

REALTEK Semiconductor Corp.



2019 CSR Report

Corporate Social Responsibility

TABLE OF CONTENTS



01

From the President



04

About the Report



05

CH1 About Realtek



16

CH2 Sustainable Development at Realtek



30

CH3 Environmental Sustainability Developments and Practices at Realtek



44

CH4 Workplace Well-Being at Realtek



65

CH5 Realtek Engaging in Social Inclusion



72

Appendix

From the President

To all partners and friends with an interest in the sustainable development of Realtek:

2019 marked the 33rd year of Realtek's founding. Our gratitude goes out to all of our partners and friends for their continued interest, support, and backing of Realtek over the years, and for continuing to assist with the growth and development of Realtek. 2019 marked a year of renewed growth of Realtek. Excellent progress and outcomes were achieved in a number of areas that we will detail in the CSR Report.

Realtek understands and strongly believes in the correlation between business operations and international developments. This is why we have continued to develop and set up sustainability management policies linked to domestic and overseas standards. Our commitment to business integrity and promotion of common prosperity enabled the continued refinement of CSR and sustainable development at Realtek. In response to global sustainability goals and the expectations of internal/external stakeholders, we not only adopted GRI Standards for the preparation of our CSR report, but also introduced the AA1000 accountability principles defined by the global non-profit organization AccountAbility to verify the disclosures made in the Realtek CSR Report. We hope this will further enhance our implementation of goals set for material sustainability topics, and provide our partners and friends with a means of examining Realtek's accomplishments in sustainability and development. The Realtek 2019 CSR Report will explain to our friends and partners our efforts and accomplishments in topics such as innovative technology R&D, product liability, environmental protection, social care, and sustainability vision. We hope to fulfill our responsibility as a corporate citizen through continued improvements in sustainable practices and do our part for global sustainability.

Sound Management and Corporate Governance

Sound management and business integrity form the core foundations of CSR developments at Realtek. Since the creation of Realtek in 1987, we have continued to develop new products and provide customers with integrated solutions through innovative R&D. Our revenues have continued to grow every year thanks to the many market-leading products we created. 2019 was another record year for Realtek with consolidated revenues of NTD 60.74 billion for the year. Revenue grew by 32.6% over the previous year and earnings per share was NTD 13.36. Realtek also continued to garner awards and recognition through our innovative products and technologies. These included two 'Best Choice Golden Awards', one product category award, and one product of the year award at COMPUTEX Taipei 2019. We also won a 2019 'Hsinchu Science Park Innovative Product Award'.

For 33 years the Realtek management team has adhered to the principle of business integrity in guiding the development of corporate governance and business management strategies, as well as the rigorous enforcement of every policy. Great importance was attached to their duty to make a positive contribution to economic, environmental, and social development through the implementation of CSR. At the same time, paying attention to equality and mutuality, the progressive introduction of various corporate governance and management mechanisms, protecting shareholder equity, strengthening the function of the Board of Directors, looking after stakeholder interests and human rights developments, and ensuring the sustainable development of the company were all key tasks and responsibilities in our fulfillment of CSR. We will continue with our efforts in the future.

Talent Development and Corporate Culture

Human resources strategy and development is one of the key elements behind the growth and sustainability of Realtek in the knowledge and technology-intensive IC design industry. Talent and intellectual property are Realtek's most important resources. Our strategic human resource planning, company policies, and the cultivation and development of talent have always been our top priorities. A labor policy was defined to guide the development and promotion of all human resources and general administration affairs. The human resources policy of Realtek is based on 'value and respect talent'. Safety and happiness are as important as work quality and are emphasized along with 'learning and development for better performance' and 'innovation and service to create total value for all'. Lifestyle improvement initiatives included the integration of resources for employee welfare through the 'Realtek Employee Care Center' to solve employee problems and provide support for work and life issues. The 'Realtek Corporate University' offers five academies with different training programs for the continued development and reinforcement of organizational learning. Work and lifestyle improvements included implementation of the 'Realtek Employee Care Center' to create a friendly, comfortable environment that promotes organizational innovation and teamwork. An 'Occupational Safety and Health Center' was also established for employee health promotion, collaborative problem-solving, delivery of employee support services, and continuous environmental improvements. To Realtek, the core of organizational development is the active development of talent and the building of team rapport. More research and resources will continue to be invested to ensure our organizational sustainability and competitiveness.

The corporate culture of Realtek is defined by 'Self-confidence and trust in people', 'Team spirit', 'Endless Innovation', and 'Energy'. Self-confidence is the product of professionalism; trust in people is through sharing, belief in the team, and helping others to grow; team spirit is from coordinating with and supporting the team on your own initiative; Endless innovation is about taking the lead while creating new value, new

disciplines, and new opportunities; Energy is about service and passion. We believe that our organizational culture is what gives us consensus on direction of development. It can also help us coordinate our efforts and focus as an organization. Therefore, our corporate culture is incorporated into every business activity. Its practice by every Realtek employee is what gives us our unique and sustained competitive advantage.

Going Green through Product Responsibility and Environmental Protection

CSR and Going Green define our goal and direction. Realtek's resources and attention are concentrated on a number of missions. For innovative products, the concept of green energy is emphasized by Realtek during the R&D and design phase. We constantly review and test the manufacturing and quality management processes to improve and provide assurance on product tolerances, deliver exceptional stability, and reduce the use of production resources. Realtek's expectations and commitments on green energy and environmental protection in our products are realized through innovative IC design. We follow the global best practice on the philosophy and requirements of energy conservation and carbon reduction. CSR concepts are embraced in the R&D and production chain by Realtek even as we pursue solid growth and profitability. A detailed introduction to several innovative products will be described in the following chapters.

Realtek has a systematic improvement program in place for environmental management measures within the overall organizational business process. All personnel are required to support and implement international standards such as ISO, OHSAS 18001, and SONY Green Partner. Product quality, environmental protection, occupational safety and health, and other initiatives ensure that we fulfill our responsibility on sustainability. To fulfill our commitment to green sustainability, we also strive to improve the energy efficiency of our plant. Systematic investments have been made to upgrade our energy-consuming equipment. A clear environmental and energy policy has been

defined by Realtek for proactive resource management and pollution prevention. We also engage in advocacy, education, and training on environmental topics. Consensus on environmental responsibility was achieved through planning and systematic management to realize environmental sustainability and to take action. We also recognize the impact of climate change on corporate sustainability. Risk management and action planning are conducted for each climate change topic to manage resource development, promote total risk management, and to uphold our corporate social responsibility. We continue to focus on fulfilling our commitment to Going Green.

Social Care and Sustainability - Common Prosperity with Global Society

Corporate citizenship is one of Realtek's existing business goals. Our continued efforts in social care targeted the following: social care education for employees, disadvantaged groups, emergency donations and assistance, academic research, children's development and special projects. These encompass a variety of requirements from multiple aspects. Realtek is continuing to integrate our resources and manpower in support of social engagement.

Having an understanding of people's expectations and requirements allows Realtek to define and develop a clearer CSR roadmap. An appreciation for the importance of our responsibilities ensures even greater rigor in each area of development. Global society and local communities are both important to Realtek. We will continue to create our vision for sustainability and corporate social responsibility through concrete action.

We thank all of our business partners for continuing to work with Realtek on building a CSR ecosystem together that supports sustainable development worldwide through substantive action. At the same time, our thanks go out once again to our friends and partners in the industry for their continued interest in the development of Realtek. Your interest and support help to drive the development of CSR at Realtek.

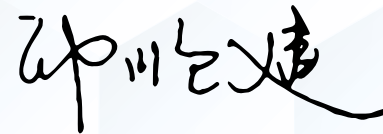
Realtek's CSR goals and commitments are as follows:

- Commitment to sustainability goals, honesty, and integrity
- Implementation of green energy policies and environmental responsibility
- Sustainable talent development and a safe environment
- Active cooperation on service and quality requirements
- Innovative R&D to enrich the world and improve convenience
- Warm the hearts of more people through continued progress

We are committed to doing our best on CSR so that our organizational energy can be combined with CSR to make the sustainability mindset a part of every Realtek employee. We will work together to make the CSR goals of Realtek come true!

Realtek Semiconductor Corp.

President



About the Report

Report Profile

The 2019 Corporate Social Responsibility Report was prepared by Realtek Semiconductor Corp. (hereafter referred to as 'Realtek') in accordance with the GRI Standards. The economic, social, and environmental impacts of Realtek are disclosed in an accurate and transparent manner. The business outcomes of material topics such as business performance, corporate governance, stakeholder engagement, social engagement, environmental protection, friendly workplace, and employee care are covered in this report. Realtek will continue to publish this report on a regular basis. The contents of the report are also published in full in the CSR section of the Realtek website.

Reporting Period

The information disclosed in the Realtek 2019 CSR Report covers the period between January 1, 2019, and December 31, 2019. The report is published on an annual basis and the last Realtek CSR Report was published in June 2019.

Contact

Realtek Semiconductor Corp.

Contact unit: CSR Center
 Telephone: +886-3-5780211
 Address: No. 2, Innovation Road II, Hsinchu Science Park, Hsinchu 30076, Taiwan
 E-mail: RT_CSR@realtek.com



Website:
www.realtek.com



CSR:
<https://www.realtek.com/en/csr/csr-overview>

Scope of Disclosure

The operating locations of Realtek consists of Hsinchu Headquarters (our main operating locations) as well as the Taipei and Tainan offices. The three main dimensions of this report are the economy, society, and environment. Disclosure in the environmental dimension only covers our main operating locations, while disclosure in the economic and social dimensions covers all Realtek operating locations. An analysis of material topics was conducted using questionnaires and surveys for this report. The contents of this report are a) a representation of business performance important to stakeholders and b) the outcomes of investment in corporate sustainability. There were no significant changes to the organization and supply chain during the reporting period.

External Assurance and Verification

The financial data disclosed in this report came from the consolidated financial statement audited and verified by PricewaterhouseCoopers in accordance with the International Financial Reporting Standards (IFRS). This report was externally verified by SGS Taiwan as conforming to the GRI Standards (Core) and AA1000 AS (2008) moderate assurance (Type I).



Editorial Policy

This report was prepared in accordance with the GRI Sustainability Standards (GRI Standards) issued by the Global Reporting Initiative. It complies with the Core option of the GRI Standards and includes a GRI content index.

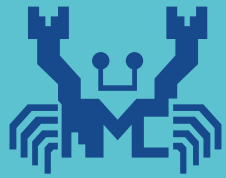
A broad range of international sustainability indicators and external initiatives were also taken into consideration by Realtek for the preparation of this report in line with international standards and industry benchmarks. These included:

- ◆ United Nations 17 Sustainable Development Goals (SDGs)
- ◆ Carbon Disclosure Project (CDP)
- ◆ Dow Jones Sustainability Index (DJSI)
- ◆ Responsible Business Alliance Code of Conduct (RBA Code of Conduct)
- ◆ ISO 26000 Social Responsibility Guidance
- ◆ ISO 22301 Business Continuity Management
- ◆ SA8000:2014 Social Accountability Standard
- ◆ 21st Session of the Conference of the Parties (COP21)
- ◆ The Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC AR5)
- ◆ Bloomberg Environmental, Social and Governance Survey (Bloomberg-ESG Survey)

Chapter 1

About Realtek





A crab forms the unique and distinctive logo of Realtek. We hope to engage in the pursuit of excellence against all odds with the tenacity and fearlessness of the crab so that we can serve the world even better and contribute to technological innovation.

About Realtek Semiconductor

- **Chairman:** Nan-Horng Yeh
- **President:** Sun-Chien Chiu
- **Company Type:** Publicly listed company
- **TSE Code:** 2379
- **Date Established:** October 21, 1987
- **Industry:** Semiconductor, IC design
- **Main Products:** Communications Network IC, Computer Peripheral IC, Multimedia IC
- **Headquarters:** No. 2, Innovation Road II, Hsinchu Science Park, Hsinchu 30076, Taiwan
- **Workforce:** 3,767 employees
- **Authorized Capital:** NTD 5.08 billion
- **Revenues:** NTD 60.74 billion (2019)

Company Profile

Realtek Semiconductor Corporation was founded on October 21, 1987, and is one of the most competitive integrated circuit (IC) design houses in the world. Realtek specializes in the development and design of ICs. From product R&D, testing, production, to sales, we embrace the principle of change and innovation to fulfill our goal of 'new technology, new product, new application, new value, and new market'. Our product portfolio encompasses electronic products of all types for applications such as communication networks, computer peripherals, and multimedia including 10/100/1000/2500M Ethernet controller IC/PHY transceivers, 10/100/1000M Ethernet exchange/photoelectric converters, SoC/gateway controller IC, wireless network controller IC, as well as AP/router SoC, DSL chipsets, VoIP, Bluetooth, xPON and IoT solutions, automotive Ethernet solutions, high-fidelity audio solutions for consumer and PC applications, card reader controller IC, Network/IP camera controller IC, LCD monitor controller IC/TV controller IC and home entertainment system solutions. The Realtek team includes experts in the design of RF, analog and hybrid signal circuits. In addition to the development of advanced, innovative technologies, Realtek also leverages our exceptional manufacturing system and know-how to stay on top of market trends. We provide customers with a full-spectrum of products and solutions that offer high performance, high quality, and high competitiveness. Realtek became the first IC design house in Taiwan to achieve ISO 9001 certification in September 1995. We were publicly listed on the Taiwan Stock Exchange in 1998 and achieved ISO 14001 international quality certification in 2006. Realtek has set a record for consecutive years of revenue growth through our sound, long-term product roadmap, effective business strategies, and the combined efforts of all employees. In 2019, we set two new records with revenues of NTD 60.74 billion and operating profits of NTD 6.33 billion.

Relationship to All Parts of the Industry Chain

Realtek's tight and extensive relationship with the industry chain allows us to provide customers with high quality, high performance, and highly competitive products and services. The core business of Realtek is the design of chip circuitry. The chips are manufactured by professional semiconductor fabs, and then transferred to packaging & testing companies for IC packaging. The high-quality chip products are then shipped back to Realtek to be sold to customers engaged in the manufacturing of electronic end-user products around the world. We focus on our core competitive advantages throughout the product R&D, testing, production, manufacturing, and sales process. We strive to ensure a high standard of quality throughout the supply chain in order to provide customers with the best professional solutions and services.



To usher in a smart new world where everything is connected to the Internet, Realtek offers the best connectivity solutions for device-to-device connections and human-machine interfaces.

Business Performance

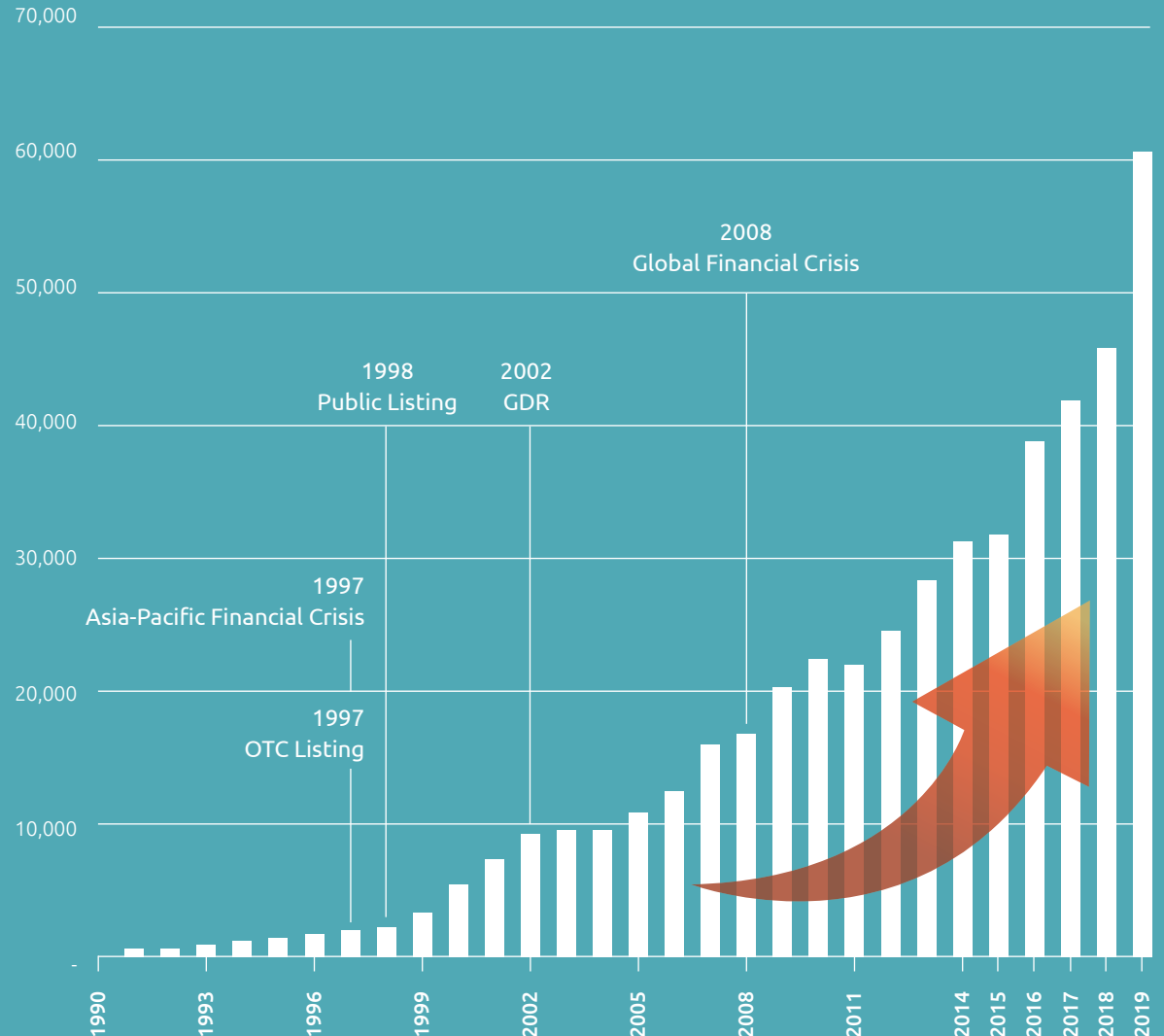
Founded in 1987, Realtek has maintained continued revenue growth and profitability over the last 33 years. Even the Asia-Pacific Financial Crisis in 1997 and the Global Financial Crisis in 2008 did not stop us from focusing on customer value through a solid business strategy and sound product portfolio. By concentrating on providing our customer partners with the best products and services, we continue to achieve steady growth and strong business results every year. 2019 was a breakthrough year for Realtek in communication networks, computer peripherals, and multimedia applications despite the persistently high levels of global competition in innovative technologies and the overall business environment. Consolidated revenues for the year again reached a new record high of NTD 60.74 billion, and grew by 32.6% over the previous year. Net profit after tax was NTD 6.79 billion with an earnings per share (EPS) of NTD 13.36 and a cash dividend of NTD 9 per share.



70%

Over 70% of our employees hold a Master's or Ph.D. degree, giving Realtek a market advantage in the R&D of high-end ICs.

Millions NTD



Economic Value of Realtek Production and Distribution in the Past Five Years Unit: Thousands NTD

Item/Year	2015	2016	2017	2018	2019
Operating Revenue	31,745,809	38,914,031	41,688,021	45,805,746	60,744,006
Operating Costs	18,155,444	22,017,294	23,784,599	25,344,876	34,160,690
Gross Profit	13,590,365	16,896,737	17,903,422	20,460,870	26,583,316
Operating Profits	1,820,105	3,342,764	3,204,237	3,770,758	6,330,865
Profit Before Tax	2,622,734	3,335,386	3,626,353	4,657,201	7,235,872
Income Tax Expenses	194,861	295,549	234,193	306,420	445,497
Income from Continued Operations for the Period	2,427,873	3,039,837	3,392,160	4,350,781	6,790,375
Profit (Loss) for the Period	2,427,873	3,039,837	3,392,160	4,350,781	6,790,375
Comprehensive Profit (Loss) for the Period	3,213,433	2,563,674	1,390,168	5,054,264	6,130,163
Dividend	1,514,853	2,019,805	2,286,429	3,048,572	4,596,163
Earnings per Share (NTD)	4.81	6.02	6.71	8.57	13.36

Note: Dividend for the year is issued in the following year. For example, the 2019 dividend is issued in 2020.

Employee Welfare Costs

(In thousands of NTD)

Salaries and Wages
\$12,900,156

(including \$119,828 in directors' compensation and \$2,097,424 in employees' compensation)

Labor and Health Insurance Fees
\$440,945

Pension Costs
\$262,707

Other Personnel Expenses
\$173,415

Total
\$13,777,223

Source: 2019 Financial Statements

R&D and Innovation

Realtek has developed integrated circuits suitable for many different applications since we were founded more than 30 years ago. Our product designs cover a range of sectors including communication networks, computer peripherals, and multimedia technology. We also own many patents and advanced technologies. Our continued innovations in specialized fields make us one of the top technology R&D companies in the world.

The core technologies of Realtek are hybrid analog-digital design, circuit design, and production process technology, systems, and silicon IP. Our focus on innovative technologies and high-quality customer service is one of the reasons for Realtek's success. Realtek is one of the international leaders in mainstream technologies (as a member of the Institute of Electronic and Electrical Engineers (IEEE)). Our capacity for technological innovation means we are often pioneers in setting industry trends and technology developments.

The innovative technical expertise of Realtek comes from our extensive system know-how and system integration capability. During product R&D, Realtek leverages our knowledge of digital/analog mixed-mode design and circuits to integrate critical components (such as MCU, DSP, RISC, PLL and Memory) from a system-level perspective. We aim to provide customers with total solutions in the form of a System-on-Chip (SoC). In addition to our system development and IC design expertise, our product quality management is backed by our familiarity with

production process applications. Over thirty years of continued innovation and breakthroughs has earned Realtek more than 6,200 patents. Realtek has therefore managed to bring success for our technology partners and customers through our push to establish ourselves as a provider of professional research and design services.

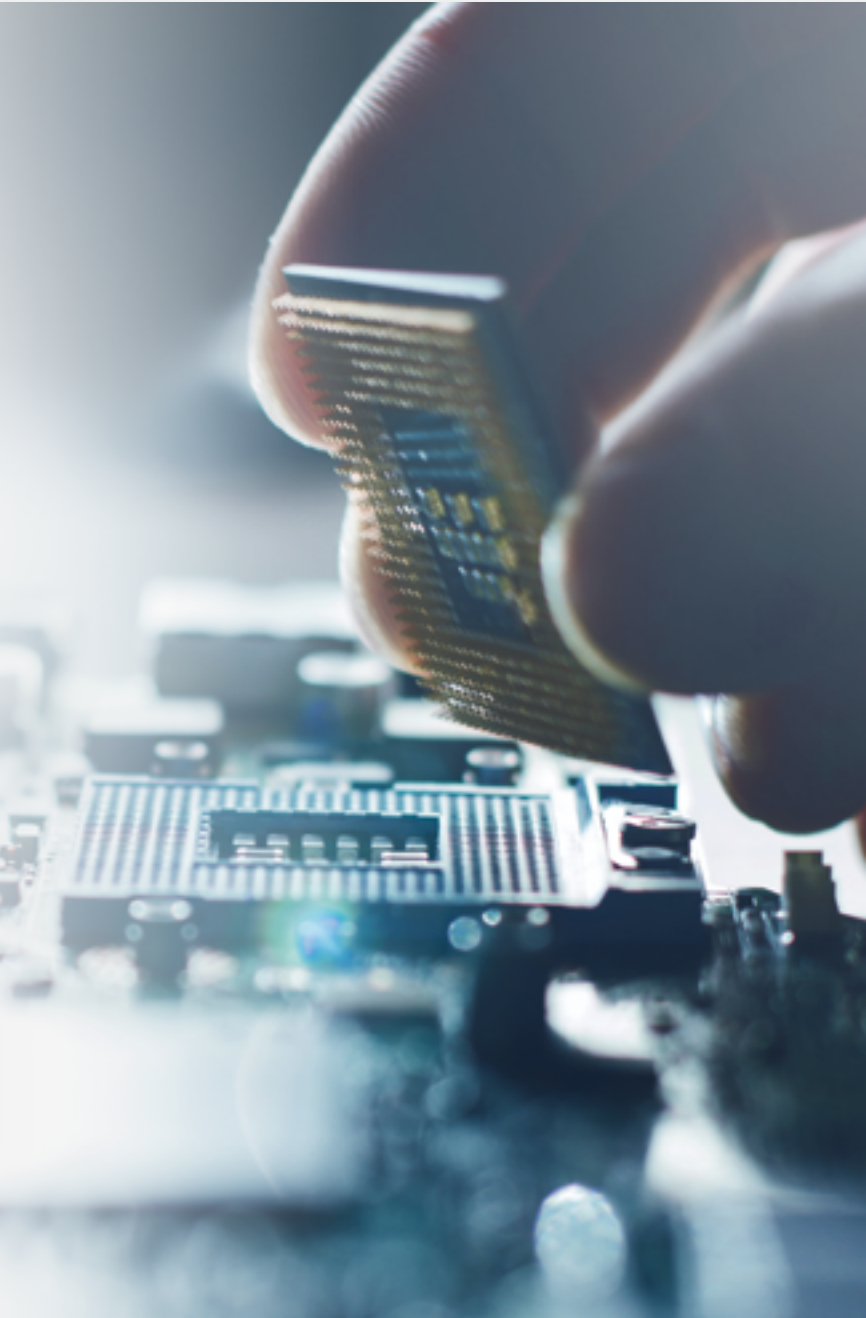
Research Direction and Vision:

Realtek is committed to providing customers with total solutions from a system perspective in product manufacturing, IC design, and other services.

Emphasis is given to the cultivation of core technologies such as embedded processors (e.g. Reduced Instruction Set Computer (RISC) CPU and Digital Signal Processors (DSP)), embedded memories, analog/digital mixed-mode IC design, radio-frequency IC design, system design, and advanced process technologies.

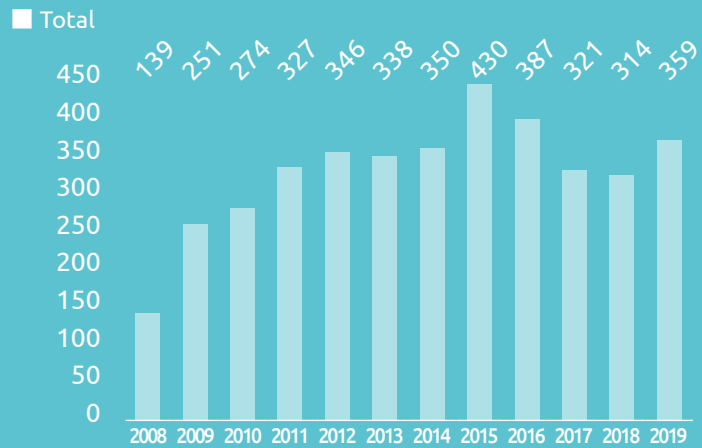
The research process starts by looking at the needs of the application user before the progressive integration of video/audio/communication system ICs.

We started by developing high-speed, broadband, and wireless Internet products before using these as a basis to develop high-speed, high-resolution multimedia product platforms that offer the customer comprehensive high-quality online and multimedia solutions. From this we created a new era of audio-visual entertainment where smart technology is a part of everyday life.

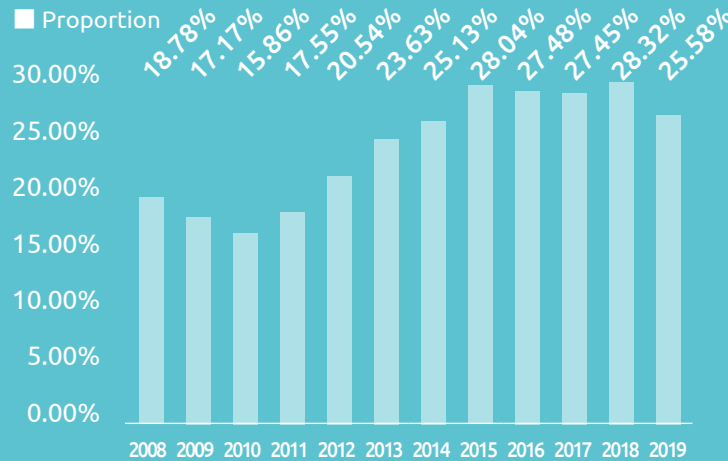


Realtek Patent Portfolio in 2019

Domestic and Foreign Patents Obtained Over the Last 12 Years



R&D Spending as a Percentage of Revenues Over the Last 12 Years



Year	Domestic	Foreign	Total
2008	34	105	139
2009	72	179	251
2010	101	173	274
2011	116	211	327
2012	95	251	346
2013	115	223	338
2014	157	193	350
2015	188	242	430
2016	177	210	387
2017	126	195	321
2018	135	179	314
2019	148	211	359

Year/Item	Revenues (Thousands NTD)	R&D Spending (Thousands NTD)	Percentage
2008	16,744,402	3,144,451	18.78%
2009	20,271,791	3,479,741	17.17%
2010	22,270,941	3,352,324	15.86%
2011	21,896,274	3,841,819	17.55%
2012	24,613,536	5,055,023	20.54%
2013	28,180,010	6,659,885	23.63%
2014	31,263,298	7,857,955	25.13%
2015	31,745,809	8,901,884	28.04%
2016	38,914,031	10,692,321	27.48%
2017	41,688,021	11,444,977	27.45%
2018	45,805,746	12,969,972	28.32%
2019	60,744,006	15,535,505	25.58%

2019 R&D Spending
\$15,535,505
 Thousands NTD

Domestic Ranking of
 Patent Applications by
 Legal Persons in 2019

6th



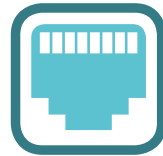
Cumulative Patents
 Obtained Since Founding
 more than **6,200**

2019 Product Highlights

The full-spectrum of communications network, multimedia, and consumer electronic IC solutions showcased at CES 2020 by Realtek, the leading international supplier of network and multimedia ICs, included:

01

Lowest Power Consumption 2.5G Ethernet Solutions (RTL8125B/RTL8156B/RTL8226B)



Realtek's 2nd Generation 2.5G Ethernet solutions are the lowest power consumption (<700mW) and smallest package size (6mmx6mm) 2.5G Ethernet products in the world. They cover all application needs for the three most common interfaces: PCIe (RTL8125B), USB (RTL8156B), and 2500BaseX/HSGMII (RTL8226B). They are the ideal 2.5G Ethernet upgrade choices for Gaming NB/PC, Workstation, NAS, Docking, Dongle, 5G CPE, and Enterprise AP products.

02

Bluetooth TWS with ANC Solution (RTL8773B Series)



Realtek's latest Bluetooth True Wireless Stereo (TWS) with Active Noise Cancellation (ANC) Solution offers reduced power consumption in stereo audio streaming (A2DP) mode, and enhanced audio quality in Headset/Handsfree mode, with simultaneous operation of Environmental Noise Cancellation (ENC) and Hybrid ANC. The RTL8773B series also supports Audio Pass-Through (APT), Google fast pairing, and voice assistant for more value-added headset applications.

03

UHD Android and RDK STB (RTD1319/RTD1311/RTD1619/RTD1611)



Multiple System Operators (MSOs) need a highly secured, constantly upgradable open source platform in order to provide premium multimedia services delivery over Internet Protocol (IP) networks. Based on Google Android TV Operation System & RDK (Reference Design Kit managed by the RDK Management open source consortium), Realtek Semiconductor has delivered a series of UHD STB SOCs with multiple HDR standards, high-security Conditional Access, and advanced DRM technologies, thereby offering the most reliable multimedia STB solutions for MSOs. In addition, among the series the RTD1319/RTD1311 are the world's first STB SOCs embedded with a 4K AV1 video decoder. The two also support AVS2.0 video decoder, which is popular in Chinese-speaking regions, making them the best candidates for both Western and Oriental MSOs.

04

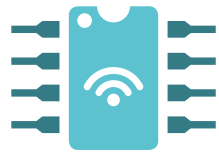
Low-Power AI IP Camera (RTS3915N/RTS3916N/RTS3916)



Realtek's IP Camera SoC is designed for low power consumption, high image quality, and powerful Edge AI computing. It is capable of performing intelligent video analytics without additional cloud server computing power, and supports versatile Convolutional Neural Network models to detect people shapes, human faces, and other pre-defined objects. Smart applications such as region invasion, line-crossing alert, people counting, and people tracking are integrated to help customers quickly achieve mass production of fully featured products.

05

High-Speed Wireless Internet Access (RTL8197F/RTL8198D/RTL8198F/RTL8852A)



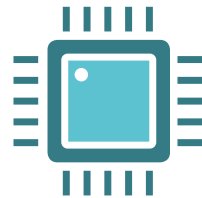
Realtek's wireless network system single chips include the RTL8197F/RTL8198D/RTL8198F and offer a small size and highly integrated design. They provide a built-in high power amplifier, low power consumption, high throughput, and support for Wi-Fi EasyMesh™.

The RTL8852A is Realtek's first 802.11ax/Wi-Fi 6 compatible wireless product. It offers compatibility with the older 802.11ac standard, and provides an enhanced stability, high-efficiency, and high-throughput wireless network service that supports large numbers of users in high-user-density locations. A new flow control mechanism reduces power consumption and extends battery life.

Realtek's High-Speed Wireless Internet Access solutions are perfect for wireless routers, mesh wireless network base stations, wireless network card solution set-top boxes, Smart TVs, Smart Speakers, IP-CAMs, etc.

06

Comprehensive IoT Series SoC (RTL8710C/RTL8720C/RTL8722D/RTL8715A)



Realtek launched a full range of IoT single-chip solutions including IoT control, voice, and video applications. The IoT Series SoC series support audio codec, dual-band Wi-Fi/ Bluetooth combo with good co-existence capability, LCD panel, patented ultra-low audio latency feature, and the world's smallest single chip Wi-Fi IP cam with 1080p HD video encoder. Realtek's full range of IoT single-chip solutions feature ultra-low power consumption, small size, high security levels, and are the perfect solutions for integrating the global IoT ecosystem.

07

Enabling Automotive Ethernet (RTL9075AA Series)



Realtek's RTL9075AA series is the world's first high-port-count Automotive Ethernet switch controller. It integrates 100BASE-T1 and 1000BASE-T1 PHYs, Audio Video Bridging (AVB) for infotainment and gateway applications, and Time-Sensitive Networking (TSN) for Advanced Driver Assistance Systems (ADAS) and autonomous driving applications. The RTL9075AA series provides 1Gbps and 5Gbps SerDes interfaces and can support Single Root I/O Virtualization (SR-IOV) on PCIe for advanced automotive electrical and electronic (E/E) architecture.

08

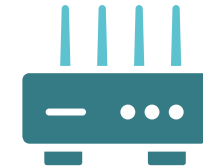
8K Android TV and AI TV (RTD2851M/RTD2893)



The Realtek RTD2851M is a 4K TV SoC, and the RTD2893 is its 8K upgrade companion chip. Together the two offer a true 8K TV solution that features 8K60Hz decoding with AV1, VP9, and HEVC codecs, and support for receiving 12GHz HDMI2.1 8K data streams, 8K noise reduction, super resolution and all related 8K image quality processing functions. The two chips combined can drive 8K120Hz panels directly. The operating system supports Android Q, and comes with an integrated Google far field voice solution. The RTD2893/RTD2851M package includes software/hardware for AI multi-tasking for image processing. Different types of AI computation can therefore be performed simultaneously.

09

Cortina Access Carrier Grade 10G AnyPON™ SFU and Super-Gateway Architecture Solution (CA8279/CA8271A/CA8271S)



The CA8279 is a Carrier Grade 10G HGU (Home Gateway Unit) SoC with Super-Gateway Architecture. It has a built-in 10G AnyPON MAC and carrier-grade networking engine suitable for next-generation Wi-Fi 6 & IoT Gateway applications. The CA8271A is a Single Family Unit (SFU) SoC with a built-in 10G AnyPON MAC and powerful carrier-grade networking engine, making it an excellent common network interface for a wide variety of applications.

The CA8271S incorporates a 10G AnyPON MAC. It features 1GB of embedded DRAM, 11mmx11mm packaging, and low power consumption (approx. 2W) making it a suitable choice for Small Form-factor Pluggable Plus SFP+ optical module applications.

Realtek Honors

2019 Important Award Record

Realtek RTD2893 8K video decoder & processing IC wins Best Choice Golden Award and Best Choice of the Year Award at COMPUTEX 2019

Realtek RTL8773B Bluetooth 5 ANC Smart Headset SoC wins Best Choice Golden Award at COMPUTEX 2019

Realtek RTL8722DM Ameba D: Ultra-Low-Power Versatile IoT Solution wins Best Choice Category Award (IoT Applications) at COMPUTEX 2019

Realtek is honored with the '2019 Hsinchu Science Park R&D Accomplishment Award'

Realtek's 8K Video Decoder and Processing IC (RTD2893) wins 'Hsinchu Science Park - Innovative Product Award 2019'



Outstanding Realtek Employees



Hsinchu Manager Excellence Award - R&D Management Category - Computer Peripheral Business Group - Terry Lin, Deputy Director



Outstanding Employee Award of Hsinchu Science Park - Multimedia Business Group - Alan Tong, Deputy Director



Outstanding Employee Award of Hsinchu Science Park - International Marketing & Sales - Edson Dong, Chief Officer



Outstanding Employee Award of Hsinchu Science Park - Communications Network Business Group - Yu-Nan Lin, Senior Manager

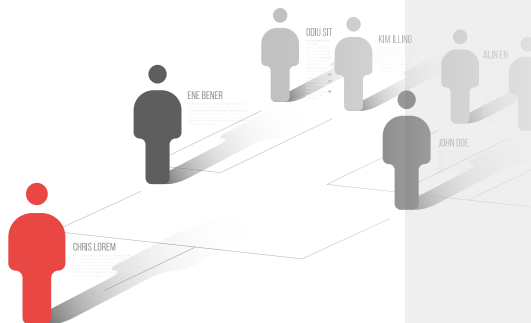


Outstanding Employee Award of Hsinchu Science Park - Information Technology Department - Mason Huang, Director

Engagement with External Organizations

In addition to the active strengthening of internal expertise and advantages, Realtek also participates in domestic and foreign professional organizations to boost our corporate competitiveness, contribution and profile. We hope to expand and build multilateral relationships through mutual learning and exchanges. The sharing of experience and market information will help us achieve industry leadership both domestically and overseas. Realtek is a member of the following external professional organizations:

Organization	Level of Membership upon Renewal	Membership Type
National Taiwan University SoC Center	Cooperative Member	General Member
Taipei Computer Association	General Member	General Member
Taiwan IoT Technology and Industry Association (TwIOTA)	General Member	General Member
National Chiao Tung University Electrical Engineering Industry-Academy Resource Alliance	Enterprise Member	General Member
Tsing Hua University SoC Design Technology Consortium	Platinum Member	General Member
Automotive Electronics SIG, Industry Development Bureau of Ministry of Economic Affairs	Cooperative Member	General Member
Taiwan IC Industry & Academia Research Alliance (TIARA)	Enterprise Member	General Member
Taiwan Semiconductor Industry Association (TSIA)	Group Member	General Member
Taiwan Engineering Medicine Biology Association (TWEMBA)	Enterprise Member	General Member
AVnu Alliance – Adopter	Adopter	General Member
Bluetooth SIG	General Member	General Member
Distributed Management Task Force (DMTF)	Participation	General Member
Embedded Microprocessor Benchmark Consortium (EEMBC)	All Access Subcommittee Membership	General Member
HDMI FORUM	Member	General Member
IEEE	Enterprise Member	General Member
JEDEC Solid State Technology Association (JEDEC)	Special New Member	General Member
MHL, LLC (Mobile High-Definition Link, MHL Alliance)	Member	General Member
MSDN	Visual Studio Enterprise	General Member
NSM Initiatives LLC	Adopter	General Member
NMV Express, NVMe	Contributor	General Member
OPEN Alliance SIG	Enterprise Member	Promoter Member
PC/SC Work Group	Member	General Member
Peripheral Component Interconnect Special Interest Group (PCI SIG)	Standard Member	General Member
SD Card Association	General Member	General Member
SDN Alliance	General Member	General Member
Serial ATA International Organization (SATA-IO)	Contributor	General Member
Sony Memory Stick License	Member	General Member
University of New Hampshire InterOperability Laboratory (UNH-IOL)	Member	General Member
USB Implementers Forum (USB-IF)	Member	General Member
Video Electronics Standards Association (VESA)	Member	General Member
Wi-Fi Alliance	Contributor	General Member



Chapter 2

Sustainable Development at Realtek

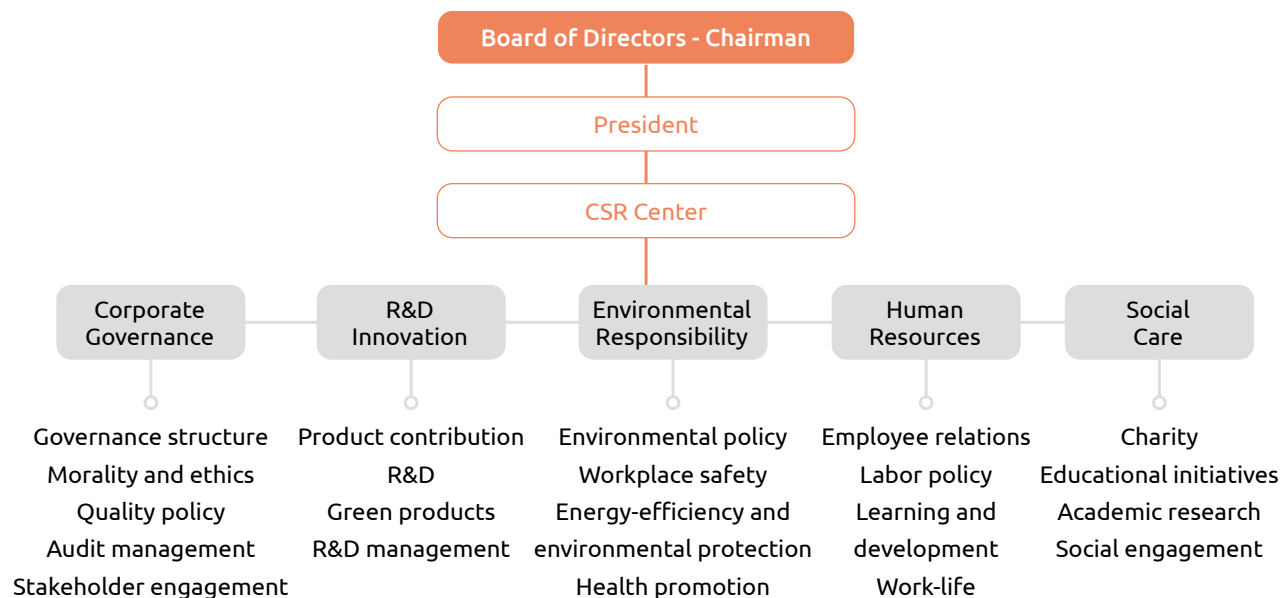


Organization and Strategy for Sustainability Management

The CSR philosophy is crucial to sustainability promotion at Realtek and one of our key goals. The Board of Directors is the top decision-making body of the Realtek sustainability organization and is responsible for supervising the progress of each key topic. The CSR Center has been formed under the Office of the President to oversee material topics such as corporate governance, R&D innovation, environmental responsibility, human resources, and social care. The CSR Center also organizes inter-departmental liaison meetings and tracks project progress.

Regular inter-departmental meetings at the CSR Center continuously combine our sustainability policies and goals with our operations. GRI Standards and domestic/foreign initiatives are also used to imbue CSR awareness into the work plans and activities of all Realtek employees so that everyone can join in practicing and fulfilling our CSR commitments.

Sustainability Organization Structure



Our CSR Commitments

Commitment to sustainability goals, honesty and integrity

Implementation of green energy policy and environmental responsibility

Sustainable talent development and safe environment

Active cooperation on service and quality requirements

Innovative R&D to enrich the world and improve convenience

Warm the hearts of more people through continued progress



Inter-departmental meetings are regularly held by the CSR Center to communicate our sustainability policies and goals to all Realtek employees. The GRI Standards, SA8000:2014 Social Accountability Standard and Responsible Business Alliance Code of Conduct (RBA Code of Conduct) are also drawn upon to enhance our employees' awareness of social responsibility and harmonize them with international standards or guides.

Stakeholder Engagement

Stakeholder Identification

A detailed internal identification procedure has been developed by Realtek based on the five principles of the AA1000 Stakeholder Engagement Standard (AA1000 SES) issued by the global non-profit organization AccountAbility. An inventory of all stakeholders was taken before the identification procedure and materiality assessment was applied. Six key stakeholders were ultimately identified as priority targets for engagement. Realtek engaged with the following categories of stakeholders for the reporting period: Investor, Employees, Customers, Government Agencies, Suppliers, and Non-Profit Organizations (NPOs).

Stakeholder Interaction



We set up a stakeholder section on our website with a dedicated e-mail for stakeholder communication and contact:

RT_CSR@realtek.com. Any questions, suggestions or voices can be channeled through this mailbox for open and effective communication.

We adopted different methods of engagement and communication for the six key stakeholders identified including one-way, two-way, one-to-many, and many-to-one. For more information please refer to the table on the right.



Table of Stakeholder Engagement Method, Frequency and Procedure:

Stakeholder	Method of Communication	Frequency of Communication	Related Records	Top 3 Sustainability Topics of Stakeholder Concern
 Investors	Annual general shareholders' meeting	Annual	Shareholders' meeting agenda and meeting minutes	1. Economic performance 2. Business integrity and compliance 3. Corporate Governance
	Quarterly results conference and online conference (Investor conference)	Quarterly	Financial information from investor conferences at the Market Observation Post System	
	Monthly revenue report	Monthly	Publication of monthly revenues on Market Observation Post System, Realtek website	
	Domestic conferences	5 ~ 10 sessions per week	Investor visited the company in person or took part in telephone interview	
 Employees	Foreign investor forum	4 times a year	Financial information from investor conferences at the Market Observation Post System	1. Economic performance 2. Improved performance and innovation R&D 3. Remuneration and benefits 4. Development of new markets (Items 3 and 4 had identical levels of concern)
	Realtek organizational communication meeting	Quarterly	Organizational communication meeting minutes	
	Employee performance interview	Half-yearly	Employee performance review form	
	Welfare Committee	Quarterly	Welfare Committee meeting minutes	
	Internal communication channels (E-mail, posters, announcement, notice board, Intranet)	Ad hoc	E-mail, posters, photos announcement	

Six Key Stakeholder Groups

Investors



Employees

Customers

Government Agencies

Suppliers

NPOs

Stakeholder	Method of Communication	Frequency of Communication	Related Records	Top 3 Sustainability Topics of Stakeholder Concern
 Customers	CSR and RBA audits	Annual	Customer audit records	1. Customer rights 2. Improved performance and innovation R&D 3. Economic performance 4. Business integrity and compliance (Items 3 and 4 had identical levels of concern)
	Quarterly business meetings	Quarterly	Meeting minutes	
	Customer GP/environmental protection requirements	Ad hoc	Customer specifications	
	Customer satisfaction survey	Annual	Customer feedback records	
	Customer and supplier conference	Annual	Conference content	
 Government Agency	Official correspondence	Ad hoc	Official document, correspondence and bulletin	1. Climate change 2. Economic performance 3. Reduce energy consumption
	Market Observation Post System website	Ad hoc		
	Various policies	Ad hoc		
	Corporate website	Ad hoc		
 Suppliers	Review of documentation	When there is a new supplier	Supplier Evaluation Form	1. Improved performance and innovation R&D 2. Development of new markets 3. Reduce energy consumption
	On-site audit (for qualified suppliers only)	Annual	Supplier audit record	
	Regular supplier conference	Monthly or bi-monthly	Meeting minutes	
 Non-Profit Organization	Telephone interview	Ad hoc	Telephone interview records	1. Reduce energy consumption 2. Green products 3. Occupational safety and health management
	Face-to-face interview	Ad hoc	Interview record	
	CSR mailbox	Ad hoc	E-Mail	

Investor Contact

Ms. Ivy Chen



TEL: +886-3-578-0211 Ext:11316

FAX: +886-3-577-6047

EMAIL: investors@realtek.com

Corporate Spokesperson

Mr. Yee-Wei Huang



TEL: +886-3-578-0211

FAX: +886-3-577-6047

EMAIL: investors@realtek.com

Deputy Corporate Spokesperson

Mr. Albert Lin



TEL: +886-3-578-0211

FAX: +886-3-577-6047

EMAIL: investors@realtek.com

External stakeholder communication channels:

<https://www.realtek.com/en/investor-relations/ir-contact>

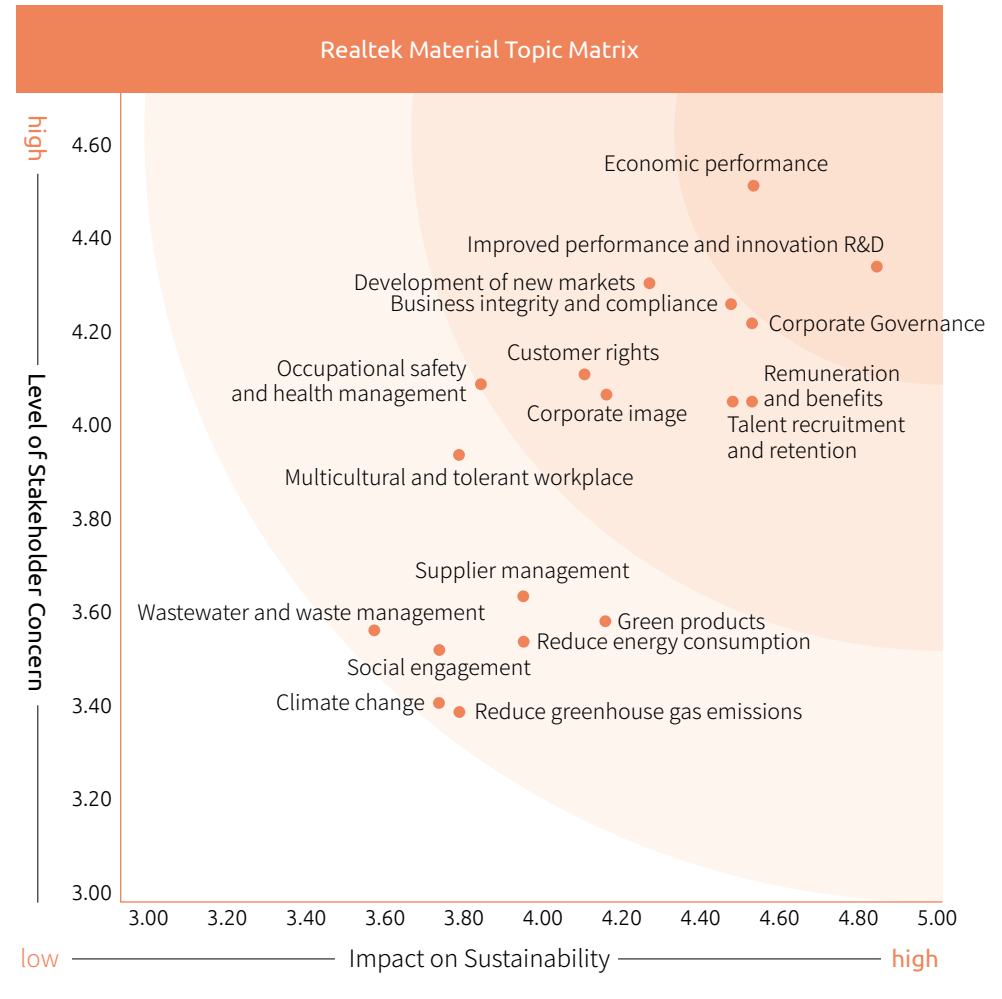
Material Topic Management

Stakeholder investment in Realtek is important to us so a questionnaire survey was conducted for external stakeholders on top of the internal management survey this year. A total of 108 responses were received including 102 valid responses. A material topic matrix was drawn up for Realtek through identification, analysis and ranking to help monitor and respond to topics of stakeholder concern. The detailed steps were as follows:

Step	Title	Description	Quantification
1	Stakeholder Identification	The targets for communication by the 2019 CSR Report were identified in accordance with the five principles of AA1000 SES-2011 stakeholder engagement standard. Six key stakeholders were determined, these being: Investors, Employees, Customers, Government Agencies, Suppliers, and NPOs.	6 Key Stakeholders
2	Identify Sustainability Topic	Relevant topics from the UN Global Compacts and Sustainable Development Goals (SDGs), industry guidelines and standards, benchmarks (both current and other industries), and organizational annual targets were picked to evaluate their impact on sustainable development in terms of corporate governance, the economy, the environment, supply chain, employee care and social engagement.	18 Sustainability Topics
3	Investigate Level of Stakeholder Concern	Online and printed questionnaires were used to survey external stakeholders on their level of concern for each topic. A total of 102 valid survey responses were received.	102 Responses
4	Assess Impact on Operations	The business impact of sustainability issues were determined through the Realtek CSR Center. A total of 19 executives participated in the study.	19 Executives
5	Determination of Material Topics	The analytical results of step 3 and step 4 were used to draw a materiality matrix for Realtek. Five material topics were then determined through discussion between CSR Committee members.	5 Material Topics
6	Defining the Scope of the Report	The Boundary of each material topic were defined to ensure that they properly reflect our economic, environmental and social influences.	3 Dimensions

Outcomes of Materiality Analysis

The outcomes of the internal and external stakeholder surveys were used by the CSR Center to analyze each topic on “level of stakeholder concern” and “impact on Realtek’s sustainability.” Materiality analysis was then conducted and a materiality matrix drawn up.



2019 Material Topics



GRI Cross-Reference

201-1 Direct economic value generated and distributed 201-2 Financial implications and other risks and opportunities due to climate change	406-1 Incidents of discrimination and corrective action taken	205-2 Communication and training about anti-corruption policies and procedures 205-3 Confirmed incidents of corruption and actions taken	302-1 Energy consumption within the organization 302-4 Reduce energy consumption 302-5 Reduction in energy requirements of products and services	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees.
---	---	---	--	---

Business	●	●	●	●	○
Supply Chain	◎	○	○	◎	○
Customers	◎	○	○	◎	○
Employees	●	●	●	●	●

Note: ○ Indirect impact ◎ Commercial impact ● Direct impact

Procedure for Handling Topics of Stakeholder Concern

Our standard procedure for responding to stakeholder feedback is as follows:

- 01 Issues raised by external stakeholders are reported during each department's regular internal meetings.
- 02 The heads of each department regularly brief the upper management on issues of stakeholder concern and future plans.
- 03 Inter-department meetings are convened by the CSR Center to analyze how each topic impacts on Realtek.
- 04 The results of continuous internal reviews are reported by the CRS Center to the top management in order to identify the material topics and internal/external boundaries for disclosure as well as Realtek's response.
- 05 Conduct internal audits to determine whether there is sufficient supporting evidence for public disclosure.
- 06 Once the scope and boundary of topics to be disclosed this year have been confirmed, respond publicly to topics of stakeholder concern through report or official press release.

Corporate Governance and Economic Performance

Corporate Governance - Management Policy

Economic Performance - Management Policy



Relevance to Realtek

Continue to strengthen the effectiveness of Board and management operations for compliance with corporate governance and the relevant laws & regulations, as well as satisfy the expectations of shareholders and investors. Business results are also regularly published through the annual report and corporate website.

Realtek is defined as an IC product development and design company. Stable development and tangible performance are our top CSR priorities. Investor conferences are regularly convened by Realtek to provide financial statements and business outcomes for the reference of investors and shareholders.



Material Topic Implications

To ensure that corporate governance and the management are aware of overall economic, social, and environmental trends during the pursuit of sustainable development to protect the rights and interests of various stakeholders.

Realtek shall focus on developing our core business and carving out our own niche in the market through a sophisticated organizational strategy and product portfolio. We will also contribute to the growth of our global partners and work together to create service value for the global society.



Policy and Commitment

The Realtek Board will diligently carry out its responsibilities on corporate governance by reviewing business performance and discussing key strategic issues including economic, environmental and social impacts, as well as risks and opportunities in order to protect the rights and interests of all stakeholders.

Based on the R&D of innovative technologies, Realtek shall continue developing even better products and integration services. We will create market-leading, innovative, low-power and high-performance products to become a sustainable enterprise with revenue growth.



Actions

Establish functional committees (Compensation Committee, Audit Committee, and Nominating Committee) to provide professional and objective supervision as well as strengthen corporate governance by the Board of Directors. Define performance evaluation procedures for the Board of Directors (including each functional committee) and conduct self-assessment every year.

Regular meetings are to be held by upper management using long, medium, and short-term business development plans as a guide. The company's product development and management reviews shall be carried out in accordance with actual market developments in order to develop professional recommendations.



Goals and Subject

Short-term: No regulatory violations of the *Securities and Exchange Act*, *Company Act*, etc.
Medium to long-term: Continue to refine the operations of the Board based on the corporate governance recommendations issued by the competent authorities. Actively participate in corporate governance evaluations and improve our information disclosure.

Short-term: Understand customer requirements, continue to engage in innovative R&D of competitive products, and continue to stay profitable each year.
Medium to long-term: Set revenue targets based on industry developments, market trends and competitor threats, and then do everything possible to try meet them. Increase market share to meet shareholder expectations and boost investor confidence.



Implementation Outcome

1. No corrective actions were ordered by the competent authorities regarding the activities of the Board of Directors in 2019.
2. Overall attendance by members of the Board was 97% for the year and they were directly involved in the operation of the Board.

The goal of maintaining profitability over successive years despite shortening development cycles and a competitive environment was achieved. Total profit in 2019 was NTD 6.13 billion.



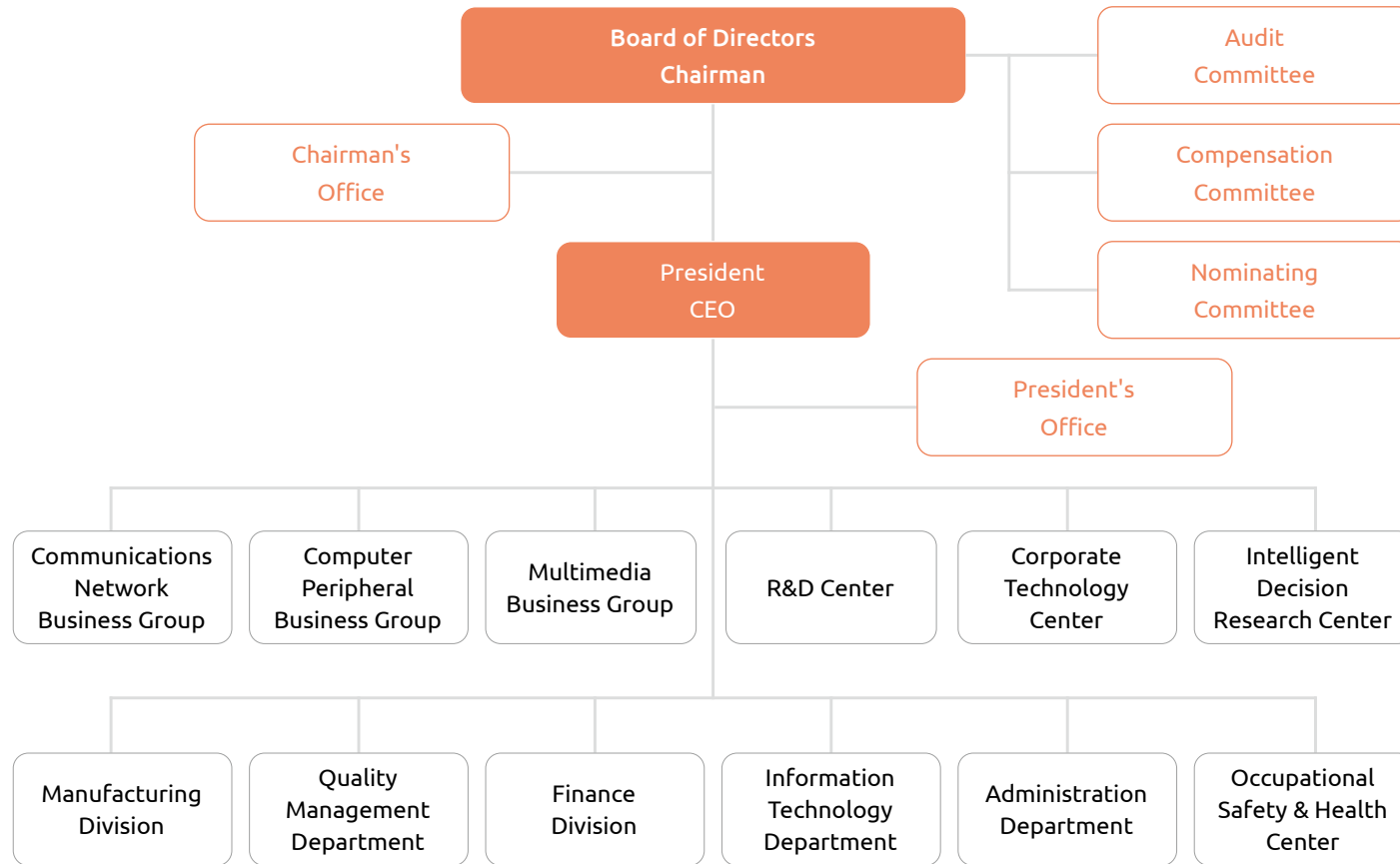
Future Plans

Continue to refine the operation of the Board of Directors based on corporate governance recommendations issued by the competent authorities.

Realtek will follow a strategy of stability and thoroughness in the face of a very competitive semiconductor market. We will prepare for the coming era by adapting to changing technological requirements while focusing on our core business and innovative R&D.

Business Organization

Realtek business units were organized into the Communications Network Business Group, Computer Peripheral Business Group, Multimedia Business Group and R&D Center; other units included Manufacturing Division, Finance Division, Quality Management Department, Intelligent Decision Research Center, IT Department, Administration Department, and Occupational Safety & Health Center. The Nominating Committee was formed in October 2019, and the Technology R&D Center established in 2020. The complete organization chart is shown below:





Board of Directors Governance Structure

The composition of the Board of Directors is determined through a vote by all shareholders in accordance with the *Company Act, Securities and Exchange Act*, as well as other related regulations and governance principles. The function of the Board was also strengthened through the creation of subordinate functional committees. The Realtek Board has a total of 9 directors with an average age of 59.34 years old. There are 8 males and 1 female, all of whom possess the necessary knowledge, skills, and sophistication to carry out their duties. Each director also has a different professional background. They are required to exercise their authority as directors in a fair and objective manner based on the long-term interests of the Company and all shareholders. Corporate governance policy shall be set to a high standard to ensure the effective operation of the Board. This will in turn protect shareholder equity and strengthen the benefits for stakeholders.

Board Composition and Operation

Realtek directors are selected and assessed on their business acumen, management skills, accounting and financial analysis skills, crisis management ability, industry knowledge, understanding of the international market, leadership ability, and decision-making ability.

The Realtek Board diligently carries out its responsibilities for corporate governance by reviewing business performance and discussing key strategic issues including economic, environmental, and social impacts, risks, and opportunities. All important resolutions of the Board are published on the Market Observation Post System of the TWSE in a timely manner. Information such as our articles of incorporation and rules of procedure for Board meetings are also published for stakeholders' reference. Directors' compensation, performance, and recusal on motions with a conflict-of-interest can also be queried in real-time by domestic and foreign investors.

Board of Directors Function

In 2019, the 11th Board of Directors at Realtek consisted of 9 directors. Meetings were chaired by Chairman Nan-Horng Yeh and Vice-Chairman Sun-Chien Chiu to ensure sound corporate governance. The Realtek Board is convened at least once a quarter. A total of 4 board meetings were convened in 2019 and the average attendance rate of all Board members reached 97%. The Board of Directors take part in external continuing education in accordance with the *Directions for the Implementation of Continuing Education for Directors and Supervisors of TWSE Listed and TPEX Listed Companies*. The courses included risk management, internal control, anti-corruption, and corporate governance. Topics studied in 2019 included 'the impact of Economic Substance Act and Global Anti-Tax Avoidance on Corporate Governance from Directors and Supervisors' Perspective', 'Digital Resilience - A New Topic Facing Directors, Supervisors and Top Executives', 'Responsibility of Directors and Supervisors in Acquisitions and Mergers', and 'Strengthening the Corporate Governance Ecology and Implementing the Independent Director System'. The professional development courses totaled 18 hours and were attended by 3 directors (33%).

Board of Directors

01. Determine business policy and make decisions
02. Budget review
03. Prepare final reports for the shareholders' meeting
04. Propose amendments to the *Articles of Incorporation*
05. Execute resolutions passed by the shareholders' meeting
06. Review of major contracts
07. Propose motions on the distribution of earnings or coverage of losses
08. Propose motions for capital increase or decrease
09. Hiring or dismissal of key employees
10. Other responsibilities as defined by law or passed by the shareholders' meeting

Key Functional Committees of the Board of Directors



Compensation Committee

Realtek has established a Compensation Committee in accordance with the *Securities and Exchange Act* and *Regulations Governing the Appointment and Exercise of Powers by the Remuneration Committee of a Company Whose Stock is Listed on the Stock Exchange or Traded Over the Counter*. The membership of the Compensation Committee is determined through a resolution of the Board of Directors. A total of 3 members are appointed for 3-year terms. The Compensation Committee was convened twice in 2019 and attendance was 100%. Responsibilities included assisting the Board with evaluating the link between the standard of remuneration for Realtek directors, supervisors and executives, and the company's business performance. It carries out due diligence on the following responsibilities and submits its recommendations to the Board for consideration.

Composition, Responsibilities and Operations

- The 3 members are appointed by a resolution of the Board. A majority must be independent directors.
- Define and regularly review the policies, systems, standards, and structure of performance evaluations and the compensation policy for directors and managers.
- Regularly evaluate and set performance targets and remuneration for directors and executives.
- The Committee was convened twice in 2019 and attendance was 100%.



Audit Committee

The Audit Committee assists the Board with performing its supervisory function along with other responsibilities as specified by the *Securities and Exchange Act*, the *Company Act* and other laws and regulations. The Audit Committee meets regularly with the company's CPA. It also reviews the CPA's selection, independence and performance. The Audit Committee was convened 4 times in 2019.

Composition, Responsibilities and Operations

- The 3 members are appointed by a resolution of the Board. All must be independent directors.
- Review possible director conflicts of interest.
- Major asset or derivative product transactions.
- CPA appointment, dismissal, or remuneration, or the appointment and dismissal of chief financial, accounting or internal audit officers.
- Annual financial report and half-yearly financial report.
- Other important matters as specified by the company or competent authorities.
- The Committee was convened 4 times in 2019 and attendance was 100%.



Nominating Committee

Diligently carry out the following responsibilities and exercise the due care of a good administrator as authorized by the Board. Recommendations shall be submitted to the Board for discussion. The Nominating Committee was established in October 2019 and consists of 3 members. The first term will run from October 31, 2019, through to June 4, 2021. In 2019 the Nominating Committee was convened once with all 3 members in attendance. Actual attendance was therefore 100% and they all took part in the functioning of the committee.

Composition, Responsibilities and Operations

- Define the criteria for cultural diversity and independence of Board members such as professional knowledge, skills, experience, and gender. Apply the criteria to find, review, and nominate candidate directors.
- Construct and define the organizational structure of the Board and each committee. Evaluate the performance of the Board, directors, and committees.
- Define and regularly review the succession plan for directors, and executives.

Realtek Business Continuity Plan

Risk Management

Realtek has developed a Business Continuity Plan (BCP) to respond to major events that may occur in the future. The Realtek BCP contains complete response plans, processes, and action (strategy) items. It also includes tasks such as resource integration and restoration of manufacturing capacity. Execution of the BCP will stabilize all mechanisms and effectively reduce the impact to normal company operations and product delivery times. It will ensure the business continuity of Realtek, mitigate the incident's impact on the company and reduce customer loss.

Scope of BCP

The BCP applies to all serious natural or man-made incidents that may impact Realtek's R&D and production. Key items include but are not limited to the impact on employee productivity from earthquakes, fire, typhoons, flooding, power outages, interruption of information services, traffic disruption, and serious communicable diseases, as well as supplier shutdown (due to closure, going out of business, mergers and transfer of production capacity). The plans, processes, and action (strategy) items that Realtek may carry out for troubleshooting include: emergency response management, communication response management, and post-disaster recovery management.

Business Continuity Division of Responsibilities and Implementation

Realtek has formed a disaster management control team, emergency response team, human resource response team, communication response team, ICT response team, and post-disaster recovery team. Effective management plans are developed for high-risk scenarios, along with strategies and business continuity plans for risk reduction, transfer, or prevention. We also track the progress of improvements to strengthen the sustainable development of Realtek while simultaneously reducing risk volatility and protecting the interests of stakeholders.

BCP Responses

Phase

Emergency Response Management

1

Immediate response and action taken at the time of the disaster. The goal is to ensure the safety of employees and contain the damage.
Response Teams: Disaster Management Team, Emergency Response Team, HR Response Team, ICT Response Team

Phase

Communication Management

2

Engage in positive interactions with customers, employees, shareholders, suppliers, banks, the media and competent authorities in order to consolidate and obtain more resources for recovery efforts.
Response Team: Communication Response Team

Post-Disaster Recovery Management

Define clear work objectives and priorities for the recovery period so that manufacturing capabilities can be swiftly and effectively restored to pre-disaster.

Response Team: Post-Disaster Recovery Team

Business Integrity and Compliance

Management Policy



Relevance to Realtek

Integrity and ethical conduct form the cornerstones of sustainability at Realtek. All forms of corruption are strictly prohibited. The 'Procedure Governing Internal (External) Whistleblower Complaints' sets out the rules of compliance for every Realtek employee.



Material Topic Implications

The spirit of integrity and compliance must be upheld in all business activities and interactions with business partners. The contents encompass anti-corruption, anti-bribery, insider trading, or any transfer of improper benefits.



Policy and Commitment

Everyone at Realtek should adhere to the integrity and ethical principles expected and emphasized by our company regardless of rank, position, or circumstances at work.



Actions

Important Realtek regulations:

1. Realtek Semiconductor Code of Ethics;
2. Realtek Semiconductor Employee Code of Conduct;
3. The purpose of Corporate Governance Best Practice Principles is to ensure business integrity and proper corporate governance.



Goals and Subject

Short-term: The goal of corporate governance is to eliminate all violations of the *Company Act*, *Securities and Exchange Act*, as well as corruption.

Medium-to-long-term: Continue to provide employees with related education and training, enforce the Realtek code of ethic and conduct, stay within personal ethical boundaries, and comply with the law.



Implementation Outcome

There were no complaints in 2019 of illegal activities or unethical conduct during company operations or by employees. There were no violations of economic regulations.

A total of 670 persons undertook internal education and training on ethics, integrity, and anti-corruption in 2019.



Future Plans

Continue to maintain our outstanding performance in corporate governance as well as strict compliance with the *Company Act* and *Securities and Exchange Act*.

Continue to organize up-to-date education and training on integrity and compliance for new employees.



Ethical Principles Upheld by all Realtek Employees - Ethical Guidelines and Code of Conduct

The long-term success of the Company is a combination of multiple factors, including the product of all employees working together to fulfill the core values of the Company. Honesty and enforcing the guidelines on ethical conduct are essential requirements for the sustainable development of the company and the creation of partnerships. We believe that integrity, compliance, and ethical behavior define the core business values of Realtek. They also serve as the principles all Realtek employees stand by in their work. Full participation and adherence is expected. Everyone at Realtek should adhere to the moral and ethical principles expected and emphasized by our company regardless of rank, position, or circumstances at work.

Ethical conduct and anti-corruption are important to Realtek. The 'Procedure Governing Internal (External) Whistleblower Complaints' establishes internal/external reporting channels and handling procedures for our company. These protect the rights of shareholders, employees, and partners (suppliers) against illegal, unethical, or dishonest behavior, promote a corporate culture of business integrity and sound development, while also protecting the legal rights of the whistleblower. In August 2015, Realtek began promoting business integrity and anti-corruption awareness for managers, senior personnel and new employees through Realtek management seminars and new employee orientation camps. Electronic versions of the teaching materials were also made available to all employees upon request. At the end of 2019, a total of 1,505 people have undertaken the physical and online course. These represented 39.95% of

our total workforce. In 2019, training was undertaken with 670 persons in total.

Integrity and ethics form the roots of corporate development and the creation of win-win outcomes. We are convinced that strict adherence to and the implementation of ethical conduct is the only way to combine the goals of sustainable development and a mutually beneficial outcome with customers. There were no incidents of corruption at any Realtek operation location in 2019.

Enforcing Ethical Management and Ensuring Sound Corporate Governance

Important internal regulations such as the 'Realtek Semiconductor Code of Ethics' and the 'Realtek Semiconductor Employee Code of Conduct' were formulated by Realtek in accordance with the 'Corporate Governance Best Practice Principles for TWSE/TPEX Listed Companies', and the 'Corporate Governance Evaluation Indicators' issued by the TWSE Corporate Governance Center to ensure business integrity and fulfill our obligations on corporate governance. The commitments made in the business integrity policy are actively enforced by the Board of Directors and management. The business integrity policy is also implemented during internal management and business activities. New employees also receive training on anti-corruption and business integrity upon arrival. There were no complaints in 2019 of illegal activities or unethical conduct during company operations by business activities.

Human Rights Management

Realtek complies with the local labor regulations at each of our operating locations around the world. We

protect the legal rights of employees while adhering to the spirit and basic principles of human rights protection set out in international human rights conventions such as the 'International Bill of Human Rights', 'International Labor- Organization - Declaration of Fundamental Principles and Rights at Work', and 'UN Global Compact'. The 'Realtek Semiconductor Human Rights Policy' was defined to fully express our commitment to the respect and protection of human rights, and the dignified treatment and respect of all employees, contractors, and temporary personnel.

The 'Realtek Semiconductor Human Rights Policy' is implemented through the following guidelines: 1. Free choice of employment; 2. Prohibition of child labor; 3. Provision of a safe working environment; 4. Importance of employee physical and emotional well-being; 5. Equal responsibility for safety; 6. Freedom of association.

Respect for Information Security and Privacy

Information security, personal data, and customer privacy are important to Realtek. We take full responsibility for the safe collection and handling of customer data. During the design and development of IC products, we pay attention to every step of the design process and carefully analyze products to prevent the unauthorized acquisition, use, destruction, modification, or disclosure of customer information. We have also defined policies and procedures for protecting information privacy and security to ensure that we can meet the goal of ensuring personal privacy and safety. Suitable control models (see below) have been constructed to ensure effective control over customer information based on data type. There were no complaints regarding violation of customer privacy against Realtek in 2019.

Information Security and Privacy

Document Management System (DMS)

Supervisor permission is required to access customer files. Access is provided by the data custodian unit when permission is granted

Digital Rights Management (DRM)

Customer files are linked to accounts with DRM authorization to strengthen controls and improve the standard of information security

Independent Network Domains and Dedicated Storage Areas

Development source code can only be transmitted between controlled domains and storage areas

Digital Data Protection

Comprehensive backup and recovery mechanism

The Two Key Mechanisms for Protection of Customer Privacy at Realtek

1. Formal authorization is required to obtain customer information.
2. SSL encryption or DRM are used to control the use of customer data.

To strengthen our information security protection, information security risks were categorized by Realtek so that response measures can be proposed for each one, and their effectiveness

checked on a regular basis. A total of 6 information security risks were identified. Their priority in descending order were network management, account management, information management, file management, anti-virus management, and external network access behavior management. Oversight and control are provided by each account manager.

Identifying Information Security Risks	Explanation of Impact Assessment	Response Measure	Performance Management
Network Management	Protecting product R&D and IP against leaks and misuse	A product cybersecurity team was set up to convene cybersecurity meetings on a regular basis. Action should be taken against known problems to prevent their recurrences, and improvement strategies proposed for potential risks. Information security management enhanced for product development environments, and compliance requirements set for IP.	The following goals were achieved through the partitioning of product R&D network domains and the proper use of process management core technologies: Information protection, access control, contract compliance, activity logging, software quality, software security.
Personal Computer Account Management	Risk prevention for account theft	Mandatory password changes at regular intervals and requiring relatively complex passwords.	Account security.
Information Management	Prevent the leaking of customer and business information	Access can only be granted by a supervisor and the responsible unit. SSL encryption or DRM control.	Legal licensing procedure, secure data transmission, control of file permissions.
File Management	Prevent the leaking of files	Introduction of Document Management System (DMS) and Digital Rights Management (DRM).	Control of document read and file access permissions.
Computer Anti-Virus Management	Computer viruses are constantly evolving and ransom-ware is difficult to guard against	Virus definitions are centrally managed by the anti-virus server and automatically updated to the user client at least once a day.	Strengthen the security of information services through effective blocking and prevention of computer viruses.
External Network Access Behavior Management	Block access to malicious domains and IP addresses	Introduction of Enterprise Threat Protector (ETP) product applications.	Filter out access attempts by malware, phishing and botnets.

Important Realtek Regulations

- Articles of Incorporation
- Procedures for Acquisition and Disposal of Assets
- Procedures for Financial Derivatives Transactions
- Rules for Election of Directors
- Procedures for Lending Funds to Other Parties
- Procedures for Endorsement & Guarantee
- Rules and Procedures of Shareholders' Meeting
- Realtek Semiconductor Code of Ethics
- Realtek Semiconductor Employee Code of Conduct
- Rules of Procedure for Board of Directors Meetings
- Rules Governing the Scope of Powers of Independent Directors
- Organizational Charter of the Audit Committee
- Corporate Governance Best Practice Principles
- Procedures Governing the Performance Evaluation of Board of Directors
- CSR Best Practice Principles
- Procedure Governing Internal (External) Whistleblower Complaints
- Organizational Charter of the Nominating Committee



Chapter 3

Environmental Sustainability Developments and Practices at Realtek

Management Policy on Efficiency Improvement and Innovative R&D

Management Policy



Relevance to Realtek

Some of the challenges facing countries around the world today include climate change and energy shortages. As these may drastically change the human living environment, Realtek is therefore concerned with how the consumption of all resources impacts the company, our supply chain partners, the ecological environment, and consumers. We hope we can reduce energy consumption and promote environmental sustainability through more effective use of resources within the company and the innovative design of green products.



Material Topic Implications

A relationship of give and take exists between Realtek operations and the environment. We strive to reduce our burden on the environment through the effective use of resources and better product performance. We hope that the integration of environmental protection and the creation of energy-saving products will lead to a win-win outcome for all parties in the topic of environmental sustainability.



Policy and Commitment

1. Realtek Environmental Policy.
2. Release a new generation of environmentally friendly, high-performance and energy-saving products every two years.



Actions

1. Use resources more efficiently and eliminate unnecessary energy use within the company.
2. Develop environmentally friendly and energy-saving products, use safe raw materials, improve product durability and reduce resource consumption.



Goals and Subject

Propose internal energy-saving measures every year and release more eco-friendly products every two years.



Implementation Outcome

1. Energy and water savings achievement: (1) Energy savings totaled 439,450 kWh; (2) Water savings amounted to 1.49m³ per person.
2. Realtek has successfully developed a number of products that use at least 40% less electricity under the same environment and conditions. The carbon reduction and energy-savings benefits from design innovations effectively reduces their environmental impact during use.



Future Plans

Realtek will continue to monitor international environmental protection topics. Internal energy-saving measures and actual action plans will continue to be conducted every year. More eco-friendly products that can improve energy-saving by at least 5% will be released every year.



Nobody is Immune to Global Environmental Change

Climate change is now a key topic in global sustainability. As a member of the global village, environmental topics are a concern for Realtek as well. We have developed and implemented initiatives that will help protect the environment. We are continuing to think about how we can do our part for the environment during IC design and development. We want to apply the core value of 'Innovation' in Realtek's dynamic culture to product innovation and business processes. The planning of routine operations and maintenance all take environmental sustainability into account. Realtek has continued to invest R&D resources into the development

of products with low energy consumption based on our Environmental and Energy Policy. This allows Realtek, suppliers, customers, and consumers to conserve environmental resources, focus on green sustainability, and reduce our impact on the environment during collaboration and use.

In the future, Realtek will continue to review and remind ourselves to incorporate the DNA for a sustainable environment into every aspect of routine activities and product innovation. We will continue to stay in tune with global trends on environmental protection and do our part to create new opportunities for a sustainable environment.

Environment and Resource Policy



Environmental Compliance

Obey the law; comply with environmental protection laws and related regulations.



Aggressive Resource Management

Reduce waste, advocate for energy conservation, practice recycling and improve reuse.



Better Pollution Prevention

Emphasize environmental protection through reduction of industrial waste, improved self-management, use of green materials, and a policy of continuous improvement.



Promotion of Education and Training

Use environmental management education and training to enhance awareness of environmental responsibility and promote total participation in environmental improvement plans.



Continuous Improvement Plan

Monitor environmental topics, balance demand and protection, realize environmental sustainability and its implementation.

Climate Change Risk Management

Realtek has defined risk management and action planning for each climate change topic to realize the three goals of environment and energy renewal, creation of green environment, and CSR fulfilment. Faced with the increasingly severe threat posed by climate change, Realtek has worked to reduce the impact of climate change through risk identification, proposal of effective responses and supporting measures, and review of actual initiatives during the year. We can then effectively control and recover rapidly from climate disasters.

Risk Identification	Impact	Response Measure	Annual Initiatives
Physical Risk <ul style="list-style-type: none"> Climate disaster risk Electricity rationing, flooding, water shortage 	<ul style="list-style-type: none"> Business interruption Property damage Lost orders 	<ul style="list-style-type: none"> Cooperate with electricity rationing by reducing load and carbon emissions or running generators. Define typhoon response plan to prevent flooding. Plan for water shortages through water storage or water transfer. 	<ul style="list-style-type: none"> Develop energy-saving response plans for 3%/5% electricity rationing and other emergency situations. Not activated as there were no physical risk events in 2019. A response meeting is convened before each typhoon. A team is also assigned to monitor the situation and manage emergency repairs. Evaluations and reviews are then carried out. The result this year was positive as a leak was contained in time. Continuous improvements will be made to windshields in the future. Responses to water shortage and drought included additional water storage, personnel education, and adjustment to air-conditioning water supply. Personnel education and control measures performed well this year resulting in lower average water consumption.
Transformation Risk <ul style="list-style-type: none"> Amendments to environmental legislation Calculation of carbon footprint based on regulatory advice 	<ul style="list-style-type: none"> Increase in workload led to an increase in manpower costs Customer's specification requirements 	<ul style="list-style-type: none"> Defining waste management measures. Discharge of emissions and effluents complied with the relevant regulations. 	<ul style="list-style-type: none"> Carried out in accordance with the law, computerized online operations, with full compliance audits to be conducted every year in the future. Set targets and carried out plan to realize further reductions in domestic waste. Elimination of specialized effluent. Generator exhaust was measured to determine if catalytic converters needed to be fitted to comply with emission standards and prevent air pollution. Around 60% of the equipment now has catalytic converters fitted.
Supply issues from energy shortage	Limited resources and high energy costs	Energy-saving gains from improved product performance with low power consumption.	Continue to develop low-energy products.
Opportunities <ul style="list-style-type: none"> Carbon reduction for products and testing equipment including factory generators 	Energy-saving equipment is relatively more expensive than standard models	<ul style="list-style-type: none"> Power equipment with high conversion efficiency to improve electricity utilization. Water recovery and reuse system to improve carbon reduction. 	<ul style="list-style-type: none"> Continue to replace conventional lighting with LED lights to save on power consumed by lighting. 90% of all lighting has now been upgraded. LED energy-saving lights will also be used throughout new factories built in the future. Power harmonics improvement, gas equipment performance improvement, and replacement of variable-frequency equipment. Positive results that were reflected in energy savings. Obsolete equipment will continue to be replaced in the future. Condensation from air-conditioning recovered for flushing toilets. Large cooling fins for cooling towers to improve operating performance. The results from 2019 were positive. Installation of filtration equipment to extend equipment service life is now under study.
Renewable Energy Topic	Improve corporate image	Install additional solar panels.	Use solar power to supplement water heaters for showers. Installation of additional solar panels when space permits to be assessed in the future.
Assess improvements in solar conversion efficiency	Reduce electricity costs	Assess the purchase of Renewable Energy Certificates (REC).	Continue to assess the benefits of purchasing RECs.

Note: Some of the initiatives have been incorporated into current management activities (e.g. convening of response meeting before typhoons) so their derivative costs were not considered; some are still in the planning phase (e.g. purchase of RECs) and a more precise assessment will be needed for a detailed breakdown of costs.

Tracking of Energy Efficiency

Realtek is an IC design house in the upstream part of the semiconductor industry. We have no heating equipment such as coal, gas, or boilers. Our production process does not involve smelting or polymerization. Most energy consumption was from externally purchased electricity, diesel for emergency generators, and petrol for company vehicles. Total energy consumption in 2019 was 154,899.80 GJ.

2019	Activity Data		Heating Value (GJ)
	Unit	Usage	
Diesel	Liters	9,399.60	328.00
Petrol	Liters	1,280.92	41.80
Externally Purchased Electricity	kWh	42,946,000.00	154,530.00
Total			154,899.80

Note: The coefficient for conversion of heating value came from the *2019 Energy Statistical Handbook - Heat Content of Energy Products* published by MOEA Bureau of Energy.

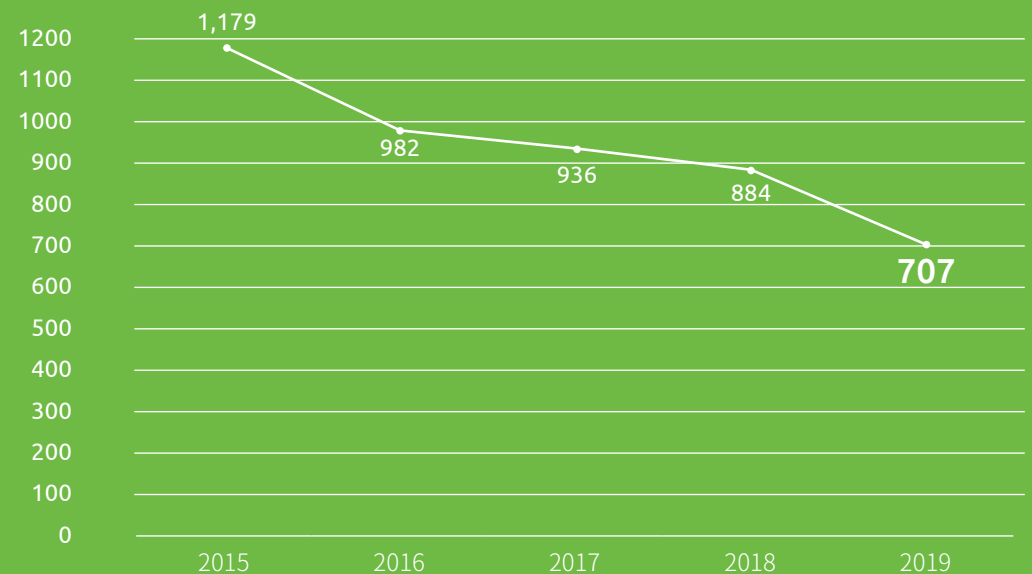
2019 Energy Usage **154,899.80 GJ**

Realtek's average energy use per unit revenue has been decreasing every year. In 2015, energy use per million dollars of revenue was approximately 1,179 kWh. In 2019, energy use was just 707 kWh, representing a decrease of around 40%. We were therefore able to generate the same amount of revenue while consuming less electricity as part of our continued push on environmental protection and energy saving.

Power Consumption and Revenue Table over the Years

Unit/Year	2015	2016	2017	2018	2019
Electricity Use (kWh)	37,434,000	38,223,000	39,032,400	40,501,200	42,946,000
Company Revenue (Millions NTD)	31,745	38,914	41,688	45,806	60,744
Electricity Use per Unit Revenue (kWh/Millions NTD)	1,179	982	936	884	707

Average Power Consumption per Unit Revenue (kWh/NT\$ million)



Voluntary GHG Management

Greenhouse gas (GHG) is now an environmental topic that international environmental groups consider to be very important and of great concern. Realtek carried out a voluntary audit of our GHG emissions in 2019 to obtain an accurate picture of our emissions. The scope of the inventory was the Hsinchu headquarters. Scope 1 and Scope 2 GHG emissions on-site were counted one by one.

Total emissions in 2019 amounted to 22,917.81 tonnes CO₂e. The bulk of these came from externally purchased electricity at 99.88%. The remainder were stationary emission sources (diesel of emergency generators), mobile emissions (petrol of company vehicles), and fugitive emissions (refrigerant, septic tank, fire extinguisher). There were no process emissions as there were no production processes.

2019 GHG Emissions

Emission Type	Scope 1				Scope 2	Total
	Stationary	Mobile	Process	Fugitive		
Emission Quantity (tonCO₂e)	24.57	3.02	0.00	0.00	22,890.22	22,917.81
Ratio	0.11%	0.01%	0.00%	0.00%	99.88%	100.00%

Note: The emission coefficient used was based on the GHG Emission Coefficient Management Table V.6.0.4 issued by the EPA. This year's inventory was based on the Global Warming Potential (GWP) used by GHG Registry of EPA, which in turn was based on the GWP in the 5th IPCC Report in 2013. If no reference value was available in the 5th IPCC Report (2013), then the GWP from the 4th IPCC Report (2007) was used instead. The operational control method was used to collate the amount of GHG and reporting was based on the ISO14064-1:2006 standard.

The *Greenhouse Gas Reduction and Management Act* in Taiwan requires seven types of GHGs to be inventoried. CO₂ was the main type of emission produced by Realtek at almost 100%. Other emissions such as CH₄ and N₂O amounted to less than 1% combined.

Emission Type	2019 GHG Emission Quantities						tonCO ₂ e	
	CO ₂	CH ₄	N ₂ O	HFCs	PFCs	SF ₆	NF ₃	Total
Emissions	22,917.61	0.06	0.14	0.00	0.00	0.00	0.00	22,917.81
Ratio	100%	0%	0%	0%	0%	0%	0%	100%

Note: Realtek does not emit NO_x, SO_x, or other serious pollutants.

2019 Greenhouse Gas Emissions
22,917.81 Metric tons CO₂e

Multi-Pronged Approach to Energy Saving and Better Energy Efficiency

Realtek monitored the energy usage at operating locations and inventoried each GHG emission source. We considered ways to improve our overall electricity efficiency and reduce our GHG emissions. To realize the goals of continuous monitoring and carbon footprint reduction, our four main areas of improvement in recent years were allocation of budget for energy-saving equipment, upgrading and reducing the number of energy-intensive facilities, adopting Variable Frequency Drive (VFD) equipment, and continuing to switch over to LED energy-saving lighting.

Realtek conducted a detailed inventory of our energy consumption. Most sources of consumption came from air-conditioning facilities, computer equipment, testing machines, and lighting fixtures powered by electricity. These items were also the main sources of carbon emissions. In 2019, the air-conditioning, lighting, compressor, gas

supply, power equipment, elevators, and other items were upgraded with high-efficiency, energy-saving equipment. Pumps were also fitted with VFD to improve their power efficiency. Total electricity savings of 439,450 kWh (1,581.25 GJ) were achieved to reduce carbon emissions by 234.23 tonnes compared to 2018.

Realtek's main business is IC design and development so the testing production line comprises a very small share. Nevertheless, the continued purchase of factory equipment with high efficiency and low power consumption not only offers savings on energy costs but also meets the target of reducing energy consumption by 1% every year as recommended by the Bureau of Energy. Continuous improvement and self-review coupled with brainstorming on different energy-saving measures allows Realtek to do our part for the environment so that we can reserve a clean and intact planet for future generations.

Energy-Saving Measures and Outcomes

Type	Item	Energy Saving (kWh)	Energy Saving (GJ)	Carbon Reduction (tonCO ₂ e)
Air-conditioning	Performance enhancing additive added to chiller coolant	232,200	835.51	123.76
	Chiller replacement	25,727	92.57	13.71
	Chiller pump upgrade and fitting of VFD	51,364	184.82	27.38
	Pump fitted with VFD	12,044	43.34	6.42
Lighting	Lobby/Hallway/Conference room/T8 tubes in parking lot/Fire protection equipment changed to LED lighting	28,601	102.91	15.24
Compressor	No.1 100HP VFD compressor changed to IE3 high-efficiency compressor	17,705	63.71	9.44
Gas Supply	30HP fixed-frequency vacuum pump changed to variable-frequency 30HP vacuum pump	5,548	19.96	2.96
Power Equipment	Improvement to power system harmonics	63,037	226.82	33.60
Elevator	Replacement of freight elevator	3,224	11.61	1.72
Total		439,450	1,581.25	234.23

Help Reduce Carbon Emissions Through Energy-Saving IC Design

Successful Development of Green and Energy-Saving Products

Realtek has long been committed to the design and development of more environmentally friendly and energy-saving IC products. We are an upstream supplier in the semiconductor industry and we supply a wide range of total solutions for professional IC applications, a large number of which are used in electronic end-products. It is our understanding and belief that as long as we continue to develop innovative IC chips that offer better energy-efficiency, we can help to significantly reduce the carbon footprint of electronic products worldwide.

Our focus is continuing to supply the global society with innovative, high-performance ICs that satisfy user requirements and environmental protection expectations. For example, Realtek incorporates environmental and energy-saving concepts into the product design process from the start of development for all network communications network products. Usage scenarios are used to remove unnecessary circuitry and develop new generations of energy-saving products. Every effort is made during each product's design cycle to reduce power consumption.

A number of next-generation products were unveiled by Realtek in 2019. Their power consumption was at least 40% lower than the previous generation of products. In addition to effectively extending product battery life, they provide the end-user with a better experience. The goals of energy efficiency, environmental friendliness, and significant reductions in overall power consumption were therefore all achieved.

IC design is one of Realtek's core businesses. Continuous R&D innovation is our responsibility and expertise. Realtek will continue to leverage our expertise in innovative IC design with the goal of surpassing ourselves and leading excellence. We will also continue to provide our partners with the best IC product design services and solutions as well as expand the tangible contributions we make to the global environment and society.



Conserving Water Resources

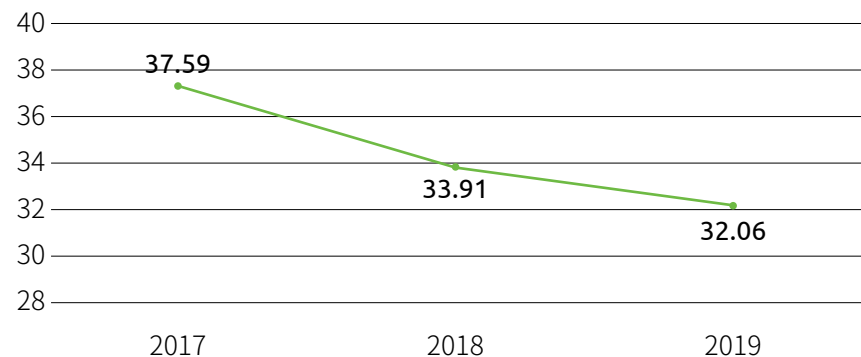
Realtek has long paid attention to water resources, energy conservation and other environmental topics. Our water conservation plan starts with water efficiency in everyday use to maximize the benefits of available water resources. In 2019 we used 120,766m³ of water. The main water sources were tap water (90.71%) and reclaimed water (9.29%). We stepped up our recovery of rainwater, air-conditioner condensate and cooling water in 2019 resulting in an average water consumption 5.46% lower than 2018. Realtek will continue to study the recovery of water resources and look for more ways to improve overall water efficiency.

Water Source		2017	2018	2019
Tap Water	Usage	110,511	107,541	109,561
Reclaimed Water	Rainwater	1455.63	1435.16	1,811.19
	Other (AC/Filtration)	9,798	9,861	9,404
Total		121,765	118,837	120,776
Total Workforce (persons)		3,239	3,505	3,767
Average Water Usage (m ³ /person)		37.59	33.91	32.06

Unit: Cubic meter

Average Water Consumption

Cubic meter/persons



Realtek's Accomplishments in Water Saving



Recovery and Reuse of Rainwater

Rainwater recovery equipment was installed at the car park building. Pipelines connected to the raft foundation water tank allow rainwater to be used for watering instead of tap water.



Recovery of AC Condensate

Condensate generated by AC boxes and dehumidification of air blowers within the plant were recovered for use by the cooling tower, reducing the usage of tap water. The low temperature of recovered condensate also aided with the cooling tower's heat dissipation, indirectly reducing the power consumption of the chiller unit yet again.



Recovery of Cooling Tower Discharge

Re-circulated water in the cooling tower can become more conductive over time. In the past, this was treated as effluent and discharged to the Hsinchu Science Park's wastewater treatment plant. A feasibility study was conducted in 2019 and the discharge water was diverted to the energy-saving tank. The reclaimed water was used for flushing toilets to reduce tap water usage.



Spray Reduction for Cooling Towers

Cooling towers were fitted with enlarged cooling panels to reduce spray. This reduces the need for water and avoids unnecessary waste.



Water-Saving in Bathrooms and Toilets

Water-saving devices were fitted to most of the taps in bathrooms and toilets throughout the plant to improve water efficiency and prevent the unnoticed loss of water.

Wastewater and Waste Management

Realtek is a fabless IC design house. We focus on the design and sale of IC chips with all manufacturing contracted to specialist foundries. ICs produced by contract manufacturers are the only hazardous waste generated by Realtek. If they are found to be defective after being shipped back to the plant for testing, then they are disposed of through professional waste contractors as hazardous industrial waste. Realtek sites do not discharge process wastewater and there is no risk of environmental impact from wastewater/effluent spills.

Discharge of Domestic Effluent is Licensed by Law

In 2019, we reported 57,971 tons of domestic effluent discharge to the Hsinchu Science Park Administration. All industrial wastewater and domestic effluent produced within the Hsinchu Science Park is collected by the sewage system and piped to the park's wastewater treatment plant for processing before being discharged into the Keya River through a dedicated pipeline. The treated water exceeds the national discharge standards and did not impact on the ecology of the Keya River. In addition to actively cooperating with environmental and energy-saving policies mandated by law, Realtek is also grateful to local government agencies for their support and

Waste is Reported and Disposed of in Accordance with the Law

Waste management is carried out in accordance with the *Waste Management Act* of the Environmental Protection Administration (EPA), Executive Yuan, and the management regulations of the Hsinchu Science Park. Waste statistics are tracked and reported each month. Realtek failed to fill vacancies for dedicated waste processing personnel within the statutory period in 2019. Corrective action required by the competent authority has since been carried out.

We also visited the EPA waste reporting and management system website (<http://ems.epa.gov.tw/>) each month to report the quantity of waste and their method of disposal. Reporting categories include type of industrial waste, hazard level, disposal method, and total weight. In 2019, we produced 52.13 tonnes of industrial waste including (1) 13.21 tonnes of non-hazardous paper and mixed waste; (2) 8.01 tonnes of non-hazardous waste electronic parts and scraps; (3) 18.50 tonnes of general waste from business and production activities; and (4) 12.41 tonnes of mixed plastics.

Realtek Strives to Make the Most of Earth's Resources and Uphold the Environmental Protection Policy by Reducing the Amount of General Domestic Waste

Realtek is committed to raising the environmental awareness of all employees through the practice of environmental protection concepts such as recycling and waste reduction in everyday work and life. Actual initiatives: Replacing polymer cutlery with ceramic cutlery, using recycled paper for product packaging and padding, greater emphasis during orientation training on adhering to energy-saving and environmental principles during purchasing. Strive to realize a green environment by thinking about all the ways to protect the environment or use resources better in everyday life.

Waste Sorted by Category and Disposal Method

Item	Waste Paper Mixture	Waste Electronic Parts and Scrap	General Waste from Business Activities	Waste Plastic Mixture
Type	Non-Hazardous	Mixed Metal Scrap	Non-Hazardous	Non-Hazardous
Disposal Method	Incineration	Processed Overseas	Incineration	Incineration
Total (Unit/Tonnes)	13.21	8.01	18.50	12.41

Supplier Sustainability Management Policy

Quality Management

ISO 9001 Quality Management System
IATF 16949 Automotive Quality Management System

Environmental Protection

RoHS Hazardous Substance Management

Corporate Social Responsibility

Non-Conflict Minerals Policy

Sustainable Supply Chain

Realtek is one of the leading suppliers in the global semiconductor industry. We are an IC design house positioned at the upstream end of the semiconductor supply chain. Mid- and back-end activities such as material purchasing and OEM production are also handled by Realtek's supplier partners to form a partnership based on professional division of labor and mutual cooperation. Our understanding of the products and services that suppliers provide to Realtek means we know how to work with suppliers to build a sustainable supply chain with reduced natural and environmental impact. This serves as a key indicator of the development of a green environment by Realtek.

Guided by our vision of sustainability, Realtek has incorporated management initiatives such as quality management, environmental protection, and CSR into our sustainability policy.

A set of supplier management regulations have been defined by Realtek in accordance with our Supplier Sustainability Management Policy. Suppliers are required to obtain ISO 9001 quality management system certification to ensure that all Realtek suppliers possess a high level of environmental awareness. Realtek can then work with suppliers to build a corridor of cooperation on research, development, and manufacturing services for a sustainable environment.

Supply Chain Sustainability Management Procedure

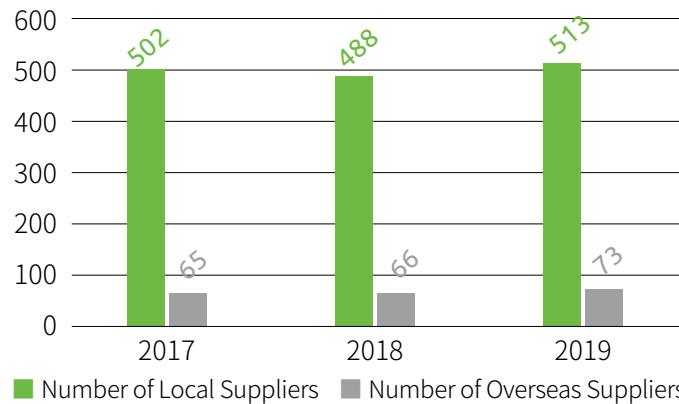
Priority	Target	Description
01	New Supplier Evaluation	Suppliers are evaluated on product quality, quality systems, environmentally-sensitive substances, and related areas to ensure that new suppliers satisfy the strict quality requirements of Realtek and comply with our sustainability management approach. The 9 new suppliers evaluated in 2019 all passed the evaluation.
02	Supplier Audit	To ensure the quality of qualified suppliers as well as the actual implementation of their management systems, factory audits are conducted every year. If a defect is found then the supplier is immediately required to propose a suitable improvement plan. Explicit targets and deadlines for improvement should also be set. In addition to on-site management audits of qualified suppliers, we also look at management action and implementation on green products. Compliance with international laws and customer requirements are our top priority.
03	Supplier Evaluation	Group evaluations are conducted for key suppliers. Suppliers are scored on delivery quality, cost, environmental management, delivery time, and technical performance. Under-performing suppliers are provided with counseling and assistance in accordance with the sustainability management principles.
04	Regular Supplier Conference	Regular conferences are held with suppliers. Key suppliers are convened once a month and secondary suppliers convened once every 2 months. Their quality, environmental management, delivery time and product development progress are checked so that advice and assistance can be provided in a timely manner.

Local Purchasing

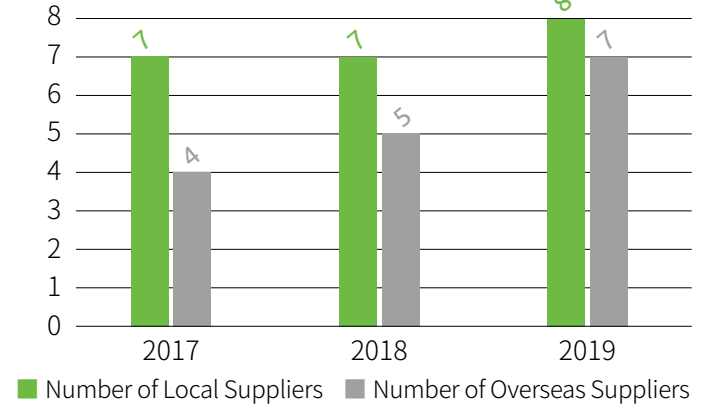
We uphold the spirit of local purchasing to try and keep job opportunities in the local community. Carbon emissions from transportation of materials are also reduced. In 2019, Realtek had 513 general local suppliers that accounted for 50% of all purchasing. There were 8 contract manufacturers that accounted for 88% of purchasing by value. We give preference to local sources for both general purchasing and contract manufacturing. Material shortage risks are also evaluated based on global supply and demand. The proportion of material sources in each region are also adjusted according to the current conditions for risk diversification.



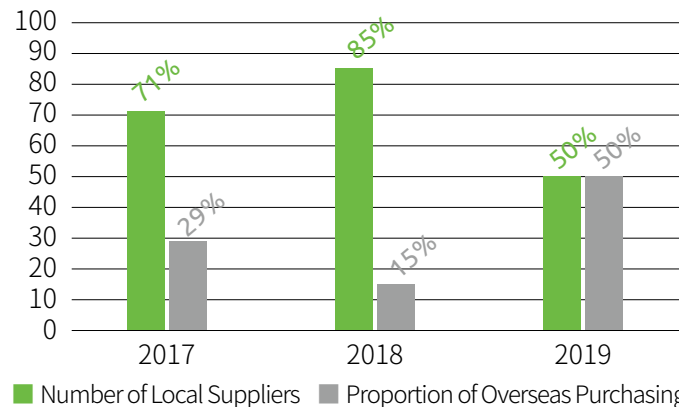
General Purchasing



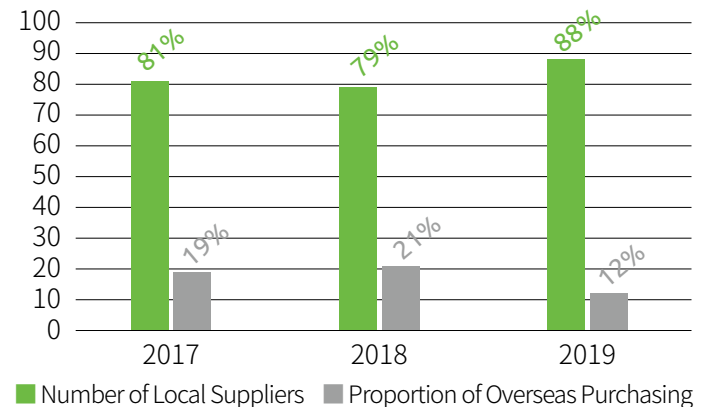
Contract Manufacturing



General Purchasing



Contract Manufacturing



Use of Safer Raw Materials

Quality Management and Environmental Regulations

In 1995 Realtek was the first IC design house in Taiwan to achieve ISO 9001 quality management system certification. In addition to quality, we also strive to comply with international environmental regulations and enforce green raw material/product certifications such as lead-free, halogen-free, hazardous substances in the electronics industry designated by the EU and Japan, and comply with the EU Restriction of Hazardous Substance Directive (RoHS). EU RoHS covers 10 substances including the 6 hazardous substances specified in EU RoHS (2011/65/EU) and 4 substances (DEHP/BBP/DBP/DIBP) specified in the amended (EU) 2015/863 directive.

Strengthen Raw Material Management in the Supply Chain to Ensure Green and Safe Products

Realtek has set strict standards for the raw materials used during production and complies with the relevant domestic/foreign guidelines. We also comply with a range of different international environmental and quality standards in ensuring that products do not contain substances harmful to human health or the environment.

Non-Conflict Minerals Policy

Realtek commenced conflict minerals investigation and management in 2010. Suppliers are required to provide a Conflict Mineral Policy Statement & Conflict-Free Smelter Program (CFSP) in accordance with the relevant standards ('Responsible Business Alliance (RBA) Code of Conduct' and 'Conflict-Free Smelter Program') to prove that the metals used in their products did not come from a region with illegal military conflicts. In the future, Realtek will continue to monitor and manage the raw material sources of suppliers to realize the CSR goal for non-use of conflict minerals.

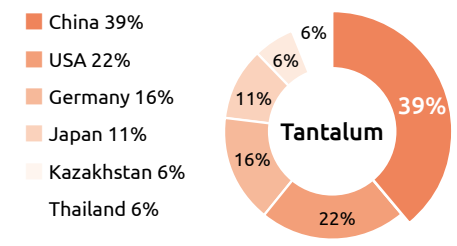
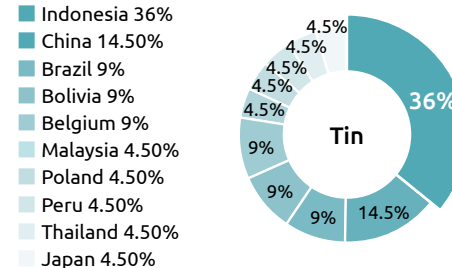
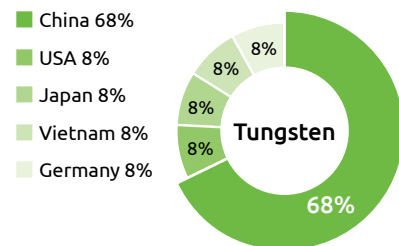
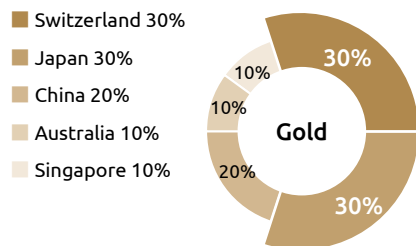
Product Certification

Realtek received SONY Green Partner (GP) certification in 2003, Fujitsu Green Partner certification in 2005, and CANON Green Partner certification in 2009. We also obtained ISO 14001 Environmental Management System certification in 2006. Realtek hopes that our continued efforts in green products will ensure consumer peace of mind during use, and prevent harm to the environment and human body.

Green Product Milestones

- **2003**
Achieved SONY Green Partner certification
- **2006**
ISO 14001 Environmental Management System certification
- **2008**
Compliance with the Restriction of Hazardous Substances (RoHS) directive
- **2009**
Raw materials are lead and halogen-free
Achieved CANON Green Partner certification
- **2009**
Green products satisfied EU REACH requirements

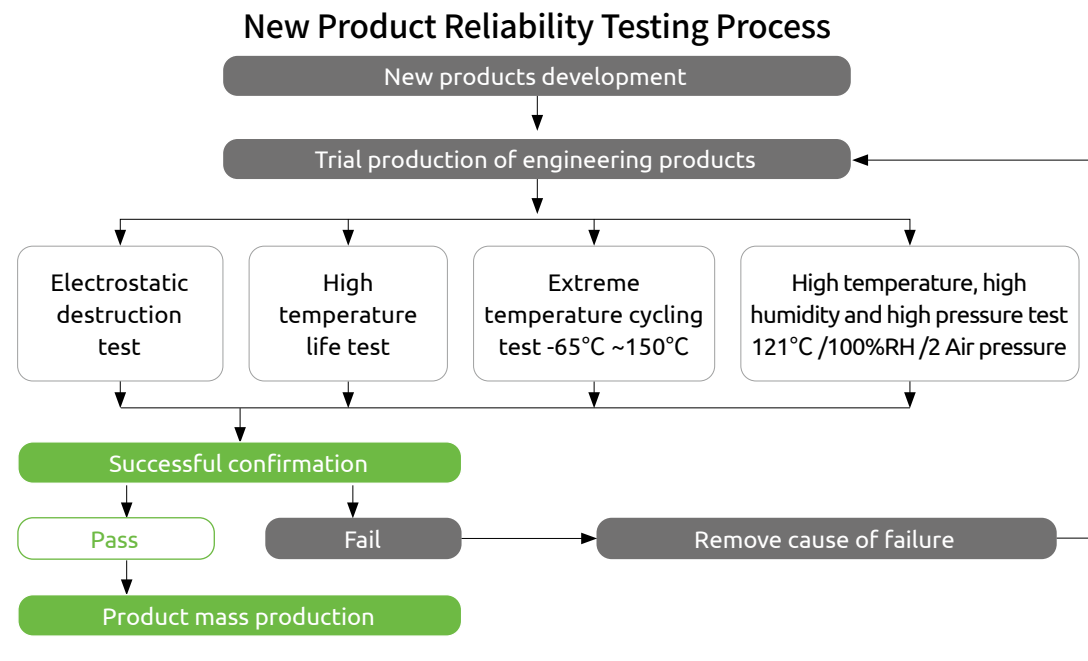
Distribution of the Four Main Sources of Metals for Realtek Products



Improving Product Durability to Reduce the Use of Production Resources

Realtek has increased product service life via reliability improvements and strives to reduce the use of production resources. Realtek's Quality Management Department uses a variety of reliability testing processes to rigorously and repeatedly test product functionality before shipping. Potential customer usage situations are simulated with exacting testing methodologies used to analyze the durability of each device under different conditions. Examples include 150 °C ~ -65 °C extreme temperature cycle testing, high-temperature/high-pressure testing when exposed to 100% relative humidity, electrostatic discharge testing, and high-temperature service life testing.

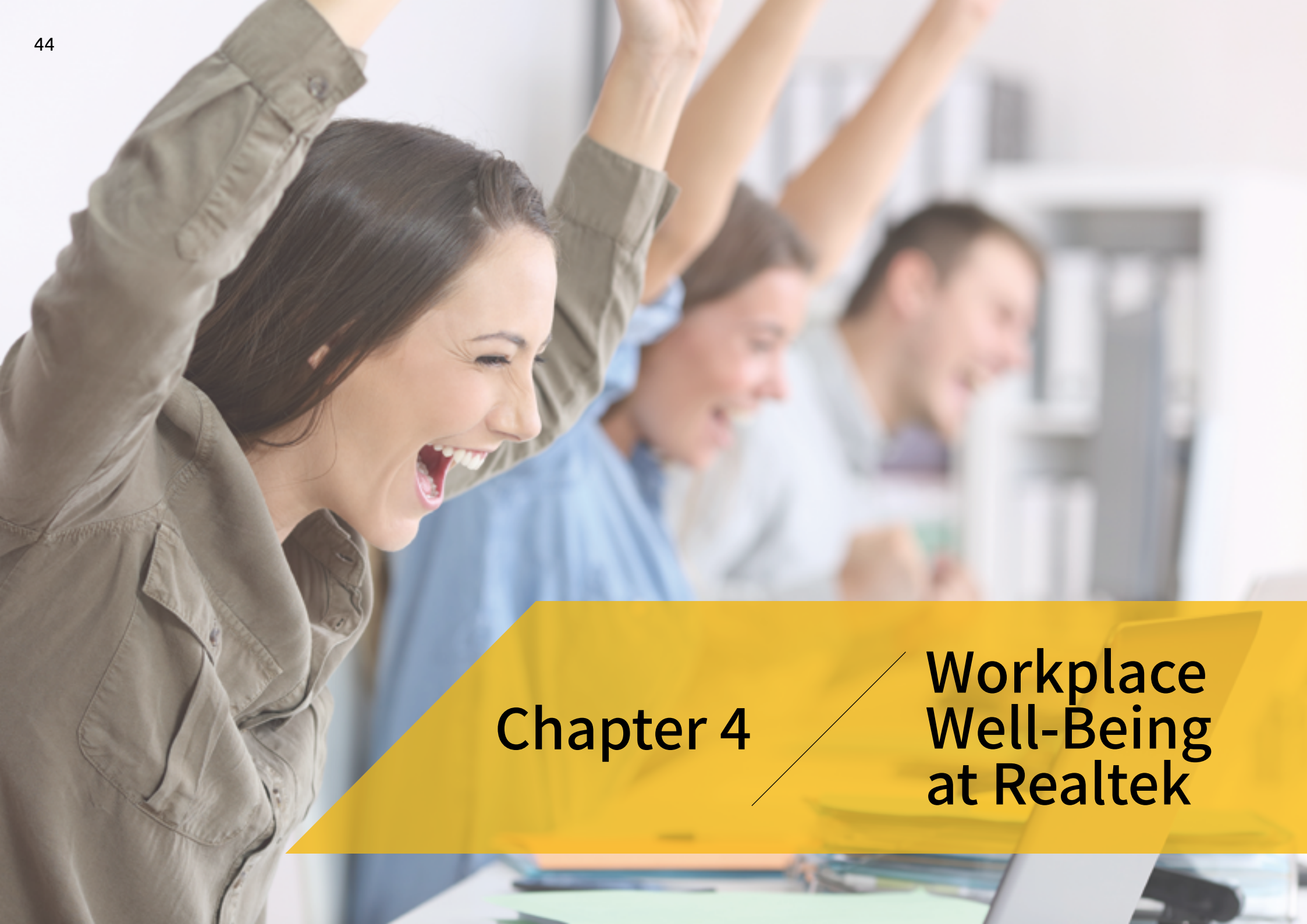
In addition to standard industry testing and measurement methods, Realtek also designs specific testing plans based on customer and end-user feedback. These testing procedures give us a full understanding of our products' reliability and durability.



Continuous Pursuit of Excellence Can Turn Products into Works of Art

Throughout our history, Realtek has surpassed contemporary quality specifications and implemented those quality management standards into products in actual mass production. We started with the ISO 9000 system for process standardization, went onto ISO 14000 to focus on environmental friendliness and green energy, became a SONY Green Partner, and then introduced ISO 17025 to ensure the accuracy and fairness of product reliability testing. These represent examples of Realtek's continuous pursuit of excellence, and the continued improvements in quality that create a superior consumer experience.





Chapter 4

Workplace Well-Being at Realtek

Remuneration and Benefits

Management Policy



Relevance to Realtek

Realtek believes that human resources are one of the most important assets in sustainable corporate development. Competitive salaries and compensation, a diverse and equal personnel policy, building of sound employee communication channels, extensive employee benefits, as well as a variety of safety and health promotion measures are all ways through which we expand our welcome to excellent talents and promote the retention and development of employees.



Material Topic Implications

Realtek continued to monitor the impact of employee salaries, rights, benefits, and workplace environment on the sustainability of our human resources. We foster a positive working atmosphere and provide an environment conducive to long-term employment.



Policy and Commitment

1. Provide competitive compensation and benefits.
2. Attract quality talent through continued improvements to employee services and organizational competitiveness.



Actions

Construct a fair compensation system, provide sound employee insurance and pension plans, enhance short/medium/long-term incentives, establish clear links between performance evaluations and the incentive/disciplinary system, share business outcomes with employees every year, continue to increase the amount invested in employee benefits, and create a friendly and healthy workplace through a wide variety of policies.



Goals and Subject

Continue to be named a constituent stock in the TWSE Taiwan Top 100 High Compensation Index.



Implementation Outcome

1. Named a constituent stock in the TWSE Taiwan Top 100 High Compensation Index.
2. Total funding from Realtek and the Employee Welfare Committee in 2019 approached NTD 82.53 million, a year-on-year increase of more than 22%.



Future Plans

1. Continue to be named a constituent stock in the TWSE Taiwan Top 100 High Compensation Index.
2. Expand the happy workplace at Realtek through the optimization of employee benefits and a fair remuneration system.

Professionalism, Well-Being, Crab Family



Realtek believes that human resources are one of the most important assets in sustainable corporate development. We take an interest in talent from every field, respect and value the unique skills and attributes of elites in each field, and offer professional knowledge and skills development for different fields so that talented people can effectively contribute their professional knowledge and expertise to all Realtek business processes. We are continuing to accumulate and refine our knowledge in each field, process performance, and service skills with a focus on core R&D. We regularly review our human resources policy and strategy to drive the continued re-engineering of human resources and service management, promote the sustainable development of human resources, and help the company create knowledge cooperation, service interaction, and growth with partners. We strongly believe that Realtek's employee training development and employee welfare policy, as well as the building of a CSR enterprise will lead to total employee engagement with the organization, and expand the dynamism of all Crab Family members. These will in turn help Realtek become a leader in the IC design industry through continued innovative R&D, outstanding quality, and proactive in-depth service.

Realtek's human resources statistics are sorted by type of employment, employment contract, and operating location, and are listed below. Realtek has a total workforce of 3,767 employees, including 3,678 full-time employees (indefinite contracts) and 89 contract employees. Analyzed by gender, 80% of our workforce are male and 20% are female.

In 2019, Realtek saw positive growth in indicators such as 1. Permanent employees, 2. Male employees, 3. Female employees in its workforce thanks to growing market demand, the attendant increase in manpower requirements, and the support offered by a friendly workplace policy. We sincerely hope that Realtek can make an even greater contribution to the nation and society in employment and development through human capital, market opportunities, and collaboration with all partners.



The employee statistics for Realtek Semiconductor's operating locations in Taiwan sorted by employment type, role, gender, and nationality are provided here for public reference.

Employee Statistics Sorted by Age, Education, Role, and Gender

Type	Group	Male No. of People	Male Percentage	Female No. of People	Female Percentage
Age	30 and under	790	20.972%	188	4.991%
	31~40	1,319	35.014%	357	9.477%
	41~50	825	21.901%	156	4.141%
	51 and over	101	2.681%	31	0.823%
	Total	3,035	80.568%	732	19.432%
Education	Senior high school or below	47	1.248%	74	1.964%
	University/College	514	13.645%	307	8.150%
	MA./Ph.D.	2,474	65.675%	351	9.318%
	Total	3,035	80.568%	732	19.432%
Role	R&D personnel	2,748	72.949%	501	13.300%
	Management and sales personnel	216	5.734%	140	3.716%
	Production personnel	71	1.885%	91	2.416%
	Total	3,035	80.568%	732	19.432%
Length of Service	Employed for less than 1 year	372	9.875%	78	2.071%
	More than 1 year	551	14.627%	129	3.424%
	More than 3 years	1,321	35.068%	274	7.274%
	More than 10 years	489	12.981%	133	3.531%
	More than 15 years	302	8.017%	118	3.132%
	Total	3,035	80.568%	732	19.432%

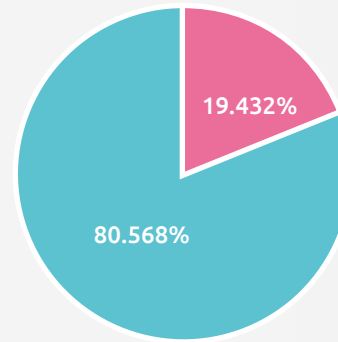
Distribution of Employee Nationality by Gender



Nationality	Local National	Foreign National	Total
 Male	3,022	13	3,035
 Female	729	3	732
Total	3,751	16	3,767
Percentage	99.57%	0.43%	100%

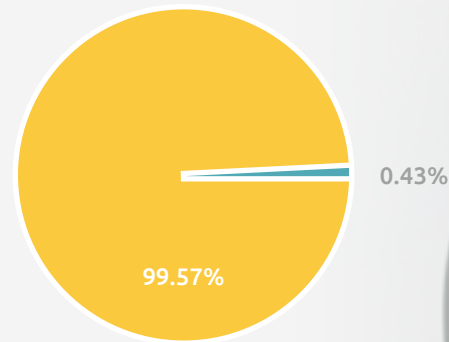
Employee Gender Distribution

● Female 732 ● Male 3,035



Proportion of Employees of Different Nationalities

● Local National 3,751
○ Foreign National 16



Realtek Labor Policy

Realtek believes that talent and knowledge form the most important cornerstones and assets of sustainable corporate development. As an innovation and technology R&D company, planning for our human resources policy is centered around providing innovative personnel services and development.

We have implemented a labor policy that incorporates five key indicators: manpower, service, training, environment, and management. The Realtek Labor Policy is as right column .

Realtek Corporate University and Talent Development

The Realtek Corporate University assists employees with professional learning and development in a diverse range of fields

A balanced curriculum that offers diverse, professional, high quality content has always defined Realtek's core educational philosophy for employees' learning, development, and continued improvement. The 'Realtek Corporate University' was established by Realtek to integrate organizational competitiveness with sustainable development goals so that they can effectively be linked to employee competency development. The 'Realtek Corporate University' helps employees engage in professional learning with both breadth and depth in a systematic and planned manner. The Realtek Corporate University consists of five academies: Speedy Induction Academy, R&D Innovation Academy, Management Leadership Academy, Experiential Cognition Academy, Learning Organization Academy. Each academy has its own complete set of goals under which employees are provided with extensive learning content and an effective learning environment based on a rigorous curriculum and a flexible, autonomous learning model.

The five academies guide the planning and development of Realtek's annual education and training courses. An example of this is the professional R&D education and training program developed by the R&D Innovation Academy of Realtek Corporate University. In 2017, 2018

and 2019 we provided more than 210, 221 and 237 professional R&D courses respectively. This is a very significant number and new courses are continuing to be added every year from the R&D of innovative technologies. In 2019, at least 4 professional R&D courses were offered by the R&D Innovation Academy each week for the professional development of employees. These help meet employee demand for professional knowledge and skills from work-related assignments in a swift and timely manner. In addition to professional R&D training, Realtek also organized a variety of different courses through the five academies to enhance professional knowledge, skills, and corporate talent. We are also continuing to provide education and training programs/courses that offer a more macroscopic perspective on the strategic development of organizations.

To strengthen knowledge management and transmission, we set up a Realtek e-learning system to carry out various education and training programs and provide employees with a channel for learning. We believe strongly that professionalism, self-confidence, accomplishments at work, and realization of value by employees will become sustainable investments for Realtek. They will then exert a positive influence on individuals, families, businesses, and the whole nation/society.

The 'Realtek Corporate University' not only seeks to realize the learning of professional knowledge and organization development. It also incorporates the Realtek corporate culture of 'Self-confidence and trust in people', 'Team spirit', 'Endless Innovation', and 'Energy'. We are certain that the employee training, planning, and implementation of our organizational culture will encourage development and creativity that will enhance Realtek's own competitiveness.

- Self-confidence comes from professionalism
- Trust in others is sharing without reserve, believing in the team and supporting others
- Teamwork comes from voluntary collaboration and support
- Endless Innovation drives continued leadership as well as the creation of new values, new fields and new opportunities
- Energy is service and enthusiasm

Labor Policy

- Protect the interests of Company employees
- Provide a healthy working environment
- Comply with national labor laws
- Advocate equality, safety, and accountability
- Value employee training and development
- Promote corporate engagement and responsibility

Realtek Corporate University

01. Speedy Induction Academy
02. R&D Innovation Academy
03. Management Leadership Academy
04. Experiential Cognition Academy
05. Learning Organization Academy

Education and Training Accomplishments

Apart from technical training courses, most of the professional training at Realtek form part of a training pipeline (e.g. Management Leadership, R&D Innovative). Realtek focuses on the performance parameters for each type of training and incorporates them into the action plan. Of the education and training courses organized by Realtek in 2019, 1,514 internal and external training courses were hosted for group and individual

learning. The total duration of courses was 5,619 hours and the total attendance for all classes combined was 21,334. Realtek employees therefore received on average 17.76 hours of training based on the total number of employees in 2019. We will continue to trust that our strategic planning on education and testing will continue providing Realtek with a competitive knowledge cultivation roadmap.

Training Hour Statistics by Employee Type

Type	Item	Male	Female	Subtotal
R&D	Attendees	17,369	2,665	20,034
	Hours	54,117	7,703	61,820
	Average Hours	3.12	2.89	3.09
Management and Sales	Attendees	517	108	625
	Hours	2,220	531.5	2,751.5
	Average Hours	4.29	4.92	4.40
Production	Attendees	615	60	675
	Hours	2,147	171	2,318
	Average Hours	3.49	2.85	3.43
Total Participation in Training	Attendees	18,501	2,833	21,334
	Hours	58,484	8,405.5	66,889.5
	Average Hours per Person	3.16	2.97	3.14
Total Workforce	No. of people	3,035	732	3,767
Average Hours of Training Undertook by Each Employee	Hours	19.27	11.48	17.76

Note: Average hours of training undertook by each employee = Total hours participating in training / Total workforce

Education and Training Accomplishments

Learning for groups and individuals

In total **1,514** courses



In 2019

Realtek Corporate University

1. Total number of courses: 1,514
2. Total number of external courses: 218
3. Total course hours: 5,619
4. Total number of attendees: 21,334
5. Total training hours attended: 66,889.5
6. Average training hours per attendee: 3.14
7. Average training hours per employee: 17.76



Range of Open Channels for Communication

Management Policy

Realtek promotes a culture of open and sincere communication throughout the Big Crab Family. At Realtek, we respect the character, perspective, and opinion of every employee. There is no union organization or collective bargaining agreement, but the currently established channels for employee/management communication remain one of our key paths to ensure smooth internal operations. We listen to and accept different opinions and ideas within the team based on the principle of equality in speech. Employees can express their professional or constructive opinions through a range of effective communication channels. Response and support management are provided when necessary.

Execution

Realtek employees can submit their opinions and suggestions through a variety of internal communication channels including (1) direct unit supervisor; (2) executives at all levels; (3) Intranet Discussion Forum; (4) Realtek organizational communication meeting; (5) All Administration Dept. contacts and supervisors; (6) Employee Welfare Committee; and (7) the President's Mailbox. Employee counseling at Realtek includes recruit consultation sessions and an Employee Relations Development Center that provides individual counseling or team support for employees. We have also established an Occupational Safety and Health Center to promote environmental safety, occupational safety, and health promoting services throughout the organization. At the same time, we have set up an 'Employee Assistance Plan (EAP)' that provides employees with a free legal advice helpline (provided by Cheng Kuan Attorneys-at-Law) and psychological counseling services (contracted to the Hsinchu Lifeline Association - Employee Support Services Center). We hope the comprehensive range of channels offered will provide everyone at Realtek with quality avenues for communication and interaction.

Competitive Compensation and Benefits

Management Policy

Quality talents are Realtek's most important assets. A sound remuneration scheme and employee benefits are critical to the organization's innovation, energy, and competitiveness. Positive performance evaluation and incentive schemes have been drawn up by Realtek to promote employee improvement, retention, and career development. Current practices are as follows:

- Two performance evaluations are conducted each year to serve as the basis for incentives such as promotions, salary adjustments, bonuses, and profit sharing
- Provide guidance on patent R&D and bonuses for patents awarded
- Well-known domestic/international periodicals, papers, and books are available for borrowing. Guidance and incentive bonuses for published articles
- Participation in R&D projects that are related to professional expertise and personal interests
- Established 'Employee's Great Ideas Encouragement Program' incentive scheme
- Offer a dual-track career development system that includes the option for promotion to R&D management roles based on ability and interest
- Bonus scheme based on performance evaluation and R&D contribution
- Highly competitive standards of compensation and benefits
- Salary adjustments, annual bonuses, and profit-sharing are based on the outcomes of personal performance evaluations so that employees can share in the company's business results

Employee Welfare Spending

Employee welfare costs amounted to ND\$13,777,233,000 in 2019. The International Financial Reporting Standard (IFRS) defines employee welfare costs as **1** Salary: includes stock-based money and bonuses; **2** Labor and National Health Insurance fees, **3** Pensions, **4** Employee remuneration, and **5** Directors' remuneration. No employee shareholding policy is planned for now. Refer to the 'Realtek Semiconductor 2019 Annual Report' for further details on remuneration and welfare spending.



Employee welfare costs have continued to grow in recent years



Named constituent stock in the TWSE "Taiwan Top 100 High Compensation Index"



Ranked in the Top 50 for average employee welfare spending by the TWSE in 2019



Fair Remuneration Scheme

Realtek has worked to implement a fair compensation scheme and standardized evaluation formulas over the years. Uniform baseline indicators are used to realize the goal of professional management. An equitable working environment is created through rigorous systems that ensure fair compensation. Consistent salary standards, salary adjustment review indicators and guidelines are applied for all Realtek employees in each position to ensure gender equality. We also ensure there is no discrimination on the basis of employee gender, race, or age in the standard of remuneration offered during the hiring process. Everything is done to ensure a fair remuneration system. In 2019, the average salary of full-time employees in non-management positions was NT\$1,993,000 and the median salary was NT\$1,819,000. There were no incidents of discrimination or complaints received during the year.

High-Coverage Company Group Insurance for Employees and Dependents

In addition to providing basic labor and health insurance, Realtek also provides group insurance paid by the company as an employee benefit. The insurance includes life, accident, hospitalization and cancer coverage. Employees' spouses and children can also be enrolled in the group insurance at the company's cost. Employees can choose to purchase hospitalization and cancer insurance for their parents at preferential rates as well. Realtek not only looks after our employees but also cares about the health of their families. Realtek employees know that the company truly cares.

Retirement Plan

Retirement regulations were drawn up and a Labor Pension Preparation Fund Supervision Committee set up by Realtek with monthly contributions paid to the Preparation Fund for permanent employees in accordance with the relevant regulations of the *Labor Standards Act*. Pension contributions have also been made in accordance with the actuary report on the pension fund since 1995. Starting from July 1, 2015, regulations governing pension contributions for employees that are local nationals were formulated by Realtek in accordance with the *Labor Pension Act*. For employees covered by the labor pension scheme outlined in the *Labor Pension Act*, at least 6% of their monthly salary is deposited with their personal account with the labor Insurance Bureau. Employee pensions are paid as a monthly pension or a lump sum from the employee's personal pension account and accumulated returns.

Diverse Work-Life

Most people seek to achieve a balance between work, health, and family life. At Realtek, we attach considerable importance to improving the work-life balance and health awareness of employees. For example, we provide health promotion and disease prevention information, host educational seminars on diverse topics, organize a variety of activities, offer a reading room, set up different types of clubs, and offer different kinds of incentives. In terms of employee lifestyle benefits, related programs are organized by Realtek every year to look after employee health, build morale, and create a workplace culture of working smart in order to build the healthy constitution and long-range competitiveness needed for sustainable corporate development. In the future, we will pay greater attention to the work-life requirements of different generations and interest groups. Also, more diverse and flexible work-life spaces will be created at the factory.

Realtek Employee Welfare Committee

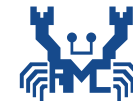
To improve our organizational energy and enhance the quality of employee welfare services, we established an employee welfare committee that organizes lifestyle seminars and a variety of different activities every year to enrich the work-life of our employees. The seminars cover investment & wealth management, arts & literature, numerology, personal relations, recreational activities, and sporting competitions. The activities are open to the families and friends of everyone in the Realtek Crab Family. 'Realtek Family Day' is the most important annual event. Employees are invited to bring their families, relatives, and friends to join the festivities. These include a variety of rides, food stalls, breathtaking performances, and exciting competitions. There

are also fun amusement rides that contribute to the unique atmosphere of the Big Crab Family Day. In addition to creating an atmosphere of team spirit, endless innovation, and energy, it also helps employees integrate their work and family life so they can join in creating the corporate culture of the Realtek Big Crab Family. In 2019, Realtek and the Employee Welfare Committee allocated nearly NT\$ 82.53 million to support employee benefits and related activities. This represented an increase of NT\$ 15.08 million; 22% more than the previous year. We hope that all employees will do their best to boost the competitiveness of Realtek in every field as we strive to provide employees with benefits that continue to improve.

In addition to large-scale events intended for all employees, Realtek also organizes a variety of small themed events to expand the channels for fun at work and play for employees. In 2019, we organized more than 18 lively and learning-through-play activities including 'Hope Cinema', 'Realtek Lifestyle Seminars', 'Little Crab Story House', and the 'Realtek Cup'. We hope that employees can apply their full knowledge, skills, and team spirit to their professional work while enjoying smart recreational living outside of work.

Seven Components of 2019 Realtek Family Day

1. Realtek Triathlon
2. Big Crab Experience
3. Crab Family - Little Crab Family Experience
4. Realtek Team Challenge
5. Exciting performance events
6. Food stalls and employees' stall selling
7. International volunteers and small farmers market



Exciting stunts - Fun for Big and Small Crabs



Crab Family Dance Show - Full of energy and vibe



Realtek Triathlon Championship - Winning No.1 in team relays

What Benefits are Offered by Realtek?

- 01 Highly competitive standards of compensation.
- 02 Salary adjustment, annual bonuses and profit-sharing are organized every year based on the company's performance to let employees share in the company's business success.
- 03 The Welfare Committee provides holiday festivals and birthday coupons, travel subsidies, and generous self-service benefits.
- 04 Free annual health exams are held to help employees practice self-health management.
- 05 Disbursing of holiday bonuses and subsidies for weddings and funerals.
- 06 The Employee Welfare Committee organizes a variety of professional educational seminars, club activities, ball-sport competitions, and competitive interactions.
- 07 The Employee Assistance Program (EAP) provides psychological counseling, legal counseling and stress reducing massage services.
- 08 Established employee cafeteria, café, and convenience store to provide employees with a variety of food & beverage services.
- 09 Employees are provided with company group insurance in addition to labor and health insurance to enhance their work-life protection.
- 10 Realtek Energy House provides sports, reading, gaming and health management services.



Realtek Family Day - Winning triathlon team

Total funding from
Realtek and the
Employee Welfare
Committee in 2019

More than **82** million NTD

Fun and lively
Employee Welfare
Committee activities

18 sessions

Cheerful smiles and
high morale among
members of
the Big Crab Family



Summary of Employee Benefits in 2019

Benefit Category	Benefit Item	Content
Financial Benefits		Performance bonus, Wedding gift, Childbirth subsidy, Funeral subsidy, Departmental fund, Travel allowance, Fuel allowance, Birthday gift coupon, Holiday gift coupon (per Company regulations)
	Cafeteria plan	Amount that each employee can apply for each year is decided by the Employee Welfare Committee.
	Employee purchase coupon	Discount shopping coupons for employee purchases.
	Meal allowance	The company cafeteria serves lunch and dinner every day. The cost of each meal is partially subsidized by the company.
Facility Benefits	Parking space	Abundant company parking is provided along with charging pillars for electric vehicles.
	Amenities	There is a Family Mart convenience store and a Xiao-Yu store on the company premises.
	Childcare service	Preferential kindergarten enrolment as well as breast-feeding room on company premises.
	Sporting facilities and environment	The Realtek 'Energy House' offers fitness facilities, pool table, table tennis, basketball arcade machine, and play equipment. There is a dance classroom, outdoor basketball court, and showers with toiletries supplied.
	Magazine Reading Room	Realtek offers a number of technology, management, finance, family and health magazines for employees to read.
	Reading House	A comfortable Reading House has been set up with books and audio-visual content that are updated every month that employees can borrow for free.
Activity Benefits	Little Crab Story House	Employees can bring their dependents to the annual Little Crab Story House event. Lively parables teach students the right concepts and habits. Realtek also gives out educational and inspirational story books to every child present after the activity.
	Hope Cinema	An internal movie screening is held every two months. Employees can bring their families or friends to watch movies.
	Lifestyle seminars	A number of internal knowledge seminars open to employees and their families are held every year.
	Family Day/End-of-Year Banquet Prize Draw	The Company sponsors money and goods as prizes.
Other Health and Project Benefits	Leave Type	Includes: special leave, flexible leave, maternity leave, paternity leave, sick leave.
	Employee Assistance Plan (EAP)	Includes: psychological counseling, legal advice, stress-relieving massage, and annual topic seminar on EAP.
	Group insurance	Realtek provides company group insurance coverage for employees. Employees' spouses and children can also receive company group insurance coverage for free.
	Business insurance	Business insurance is provided by Realtek.
	Health exam	Annual health exams are offered for employees (free) and their dependents (at a discounted rate). Special in-hospital self-funded special exams (CAT and MRI) at a discounted rate were also organized for the first time in 2019.
	Health consultation with resident physician	Six sessions were conducted each month. 3 hours of consultation were provided on-site by the doctor for each session. A total of 457 consultations were conducted in 2019.
Airport VIP Lounge	An airport VIP lounge is available for airlines that Realtek has agreements with.	

Employee Welfare Committee Activity Record for 2019. Event attendance was over 1,500.

Item	Benefit Item	Date	Event Description	Event Content
01	Film Appreciation	2019/01/09	The Welfare Committee organizes an internal 'Hope Cinema' every two months for licensed screening of popular movies that just finished their first run. Employees are welcome to bring their family and friends.	January screening of <i>Mission Impossible: Fallout</i>
		2019/03/06		March screening of <i>Crazy Rich Asians</i>
		2019/05/08		May screening of <i>Aquaman</i>
		2019/07/03		July screening of <i>How to Train Your Dragon 3</i>
		2019/09/04		September screening of <i>Dumbo</i>
		2019/11/06		November screening of <i>Aladdin</i>
02	Recharge Seminars	2019/04/17	The 'Realtek Lifestyle Seminars' are organized by the Welfare Committee every year. A total of 4 sessions were held in 2019. Seminars on a variety of topics are hosted to enrich the work and life of employees and their dependents.	Q1 seminar – 'Building my Financial Health Indicators' Speaker: Terry Guo
		2019/06/27		Q2 seminar – 'Around the World in 80 Days on 100,000 dollars - Let's Go to Eurasia!' Speaker: 943
		2019/08/22		Q3 seminar – 'Property Guide - Analysis of Local Trends in Hsinchu for Buyers' Speaker: Lu, Jing-Min
		2019/11/21		Q4 seminar – 'Living in Comfort: Building a Happy Home Life' Lecturer: Tang, Jia-Hong
03	Realtek Family Event	2019/07/31	The Welfare Committee hosts 'Little Crab Story House' family activities every year. 7 sessions were held in 2019, with each session running for 2 days and limited to 50 or 60 children depending on venue size. Friendly, professional Story House sisters and brothers are invited to visit Realtek and tell stories to little crabs. The event is wildly popular among parents and children. The lively and thought-provoking stories provide big and small crabs with an educational and very meaningful family activity.	'Little Crab Story House - Day 1' Session A stories – 'Little Thumb, Witch's Broomstick' Session B stories – 'John the Elephant, The Late King' Session C stories – 'Little Chick Saves Mom, Don't You Know How Great You Are' Session D stories – 'Half the Reward, The Brave Little Warrior'
		2019/08/01		'Little Crab Story House - Day 2' Session E stories – 'Little Thumb, Witch's Broomstick' Session F stories – 'John the Elephant, The Late King' Session G stories – 'Little Chick Saves Mom, Don't You Know How Great You Are'
04	Health and Vitality	2019/11/09	The Welfare Committee subsidizes the 'Realtek Cup Competition' for clubs every year. Six clubs took part in 2019. The company-wide competition fosters team spirit and rapport, encourages healthy recreational habits, and promotes friendships between company colleagues.	Realtek Cup Badminton Tournament
		2019/06/20 - 2019/08/29		Realtek Cup Basketball Tournament
		2019/09/11 - 2019/10/23		Realtek Cup Tennis Tournament
		2019/05/23		Realtek Cup Table Tennis Tournament
		2019/12/21 - 2019/12/28		Realtek Cup SoftBall Tournament
		2019/07/27		Realtek Cup Volleyball Tournament

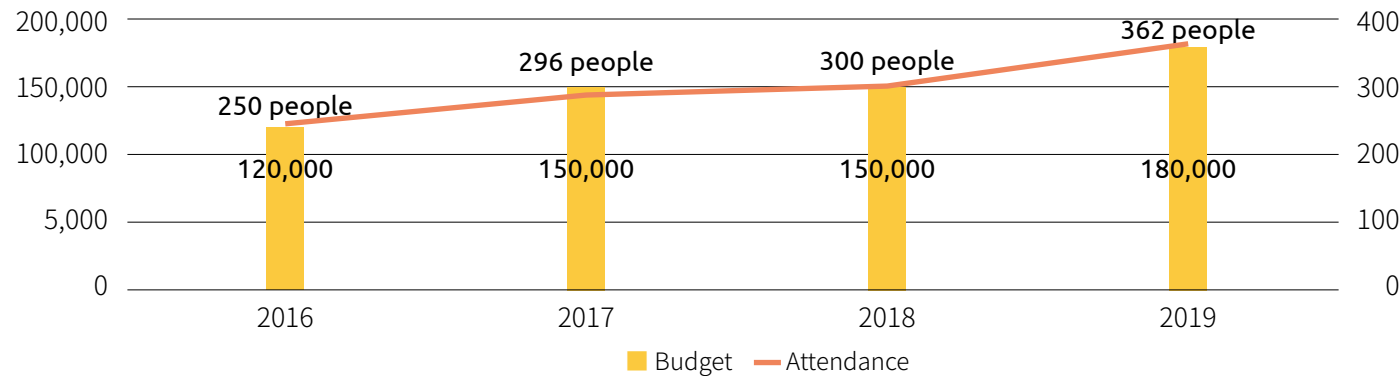
Total exceeds
1,500
attendees

The ‘Little Crab Story House’ Provides Plenty of Fun and Excitement for Little Crabs During the Summer Break

The Employee Welfare Committee hosts the ‘Little Crab Story House’ family event that little crabs look forward to every year. Friendly and professional story house sisters and brothers are invited to read stories to the little crabs. Due to the event’s popularity among employees and young children, we have increased the budget, available sessions, and capacity every year. We hope to provide big and little crabs with an educational and inspirational family event through lively, interesting, and inspiring stories. The sounds of laughter and expressions of surprise every year motivate all Realtek employees and dependents.

Crab mother feedback:

"The children are always so excited when they visit the Realtek workplace. They not only learn that **'this is where mommy works'** but also get to hear **great stories**. What could beat that? The parables in the story can be applied in the real world in the future too, making them quite practical! This is what learning through play means. **I thank the Company for organizing such a great family event!**"



Annual	Budget	Sessions	Capacity	Attendance	Attendance Rate
2017	150,000	6 sessions over 2 days	300 people	296 people	98.67%
2018	150,000	6 sessions over 2 days	300 people	300 people	100%
2019	180,000	7 sessions over 2 days	390 people	362 people	92.82%



The Little Crab Story House held every year strengthens employees’ family relationships while also enriching their work and life.

Unpaid Parental Leave Scheme

We care about every stage in the lives of Realtek employees. We are also more than happy to help our employees get through every important phase in their lives successfully and safely! An unpaid parental leave scheme based on the Gender Equality in Employment Act was implemented by Realtek. All male and female employees can apply for leave to look after their family members.

Number of People that Used Unpaid Parental Leave in 2019

7 men



16 women

Retention Rate

100% for men

90.91% for women

Reinstatement and Retention after Unpaid Parental Leave Sorted by Gender

Item	Code	Male		Female		Subtotal Quantity
		Quantity	Gender Ratio	Quantity	Gender Ratio	
Number of people eligible for unpaid parental leave in 2019	A	364	86.00%	59	14.00%	423
Number of people that used unpaid parental leave in 2019	B	7	30.43%	16	69.57%	23
Total number of people reinstated after unpaid parental leave in 2019	C	3	25.00%	9	75.00%	12
Total number of people expected to be reinstated after unpaid parental leave in 2019	D	6	33.33%	12	66.67%	18
Total number of people reinstated after unpaid parental leave in 2018	E	3	21.43%	11	78.57%	14
Total number of employees still with the company 12 months after returning from unpaid parental leave in 2018	F	3	23.08%	10	76.92%	13
Reinstatement rate	C/D	50.00%		75.00%		
Retention rate	F/E	100.00%		90.91%		

In addition to the unpaid parental leave scheme, the Occupational Health and Safety Center also conducts 'Motherhood Protection' for female employees from notification of pregnancy to one year after childbirth. Standard prenatal visits are also supplemented by consultation with the on-site doctor, health education for pregnant mothers, as well as personal and baby health

advice after giving birth. Realtek also offers a clean, safe, and private breast-feeding room where the mothers of newborns can express breast milk in a friendly and stress-free environment. Hsinchu City recognized Realtek's efforts with a distinction award for our breast-feeding room in 2018. We will continue to develop new concepts that fulfill the corporate social responsibility of Realtek for all employees.

Friendly and welcoming breast-feeding room environment



Safe Workplace and Health Promotion

Realtek established an Occupational Safety and Health Management Committee in accordance with Article 23 of the *Occupational Safety and Health Act*. The Committee has 13 members and is convened on a quarterly basis to review occupational safety and health issues. Realtek is in the IC design industry so there are no employees engaged in high-risk work or roles that have a high risk of certain diseases. We have continued to make improvements in occupational safety topics or procedures based on domestic/foreign occupational safety legislation. We work actively and attentively to create a safe and reliable working environment for all employees.

Realtek occupational safety and health policy:

1. Respect for occupational safety and health is one of the pillars of Realtek's business
2. The goal of zero injury through elimination of hazards and reduction of occupational safety risk has been set for all employees
3. Engage in continuous improvements to enhance occupational safety and health standards based on statutory and other requirements
4. All employees participate in consulting. Providing employees with a safe and healthy working environment is one of Realtek's basic responsibilities

Title	Current Position	Role
Chairman	President	Person-in-charge
Committee Member (and Executive Secretary)	Head of Occupational Safety Center	Occupational Safety and Health Manager
Committee Member	Head of R&D Center	Head of Unit
Committee Member	Head of Manufacturing Division	Head of Unit
Committee Member	Head of Quality Management Department	Head of Department
Committee Member	Occupational Safety and Health Personnel	Occupational Safety and Health Personnel
Committee Member	Factory Affairs, Administration Department	Engineer
Committee Member	Nurse, Occupational Safety Center	Medical Personnel
Committee Member	Head of Manufacturing Division	Labor Representative
Committee Member	Engineer, Communications Network Business Group	Labor Representative
Committee Member	Engineer, Computer Peripheral Business Group	Labor Representative
Committee Member	Engineer, Multimedia Business Group	Labor Representative
Committee Member	Quality Management Department	Labor Representative



Occupational Safety and Health Committee meeting (quarterly)



Content of report by occupational safety personnel at the meeting

40%

of this formal labor health and safety management committee is made up of labor representatives. Labor representatives assist with supervising and making recommendations on planning related to health and safety.



Awarded OHSAS 18001 International Certification

Realtek identified the physical and mental harm that certain types of work or working environment might inflict in accordance with the *Occupational Safety and Health Act*, the *Labor Standards Act*, and other industry-related regulations. Various measures have been adopted to reduce, eliminate, avoid, or prevent such risks in order to provide a safe and healthy working environment. All of the above efforts have been certified by SGS Taiwan, an independent third-party verification body, to achieve Realtek's certification on OHSAS 18001 Occupational Health and Safety Management Systems. In addition, ISO 45001 certification is expected to be completed in 2020.

OHSAS 18001 Occupational Safety and Health Performance Indicators

In 2019, the OSH Center defined supervision and measurement methods for operations and activities that may pose an unacceptable level of safety and health risk. At the end of each quarter, management performance is calculated using the factors listed in the performance evaluation criteria to realize the goal of continuous improvement on safety and health.



Passive Performance Indicators

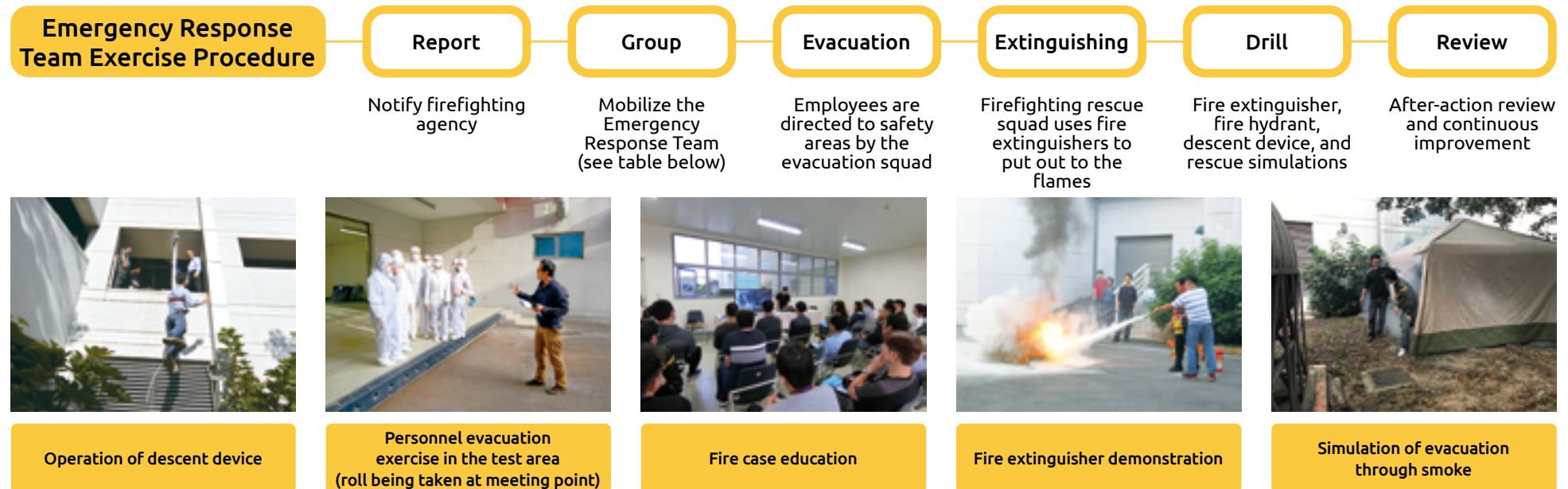
Safety Indicator	Scoring Criteria	Quarter Target Value	Quarter Actual Value
Disabling Injury Frequency Rate (FR)	(Number of disabling injuries x 1,000,000) / Total work hours	0.00	0.00
Disabling Injury Severity Rate (SR)	(Number of disabling injuries x 1,000,000) / Total work hours	0.00	0.00
Frequency/Severity Indicator (FSI)	$\sqrt{(F.R. \times S.R. / 1,000)}$	0.00	0.00

Emergency Response Plan

Realtek is required by national firefighting legislation to form an emergency response team and conduct realistic fire simulations (exercise with simulated smoke) once every 6 months. The purpose of this is to ensure that effective firefighting measures can be organized on the spot when a fire breaks out and before the fire service arrives to reduce the amount of damage. Routine preventive internal inspections can also provide early warning and timely fire suppression. The team can even use their training to direct the evacuation of employees during the early stages. Improving the firefighting team's expertise with rescue, evacuation, and first-aid will ensure proper readiness during emergencies.

The emergency response exercise includes cutting off the plant's power, a personnel count, emergency first-aid and setup of first-aid stations. The exercise is very realistic. The emergency response tasks must be carried out correctly and completed within the allotted time. An after-action review is conducted after the exercise. Mistakes in the latest exercise are identified for improvement. We hope that every exercise will hone the skills of related personnel. In the event of an emergency, the relevant SOPs can be put into action so that injury can be prevented or minimized.

Emergency Response Team	Tasks
Reporting Squad	1. Responsible for notifying the relevant units. 2. Report disaster damage and casualties to Command HQ.
Rescue Squad	1. Launch response missions based on incident type. 2. Determine the cause of the incident and carry out emergency rescue.
Guidance Squad	1. Direct people to the evacuation points in a loud voice. 2. Operate evacuation equipment and monitor radio broadcasts to determine the evacuation route.
Auditor	1. Count the number of people in the evacuation zone.
Traffic Management, Safety and Protection Squad	1. Direct traffic around the affected area. Guide the fire services and ambulance to the correct locations. 2. Designation of safe zones as well as management of traffic and personnel evacuation at the scene of the event.
First Aid Squad	1. Administer first-aid to patients at first-aid stations. 2. Determine the type of incident when the alarm is triggered. Administer appropriate medical devices and drugs as required.



Employee Health is the Building Block of Corporate Competitiveness

Exceeded the Industry Standard by Upgrading First-Aid Equipment to Include AEDs on Each Floor

Statutory first-aid equipment was upgraded in 2019 with the expanded installation of Automated External Defibrillator (AED) devices at Realtek Hsinchu head office. AEDs were installed on each floor to improve the chance of successful first-aid in the case of an incident requiring a heart restart. The 5 existing AEDs were joined by 8 more. An 'AED and CPR Training Workshop' was also held in 2019. Sixty personnel including new employees, current employees, and emergency response team members took part in the training. Realtek is planning to hold the workshop every year in order to achieve the goal of a 100% training rate.

Selection of Quality Health Exam Teams to Carry Out Annual On-Site Health Exam

Many employees and their dependents have praised and taken part in the annual health exams organized by Realtek. Quality health exam teams are selected based on their health exam planning, preliminary briefing, pre-exam contact, consultation during the exam process, reservation process, professional communication on the day, subsequent health seminars, and statistical analysis. The teams then visit the sites to carry out professional health exams for employees in a systematic manner. Seven new self-funded options were added to the employee health exam in 2019 (1. Blood test for tumor marker, 2. Blood test for hepatitis, 3. Blood test for cardiac-function, 4. Blood test for thyroid function, 5. Blood test for anemia, 6. Blood test for allergens, 7. Breath test for Helicobacter pylori bacteria). Special in-hospital self-funded exams (CAT and MRI) were also set up for the first time to provide greater assurance on the health of everyone at Realtek. A total of 3,146 employees underwent health exams in 2019 for an implementation rate of 91%.

Realtek Introduced New Options for Employee Health Exams in 2019

- Added statutory health exam for employees over the age of 40 (inclusive) as required by law.
- Added statutory health exam for people who work extended hours at night.
- Added health screening for employees over the age of 50 (inclusive).
- Standard company package made available to employees' dependents with preferential rates on self-funded options (7 tests including 6 blood tests and 1 Helicobacter pylori breath test) as well as in-hospital special self-funded optional exams (1 painless endoscope examination / 3 CAT exams / 5 MRI exams).

Health Exam Statistics for Recent Years

👤 2017 : 2,741 people 👤 2018 : 2,926 people 👤 2019 : 3,146 people

New AED Installations - Map of Installed Locations in the Company



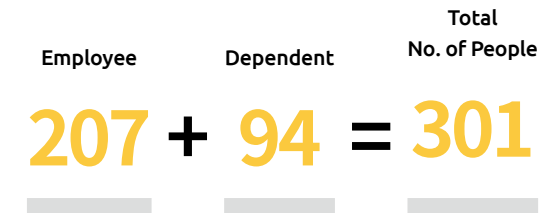
Monthly Health Promotion Activity

Realtek provides a selected theme and issues a health tip every month (or based on current health and hygiene topics), as well as offers employees simple and easy-to-understand health information via leaflets and posters. Complementary graphics are also used to leave a stronger impression and attract employees' attention. These remind employees to look after their physical and mental well-being through proper diet, routines, regular exercise, and stress relief even if they are busy with work. Realtek's total approach to health education is intended to support the physical and mental well-being of all employees, and promote a healthy family life and a further future of the company, society, and nation.



Flu Vaccination

The flu season starts around late autumn/early winter every year. Epidemic prevention is essential for people of all age groups. To safeguard the health of employees and their families, off-site self-funded quadrivalent influenza vaccinations were organized by the Occupational Safety Center in 2019. People were reminded to get vaccinated early and improve their immune function before the peak of the flu season so they can combat the spread of flu effectively. Vaccination locations were expanded to include Taoyuan, Hsinchu, and Miaoli for the first time. Employees could then book a vaccination appointment at a nearby clinic. This helpful service was welcomed by employees and their dependents. A total of 301 employees and their dependents participated in the flu vaccination booking event.



Health Seminar

Realtek invites professional doctors every quarter to talk about healthy diets and preventive medicine. Employees were reminded to look after themselves outside of work, pay attention to small physical changes, and avoid running themselves down through excessive fatigue. These seminars provided health knowledge, ways to stay healthy, and first-aid techniques.

Q1

'Annual Health Exam Reports Explained'



Dr. Song, Chi-Kan from the Department of Blood Oncology was invited to personally explain the meaning of each anomaly in health exams so employees can manage their personal health more effectively.

Q2

'Eating Out - Making Smart and Healthy Choices'



Director Huang, Hsiang-Lan from the Department of Nutrition at Min Sheng Hospital was invited to personally teach employees how to select nutritious or complementary foods based on their personal health. By avoiding the impact of dining out for extended periods of time, the risk of metabolic syndrome can be reduced while maintaining good physical shape.

Q3

'AED-CPR and AED Training Workshop'



EMT-II Instructor Liao, Tu-Rong was invited to demonstrate AED and CPR techniques as well as conduct training drills.

Q4

'Flu Season - Don't Give Pneumonia an Opening'



Dr. Cao, Yu-Ting from the Hsinchu branch of National Taiwan University Hospital was invited to talk about flu prevention and treatment. Dr. Cao also took a group photo with Realtek employees after the class.



Follow-Up on Injury or Illness

Most of the follow-up cases came from traffic accidents, medical care and support for serious illness. Professional nursing personnel and on-site physicians use personal interviews or telephone calls to check on the well-being and progress of Realtek employees. All possible assistance is given to employees for health care and medical advice. Professional advice, psychological support, and other sources of support such as insurance and social resources are provided during therapy to speed up their recovery, reduce the negative physical/mental effects, as well as reduce the impact on their work and family.

Traffic Accident

13
persons

Medical Accident

4
persons

Patient Care

6
persons

Stress-Reducing Massage Service Center

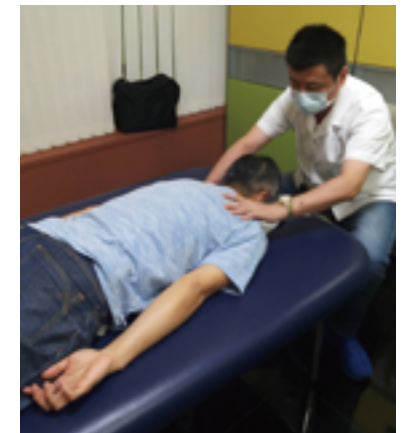
The most popular health promoting activity outside of professional medical advice and assistance was the stress-reducing massage service that has been running since 2008. It has been used more than 30,000 times over the last 11 years. Comfortable equipment was supplied by Realtek and visually handicapped masseurs with professional qualifications hired to keep employees' bodies in a healthy state and improve their quality of work and life. Professional massages not only improve employees' blood circulation and enhance their health, but also provide employment for the visually-handicapped, improving their quality of life and environment.



Massage Bed Service



Massage Chair Service



Massage Service

Chapter 5

Realtek Engaging in Social Inclusion

‘Realteker Joyfully Supports Charities’ Program

Social inclusion is the consensus of everyone at Realtek. We have long supported and taken part in charity activities over the years. In 2008, Realtek launched the ‘Realteker joyfully supports charities’ program to actively develop charity initiatives for Realtek employees to take part in. We hope that our charity initiatives and participation will lead to sustainable creativity and action. Social care is about being human. It is channeled through activities organized by a company and is an important part of Realtek’s engagement with social inclusion. The hope that every concept and every action will ultimately come together and leave a long-lasting impression on the nation and society is the philosophy that guides Realtek.

The ‘Realteker joyfully supports charities’ social inclusion program covers six categories: social care education for employees, disadvantaged groups, emergency assistance, academic research, schoolchildren development, and individual cases. They encompass a wide variety of topics and care recipients. The ‘Realtek CSR Planning Center’ was established in 2010 for more systematic planning on the allocation of resources. More resources and energy were also invested to expand our social care efforts and fulfill our CSR. In addition to providing care resources to external recipients, we also design internal activities that reinforce the importance of social care topics to employees. At the same time, we also learn from the rest of society in order to enhance Realtek’s strategic planning on CSR. The benefits will then be translated into greater engagement and more effective action by Realtek.

Education Grants

Education is one of the most important items to Realtek on the topic of social inclusion. Education is a long-term effort that has a very significant impact on the sustainable development of individual students and the nation as a whole. The development of education has therefore long been a key area of interest for Realtek. For indigenous education in Hsinchu County, Realtek provided learning awards and assistance to four schools in the indigenous regions. We hope this will enrich the educational resources for children at indigenous elementary schools, and help them concentrate on learning and growth. We also hope that the children can give back to their community one day so that we can all work together to promote mutual support and caring in society and throughout the nation.

Investments in educational development projects in 2019 included:

01. Awards for rural elementary schools in Hsinchu (Yu Feng Elementary School, Hsiu Luan Elementary School, Xin Guang Elementary School, Shih Lei Elementary School) for the 2019 academic year
02. Expanding the reading horizons of schoolchildren through the donation of monthly educational publications
03. Sponsorship of arts and humanities (music) class at Shuang Si Elementary School in Baoshan Township, Hsinchu County
04. Sponsorship of ‘2019 Hsinchu Girls’ Senior High School Choir Performance - Pre-Departure Concert for Karuizawa International Choral Festival’
05. Sponsorship of ‘Fountain of Wisdom Theatre - Rediscovering Lost Courage’ campaign
06. Sponsored the travel expenses of Liu Jia Elementary School in Zhubei City, Hsinchu County, competing in the ‘2019 Japanese National Men and Boys Indoor Tug-of-War Championship’



Social Care Projects

Providing social care in a timely manner is just as important as social inclusion. Helping disadvantaged groups and providing more timely assistance is the purpose of our social care projects. Social care projects in 2019:

01. Sponsorship of 2019 Taiwan Fund for Children and Families Hsinchu Center - summer camp
02. Sponsorship of 2019 Taiwan Fund for Children and Families Hsinchu Center – Winter Children’s Home Carnival
03. Eden Foundation - Disadvantaged Children Support Plan (Unlimited possibilities of growth and development)
04. Sponsorship of the ‘Young and Happiness ~ Handicapped and Environmental Protection Charity Carnival’ hosted by St. Joseph’s Social Welfare Foundation, Hsinchu City
05. Sponsorship of the ‘2019 LOHAS Nanliao Family Excursion Carnival’ event hosted by A-Heng Training Center for Mental Retardation, Hsinchu City
06. Sponsorship of ‘Teach According to Aptitude to Help Disadvantaged Children Learn’ hosted by Boyo Social Welfare Foundation
07. Sponsorship of ‘Guardians of Time and Memories’ senior awareness and charity hike hosted by Society of Jesus Hsinchu Social Service Center
08. Sponsorship of ‘Guardians of Time and Love’ senior awareness and charity hike hosted by Society of Jesus Hsinchu Social Service Center



Sponsorship of Academic Research and Development Activities

National progress depends on breakthroughs and developments by dedicated research institutions. The innovations they supply drive growth and development in each field. Academic R&D activities were therefore systematically sponsored by Realtek so that we can create a sustainable and prosperous future together.

01. Industrial technology and research: 2019 International Conference on Very Large Scale Integration
02. Taiwan IC Design Society: 2019 VLSI Design/CAD Symposium
03. Chinese Professional Management Association of Hsinchu
04. Taiwan Academy of Implant Dentistry
05. Taiwan Lung Foundation
06. Liver Disease Prevention & Treatment Foundation
07. Hsinchu City Sports Development Association
08. National Taiwan University (Department of Plant Pathology and Microbiology)
09. Taiwan Telecommunications Annual Meeting
10. 2019 IEEE Electrical Design of Advanced Packaging and Systems (EDAPS)
11. 2019 International Conference on Analog VLSI Circuits (AVIC1)



Sponsorship of Local, Regional and Community Groups

Community relations is fundamental to CSR. CSR at Realtek has always focused on embracing and supporting the local community. We will continue to engage with local, regional and community groups.

01. Hsinchu City Traffic Accident Support Association
02. Friends of Special Police Association
03. Adoption of public street lights in Hsinchu City
04. ‘Operation Police Heart’ by the 5th Precinct of Tainan City Police Department
05. Agriculture Bureau of Tainan City Government - 100 cartons of pomelos
06. Hsinchu County Friends of Firefighters Association



Summary of Realtek's Engagement with Social Inclusion in 2019

Date	Description
1/22	Sponsorship of Industrial technology and research: 2019 International Conference on Very Large Scale Integration
1/25	Sponsorship of Eden Foundation - Disadvantaged Children Support Plan (Unlimited possibilities of growth and development)
1/31	Sponsorship of pens for attendees at AICAS 2019
2/20	Sponsorship of the '2019 LOHAS Nanliao Family Excursion Carnival' event hosted by A-Heng Training Center for Mental Retardation, Hsinchu City
2/28	Donation to Liver Disease Prevention & Treatment Foundation
3/11	Sponsorship of 30th VLSI Design/CAD Symposium 2019
3/19	Sponsorship of Hsinchu City Traffic Accident Support Association
3/20	Sponsorship of 'Fountain of Wisdom Theatre - Rediscovering Lost Courage' campaign
3/20	Sponsorship of membership dues for Friends of Special Police Association
3/21	Sponsorship of the 'Young and Happiness ~ Handicapped and Environmental Protection Charity Carnival' hosted by St. Joseph's Social Welfare Foundation, Hsinchu City
3/28	Sponsorship of 2019 'Guardians of Time and Memories' senior awareness and charity carnival hosted by Society of Jesus Hsinchu Social Service Center
4/11	Sponsorship of arts and humanities (music) class at Shuang Si Elementary School in Baoshan Township, Hsinchu County
4/12	Sponsorship of '2019 Hsinchu Girls' Senior High School Choir Performance - Pre-Departure Concert for Karuizawa International Choral Festival' and 'Karuizawa International Choral Festival and Competition'
5/8	Chinese Professional Management Association of Hsinchu 2019 activities
6/6	Sponsorship of 2019 Taiwan Fund for Children and Families Hsinchu Center - summer camp
6/10	Adoption of public street lights in Hsinchu City for 2019
6/17	Silver-grade sponsorship of AVIC 2019
6/21	Sponsorship of Liu Jia Elementary School from Zhubei City, Hsinchu City invited to compete in the '2019 Japanese National Men and Boys Indoor Tug-of-War Championship'

Date	Description
7/8	Sponsorship of EDAPS 2019 - general sponsor
7/17	Sponsored the accommodation and airfare for NCTU student (Lin) attending ISSC 2019
7/22	Donation to Taiwan Academy of Implant Dentistry
7/23	Sponsorship of 2019 'Guardians of Time and Love' senior awareness and charity carnival Hosted by Society of Jesus Hsinchu Social Service Center of Hsinchu
7/31	Sponsorship of operational expenses for Hsinchu Municipal Athletics Federation
8/16	Taiwan Lung Foundation
8/21	Agriculture Bureau of Tainan City Government - 100 cartons of pomelos
9/4	Membership dues of Hsinchu County Friends of Firefighters Association
9/4	'Operation Police Heart' by the 5th Precinct of Tainan City Police Department
9/10	Sponsorship of Boyo Social Welfare Foundation - 'Teach According to Aptitude to Help Disadvantaged Children Learn'
9/23	Sponsorship of 2019 Taiwan Fund for Children and Families Hsinchu Center - Winter Children's Home Carnival
9/26	Sponsorship of 2020 Taiwan Telecommunications Annual Meeting (2 free places for Platinum sponsor)
10/25	Liver Disease Prevention & Treatment Foundation
12/6	Sponsorship of 2020 International Conference on Very Large Scale Integration (VLSI)
12/12	Sponsorship of ITC Asia 2020 (Gold class - USD 1700)
12/26	Realtek supporting rural education - Promotion of student learning charity project
12/31	Realtek 30th Anniversary Family Day - Sponsorship of 4 'Back-mountain' schools
12/31	Sponsorship of National Taiwan University (Department of Plant Pathology and Microbiology)

Total amount was NT\$ **3,534,412**

Realtek Supports Charity with a Smile Local Section

Supporting the Sustainable Development of Local Industry and Investing in Social Welfare Institutions

Realtek supported Taiwanese agriculture by taking direct action to help pomelo growers in Tainan. When we learned about this initiative in 2019, Realtek immediately marshaled the social care power of both the company and employees to order 1,000kg of pomelos. The project not only concentrated our resources to increase the order quantity but also incorporated social welfare institutions and students that we have an investment in. The pomelos that Realtek purchased were then donated to 6 social welfare institutions – Taiwan Fund for Children and Families Hsinchu Center, Miracle Home, Ren-Ai Children's Home, St. Teresa Children Center, Blue Sky Home, and Grown-Up with Hands Family. Our efforts won the praise of both Hsinchu City Government and the Agriculture Bureau of Tainan City. Realtek will continue to support the development of agriculture and share the produce with social welfare institutions. Our expansion and update of social care and promotion will bring the great taste of local produce to even more people.

Investing in Social Welfare Institutions

Realtek visited the six social welfare institutions of Taiwan Fund for Children and Families Hsinchu Center, Miracle Home, Ren-Ai Children's Home, St. Teresa Children Center, Blue Sky Home, and Grown-Up with Hands Family during the Lunar New Year in 2019 to celebrate the Year of the Pig. Presenting each social worker and child with New Year candy as the weather warmed into spring put a huge smile on the faces of the children and adults. The moving atmosphere has inspired Realtek to continue planning more initiatives and to take every opportunity we can to visit and provide our support again.

Presentation of New Year candy to social welfare institutions in the new spring



Realtek supported Taiwanese agriculture by actively helping pomelo growers in Tainan.



Realtek Charity Blood Donation Drive

Realtek regularly hosts blood donation events in the factory as part of our longstanding partnership with the Hsinchu Blood Donation Center. Employees are invited to roll up their sleeves and donate blood. A total of 1,230 employees took part in the blood donation events held over the past three years and donated 1,992 bags of blood. Every event has drawn an enthusiastic response from employees. Employee support for blood donation drives has continued to increase in recent years so the Blood Donation Center has made arrangements to improve the experience. Realtek also began holding simultaneous blood donation events at two factories in 2019.



Realtek invites teachers and students from four rural schools to join the festivities

Supporting Education at Rural Schools

Realtek Family Day is an annual highlight of our 'Crab Family'. Apart from inviting all Big Crab Family members, their dependents, friends, and relatives, we also began inviting the teachers and students from four elementary schools in the rural areas of Hsinchu (Shih Lei Elementary School, Yu Feng Elementary School, Xin Kwang Elementary School, and Tunan Elementary School) to visit in 2010. We provide full subsidies for travel costs, carnival activity vouchers, and an educational gift for

every visiting student. We hope that students and teachers from rural elementary schools in Hsinchu can have a good time with Realtek's Big Family. In return, the rural students provide us with youthful choreography, performances unique to their culture, and the spirit of learning. They make the Family Day an exciting and very meaningful event every year.

Realtek presents school scholarships during the annual Family Day event as well. We hope that the combination of projects and scholarships will create more learning opportunities and collective progress.

Realtek presents scholarships to four rural schools to create more learning opportunities



Realtek Supports Charity with a Smile Social Inclusion

Society Section

Realtek Supporting Rural Education - Promotion of Student Learning Charity Project

Realtek has long taken an interest in education-related topics. In 2018, we began working actively on a reading initiative for rural children's education. It was hoped that supplying quality monthly publications to remote and rural elementary schools would encourage students to read more and improve their learning. A year's subscription to educational magazines was donated by Realtek to 20 remote rural schools with a total of 138 classes throughout Hsinchu, Miaoli, and Pingtung. The project was still underway when we started receiving feedback from school teachers and students. They said that the educational magazines helped children get in the habit of reading, and could also be used by teachers in class as extended learning materials.

Realtek expanded the rural support project in 2020 by increasing the educational magazine subscriptions to 26 rural schools with a total of 179 classes. We hope that the continued investment of reading resources for partial rural regions will make a difference to rural education, accumulate a wealth of cultural refinement, provide students with sustainable support, and encourage them to enjoy reading and learning.

Liu Qiu Elementary School Huang, Hsin-Chia, Teacher

"They introduced the children to new horizons and showed them that children's publications are far better reading than celebrity gossip rags. Reading increased the children's maturity and broadened their minds. The rich and diverse content makes the children keep reading. It also gave them more things to talk about with their classmates. When the interesting bits make them laugh, it attracts more of their peers as well."



Tiannan Elementary School Chen, Shih-Ling, Teacher

"A lot of the content in the magazines can be used as supplementary teaching materials in class. Many of the segments were suitable for student reading as their content was easy to read yet filled with information. Many of the students are always leafing through the Global Kids Junior or Global Kids monthly magazines during the morning reading time at school. These are the students' favorite magazines."



GRI Standard Index:

General Disclosure Reference Table GRI 102: General Disclosure 2016

Material Topic	Core	GRI Number	GRI Indicator Description	Page No.
Organizational Profile	Core	102-1	Name of the organization	1
	Core	102-2	Activities, brands, products, and services	7
	Core	102-3	Location of headquarters	8
	Core	102-4	Location of operations	2
	Core	102-5	Ownership and legal form	8
	Core	102-6	Markets served	7
Organizational Profile	Core	102-7	Scale of the organization	8
Organizational Profile	Core	102-8	Information on employees and other workers	53
	Core	102-9	Supply chain	48
	Core	102-10	Significant changes to the organization and its supply chain	2
	Core	102-11	Precautionary principle or approach	34
	Core	102-12	External initiatives	1
	Core	102-13	Membership of associations	19
	Core	102-14	Statement from senior decision-maker	3-6
Identification of Material Aspects and Boundary	Core	102-16	Values, principles, standards, and norms of behavior	34
Governance	Core	102-18	Governance structure	28

Material Topic	Core	GRI Number	GRI Indicator Description	Page No.
Stakeholder Engagement	Core	102-40	List of stakeholder groups	22
	Core	102-41	Collective bargaining agreements	No collective bargaining agreement
	Core	102-42	Identifying and selecting stakeholders	21
	Core	102-43	Approach to stakeholder engagement	23
	Core	102-44	Key topics and concerns raised	26
Reporting Practice	Core	102-45	Entities included in the consolidated financial statements	Please refer to p.81 of Annual Report
	Core	102-46	Defining report content and topic boundaries	2
	Core	102-47	List of material topics	26
	Core	102-48	Restatements of information	There was no restatement of information
	Core	102-49	Changes in reporting	No changes in reporting
	Core	102-50	Reporting period	1
	Core	102-51	Date of most recent report	1
	Core	102-52	Reporting cycle	1
	Core	102-53	Contact point for questions regarding the report	2
	Core	102-54	Claims of reporting in accordance with the GRI standards	1
	Core	102-55	GRI content index	87-89
Reporting Practice	Core	102-56	External assurance	90

Reference Table for Material Topic and GRI Standards

Material Topic	GRI Number	GRI Indicator Description	Page No.	Omitted
Corporate Governance				
GRI 103: Management Approach 2016	103-1 103-2 103-3	Management approach	26, 27	
GRI 406: Non-Discrimination 2016	406-1	Incidents of discrimination and corrective actions taken	58	
Economic Performance				
GRI 103: Management Approach 2016	103-1 103-2 103-3	Management approach	26, 27	
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	8-9, 59, 81	
	201-2	Financial implications and other risks and opportunities due to climate change	39	Please refer to p.40 of this report
Business Integrity and Compliance				
GRI 103: Management Approach 2016	103-1 103-2 103-3	Management approach	26, 33	





Material Topic	GRI Number	GRI Indicator Description	Page No.	Omitted
GRI 205: Anti-Corruption 2016	205-2	Communication and training about anti-corruption policies and procedures	29, 35	
	205-3	Confirmed incidents of corruption and actions taken	35	
Improved Performance and Innovation R&D				
GRI 103: Management Approach 2016	103-1 103-2 103-3	Management approach	26, 38	
GRI 302: Energy 2016	302-1	Energy consumption within the organization	41	
	302-4	Reduction of energy consumption	43	
		Reduction in energy requirements of products and services	44	Please refer to p.45 of this report
Remuneration and Benefits				
GRI 103: Management Approach 2016	103-1 103-2 103-3	Management policy	26, 53	
GRI 401: Employment 2016	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	60, 64, 67	





Reference Table for Non-Material Topics and GRI Standards

Category/Topic	Disclosure No.	GRI Indicator Description	Page No.
GRI 201: Economic Performance 2016	201-3	Defined benefit plan obligations and other retirement plans	60
GRI 203: Indirect Economic Impacts 2016	203-1	Infrastructure investments and services supported	10
	203-2	Significant indirect economic impacts	83-84
GRI 204: Procurement Practices 2016	204-1	Proportion of procurement spending on local suppliers	49
GRI: 301 Materials 2016	301-1	Materials used by weight or volume	50
GRI: 303 Water 2016	303-1	Water withdrawal by source	46
	303-3	Water recycled and reused	46
GRI: 305 Emissions 2016	305-1	Direct (Scope 1) GHG emissions	42
	305-2	Energy indirect (Scope 2) GHG emissions	42
	305-5	Reduction of GHG emissions	42
GRI: 306 Effluents and Waste 2016	306-1	Water discharge by quality and destination	47
	306-2	Waste by type and disposal method	47
	306-3	Significant spills	47
	306-4	Transport of hazardous waste	47
	306-5	Water bodies affected by water discharges and/or runoff	47

Category/Topic	Disclosure No.	GRI Indicator Description	Page No.
GRI: 401 Employment 2016	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	63
	401-3	Parental leave	67
GRI: 403 Occupational Health and Safety 2016	403-1	Workers representation in formal joint management-worker health and safety committees	69
	403-2	Types of injury and rates of injury, occupational diseases, lost days, absenteeism, and number of work-related fatalities	70-71
	403-3	Workers with high incidence or high risk of diseases related to their occupation	67-78
GRI: 404 Training and Education 2016	404-1	Average hours of training per year per employee	57
GRI: 405 Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	54
GRI: 416 Customer Health and Safety 2016	416-1	Assessment of the health and safety impacts of product and service categories	51
GRI: 418 Customer Privacy 2016	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	35-36

Appendix II – SDGs Compared Table

SDGs Goals	Investment by Realtek	Corresponding Chapter
 <p>4 QUALITY EDUCATION</p>	<p>Realtek provides scholarships and educational gifts to students at schools in rural areas in Hsinchu County (Yu Feng, Xiu Luan, Xin Guang, and Shih Lei elementary), hoping to make a difference in their learning environments while at the same time creating more learning opportunities.</p> <p>We have been involved in a welfare project regarding children's reading, and have donated a year's worth of educational magazines to 20 schools in remote areas in Hsinchu, Miaoli, and Pingtung - a total of 138 classes.</p>	<p>Chapter 5 - Realtek Supports Charity with a Smile – Local Section</p> <p>Chapter 5 - Realtek Supports Charity with a Smile – Society Section</p>
 <p>5 GENDER EQUALITY</p>	<p>At Realtek, we have been committed to practicing gender equality for many years. We offer colleagues at different job categories the same salary standard, salary adjustment assessment indicator, and norms regardless of gender.</p> <p>We enforce the Unpaid Parental Leave Scheme according to the 'Act of Gender Equality in Employment'. All employees are entitled to apply in accordance with relevant procedures.</p>	<p>Chapter 4 - Competitive Compensation and Benefits</p> <p>Chapter 4 - Unpaid Parental Leave Scheme</p>
 <p>6 CLEAN WATER AND SANITATION</p>	<p>In 2019, we enhanced rainwater, AC condensate, and cooling water recovery. Overall, water consumption was 5.46% lower than in 2018.</p> <p>We do not discharge processed water so there is no concern regarding sewage leaks affecting the surrounding environment. All wastewater is collected by the sewage system and piped to the Hsinchu Science Park's wastewater treatment plant for processing before being discharged into the Keya River through a dedicated pipeline. The treated water exceeds the national discharge standards.</p>	<p>Chapter 3 - Conserving Water Resources</p> <p>Chapter 3 - Waste Management</p>
 <p>8 DECENT WORK AND ECONOMIC GROWTH</p>	<p>Realtek's consolidated revenue in 2019 reached NT\$60.74 billion, up 32.6% from the previous year; net profit totaled NT\$6.79 billion with an EPS of NT\$13.36 and cash dividend NT\$9 per share, hitting a new high.</p> <p>We have a total of 3,767 employees, and in an effort to support their professional learning and continuous development, we established the Realtek Corporate University. In 2019, we provided over 237 professional R&D courses, with average education and training hours of 17.76 hours/person.</p>	<p>Chapter 1 - Business Performance</p> <p>Chapter 4 - Talent Development</p>

SDGs Goals	Investment by Realtek	Corresponding Chapter
 <p>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</p>	<p>Realtek has successfully developed many innovative and leading integrated circuits for over 30 years and obtained more than 6,200 patents.</p> <p>We apply a strict testing approach when analyzing the usage situation of all devices under all types of circumstances and extend products' useful life through increasing their durability while reducing the use of production resources.</p>	<p>Chapter 1 - R&D and Innovation</p> <p>Chapter 3 - Improving Product Durability to Reduce the Use of Production Resources</p>
 <p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p>	<p>We implement green raw materials and product certification, including compliance with hazardous substance requirements for the electronics sectors prescribed by the EU and Japan, and the RoHS, including lead-free and halogen-free requirements.</p> <p>In 2010 we began to check for conflict minerals. Suppliers are required to prove the metal used in their products do not come from areas of illegal armed conflict.</p> <p>We have received green partner certification from SONY, Fujitsu, CANON, and the ISO 14001 environmental management system certification, ensuring that our production procedures and the selection of raw materials do not pose harm to humans.</p>	<p>Chapter 3 - Use of Safer Raw Materials</p>
 <p>13 CLIMATE ACTION</p>	<p>As a means to fully grasp the actual emissions, we conducted our own inventory check on GHG emissions in 2019.</p> <p>Air-conditioning, lighting, compressor, gas supply, power equipment, elevators and other items were upgraded with high-efficiency, energy-saving equipment. Pumps were also fitted with VFD to improve their power efficiency. In 2019, total electricity savings of 439,450 kWh were achieved to reduce carbon emissions by 234.23 tonnes.</p>	<p>Chapter 3 - Voluntary GHG Management</p>
 <p>16 PEACE, JUSTICE AND STRONG INSTITUTIONS</p>	<p>Honesty and enforcing the guidelines on ethical conduct are essential requirements for the sustainable development of the Company and the creation of partnerships. They are also the code of conduct for all employees.</p> <p>In 2019 there were no complaints of illegal activities or unethical conduct during company operations or by employees.</p> <p>The establishment of the 'Realtek Semiconductor Human Rights Policy' fully demonstrates the responsibility of respect and the protection of human rights. All employees must be treated with dignity and respect.</p>	<p>Chapter 2 - Business Integrity</p>

Appendix III Assurance Statement



ASSURANCE STATEMENT

SGS TAIWAN LTD.'S REPORT ON SUSTAINABILITY ACTIVITIES IN THE REALTEK SEMICONDUCTOR CORP.'S CORPORATE SOCIAL RESPONSIBILITY REPORT FOR 2019

NATURE AND SCOPE OF THE ASSURANCE/VERIFICATION

SGS Taiwan Ltd. (hereinafter referred to as SGS) was commissioned by Realtek Semiconductor Corp. (hereinafter referred to as Realtek) to conduct an independent assurance of the Corporate Social Responsibility Report for 2019 (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 the report presented during on-site verification (2020.04.09–2020.05.08). SGS reserves the right to update the assurance statement from time to time depending on the level of report content discrepancy of the published version from the agreed standards requirements.

The information in the Realtek's CSR Report of 2019 and its presentation are the responsibility of the management of Realtek. SGS has not been involved in the preparation of any of the material included in Realtek's CSR Report of 2019.

Our responsibility is to express an opinion on the report content within the scope of verification with the intention to inform all Realtek'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 Realtek, 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 Realtek's CSR Report of 2019 verified is accurate, reliable and provides a fair and balanced representation of Realtek sustainability activities in 01/01/2019 to 12/31/2019.

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

Realtek 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. For future reporting, Realtek may proactively consider having more direct two-ways involvement of stakeholders during future engagement.

Materiality

Realtek 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, Realtek's CSR Report of 2019, 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, it is recommended to have more descriptions of the management approach. When reporting on goals and targets for each material topic, the expected results are suggested to be set, if applicable, with quantitative objectives (GRI 103-2). It is proposed to explain the mechanisms for evaluating the effectiveness of the management approach specifically (GRI 103-3). More descriptions about the results of the evaluation of the management approach and specific actions aimed at improving performance are also encouraged.

Signed:

For and on behalf of SGS Taiwan Ltd.

David Huang
Senior Director
Taipei, Taiwan
1 June, 2020
WWW.SGS.COM





Realtek Semiconductor Corp.

Address: No. 2, Innovation Road II,
Hsinchu Science Park, Hsinchu 30076, Taiwan

Telephone: +886-3-5780211

www.realtek.com