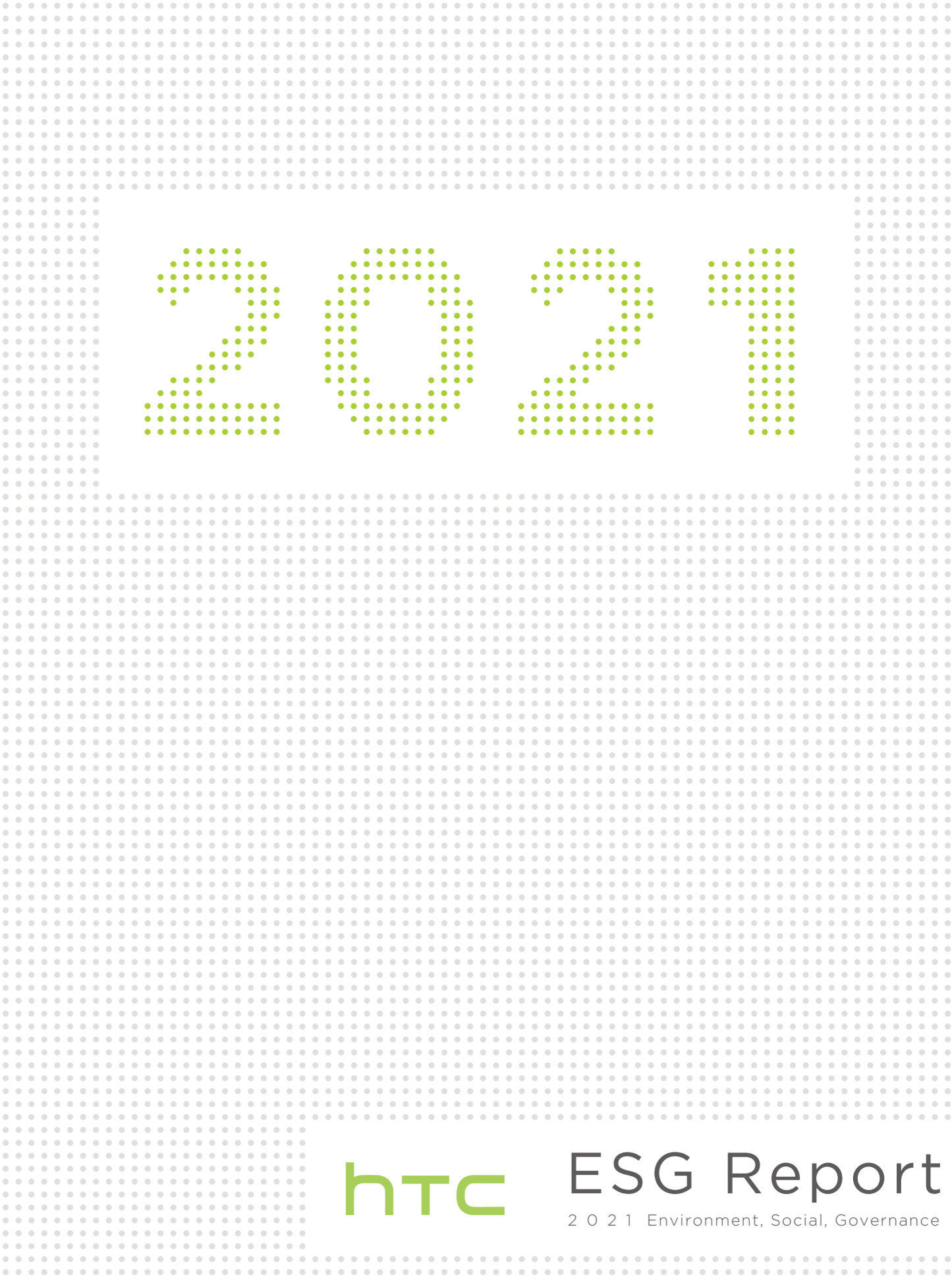




2021 HTC ESG Report



Editorial Principle

Thank you for reading the 10th ESG Report issued by the HTC Corporation (HTC). HTC has an open and honest approach to the review and disclosure of our executive performance related to all Sustainability matters and offers our stakeholders a clear picture of all the related issues. Our aim is to use our brand’s influence to integrate our ESG strategies into the organization, and we start off with a comprehensive response to all these issues.

As a global virtual reality and smart phone brand, we are ready to confront all the challenges that might present themselves. For each major Sustainability issue that relates to our future development, we make it clear at the beginning of each section which challenge we are facing, our current achievements, and our goals for future development.

By understanding and commitment to these issues, HTC will define and confirm our direction toward sustainable development, and also let our stakeholders know everything about our performance and the results with respect to ESG in 2021.

This report has been prepared in Chinese and English. Both versions are posted on our official website and are available for download (www.esg.htc.com)



Report Scope and Boundary

The organizational boundary, as mentioned in this annual report, mainly covers the company office buildings and plants in Taiwan: the headquarters in Taoyuan and two office buildings in Taipei. All HTC business operations in Taiwan are within the boundary. The scope of financial information is consolidated financial disclosure; the scope of human resources information covers employees worldwide.

2021 HTC ESG Report Organization Coverage Information

Boundary	Address	Tel
HQ & Plants	No 23, Xinghua Rd., Taoyuan Dist., Taoyuan City 330, Taiwan	+886-3-3753252
Taipei Office 1	No 88, Sec 3, Zhongxing Rd, Xindian Dist, New Taipei City, Taiwan	+886-2-89124138
Taipei Office 2	1F, No 6-3, Baoqiang Rd, Xindian Dist, New Taipei City, Taiwan	+886-2-89124138



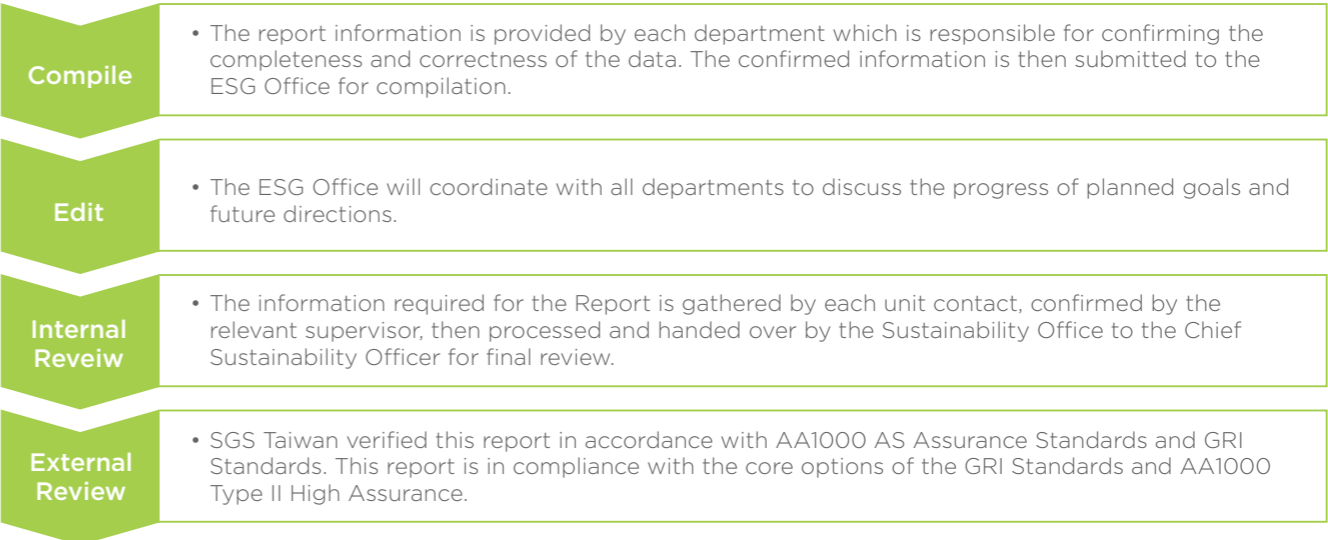
Time Coverage of Disclosure

We plan to issue the HTC ESG Report annually. This report generally covers the year 2021 from January 1 to December 31. However, in order to provide a more complete picture of all our ESG achievements in various aspects to date, the content and information about some issues refers to work carried out in 2020 to 2022 May, as well as the HTC ESG management policies, key issues, and performance, responses and activities for previous years.

Report Basis

This report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards Core Option and AA1000 standards and has been confirmed by SGS-Taiwan to be in compliance with AA1000AS Type II high-level assurance and GRI Standards Core option.

Process of Reporting Quality Management



Forward-Looking Statements & Statistical Calculations

In this report, HTC makes some forward-looking statements about future ESG challenges and developments. However, because some of these issues are uncertain and subject to variable factors (such as policies, laws, and international regulations), it should be noted that they have been made after discussions on current HTC status and are made as forecasts, the purpose being to give our stakeholders a picture of the HTC understanding and realization of ESG issues. The forecasts are not promises by HTC of guaranteed financial, operational, and business performance.

The figures shown in this report are in the metric system and are statistical and calculated results generated according to the related international standards and bases of calculation. In the event that any special calculation methods are implemented for particular indicators, notes are provided below the corresponding tables or graphics.

- Financial data was checked and confirmed by Deloitte & Touche, and was calculated in NT\$
- ISO 14064 greenhouse gas emissions and ISO 50001 energy management systems were verified by AFNOR Asia.
- ISO 14001, ISO 45001, QC080000, ISO 27001 and ISO 27701 management systems were verified by SGS Taiwan.
- The AA1000AS Standard was assured by SGS Taiwan.

Feedback

If you have any questions about this 2021 HTC ESG Report please let us know to help us make continuous progress.

Contact Us

ESG Office, HTC Corporation
Contact: Yunyu Chen +886-3-3753252 ext. 36312
E-mail : esg@htc.com
Address: No 23, Xinghua Rd, Taoyuan Dist., Taoyuan City, Taiwan
ESG Website: www.esg.htc.com



HTC Sustainability Questionnaire

Statement of the Management

Thank you for taking the time to peruse the 2021 "ESG Report" issued by HTC. We continue to follow the latest "Global Reporting Initiative Standards" and AA1000 standards Type II High Level of Assurance to report information disclosure to the general public and all stakeholders. The relationship communicates with HTC's commitment and achievements in reflecting social responsibility and moving towards sustainable development.

HTC had an excellent year in 2021, with the launch of focused, highly acclaimed products, the full implementation of the corporate restructure, and robust improvement in operational performance.

HTC is encouraged by the increasing recognition of its strategy as driving the future of the industry. In early 2018, HTC coalesced the Company around a central, overarching vision of VIVE Reality, whereby merging technology with humanity to unleash the imagination will create a world where technology fades into the background and experiences come the forefront. This vision is today being described as the 'metaverse'. HTC's version of the metaverse is VIVERSE, an immersive, boundless universe of fantastic new experiences, and a seamless gateway to other content universes created in collaboration with partners.

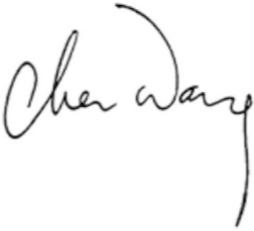
Against a backdrop of prolonged market disruption caused by the ongoing pandemic, HTC maintained its engineering and design edge, delivering high quality hardware, software, platforms and services to markets including enterprise, education, arts, entertainment and healthcare. In particular, with business and leisure travel still restricted, practices adopted or accelerated during the first year of the pandemic largely sustained over 2021, and HTC saw virtual reality embraced by numerous industries and organizations to enhance their business processes.

Environment, Social and Governance (ESG) issues have risen to prominence over the last few years and are now a significant consideration in investment decisions. As a global citizen, HTC is committed to these principles, and has transformed the original corporate social responsibility committee into the ESG committee, chaired by the Chairwoman. HTC also appointed its first Chief Sustainability Officer in Senior VP Madeline Chen, who will lead the charge for sustainability in HTC's management, design, product, and manufacturing processes as well as in the supply chain, to contribute more actively to HTC's environmental protection efforts, social responsibility and corporate governance. In order to achieve the long-term goal of sustainable development through continuous improvement, the ESG committee is working with all HTC colleagues to understand how their work can contribute to these objectives. In April 2022, HTC received the Silver Award by EcoVadis, the international sustainability rating platform. Among the 90,000 companies participating in the EcoVadis Corporate Sustainability evaluation in 2022, HTC ranked in the top 15%, highlighting HTC's continued commitment and efforts to various fields of sustainable development.

HTC strives to increase environmental sustainability across its operations, improving manufacturing processes and quality standards as well as seeking areas to reduce emissions and increase power efficiency. This year, HTC attained management level (B- grade) in the climate change rating of the Carbon Disclosure Project (CDP). Waste reduction and resource recycling efforts continued to show results, with HTC's waste recycling rate significantly increased over the last ten years, by 87%.

Looking ahead, HTC will continue to uphold VIVERSE's vision and the brand spirit of "Pursuit of Brilliance", continue to innovate and focus on technology, optimize organizational resources and create value, uphold the right strategies, world-class talent, innovation and a heritage of innovation that will drive our next stage of growth. Throughout all of our operations and partnerships, HTC seeks to ensure the highest standards of environmental protection and R&D innovation, with a view to creating a better life for people. HTC strives to become a world's leading brand, and you are welcome to give us support, encouragement and suggestions on HTC's road to a sustainable future.

HTC
Chairwoman and CEO



Letter from Chief Sustainability Officer _____

HTC has been focusing on not only product innovation but also CSR (Corporate Social Responsibility) related topics. In 2012, we set up a CSR Committee to oversee all the internal and external CSR tasks. As the world continues to pay high attention to the climate change and sustainability, we upgraded CSR Committee to ESG (Environment, Social, and Governance) Committee in the beginning of this year. Our chairperson Cher leads the ESG Committee as the chairperson and all BU (Business Unit) heads participate as members of the ESG Committee. HTC has also appointed a Chief Sustainability Officer role and set up an ESG Office to extend CSR to more comprehensive ESG strategies and policies. By doing so, we cover all the three aspects of ESG and take sustainability into work and life with full actions, to build the consensus from HTC fellow employees and lead HTC to keep moving forward.

In terms of the environment, as a citizen of the world, net-zero is our absolute goal. Our achievements so far include the GHG measurement and green product supply chain. Starting from 2022, we will also begin conducting the product carbon footprint measurement, hoping to find out every possibility of energy saving and carbon emission reduction by measuring carbon footprint from organization and product level. For example, we have begun investigating the possible carbon emissions per kilogram of the raw materials used in our products, and then find out more cost-effective and lower carbon footprint materials for replacement to reduce the carbon footprint from the source. We found that the cost did not necessarily increase but potentially decrease while gradually practicing carbon footprint reduction. For example, the previous product packaging adopted multiple-color printing and strong structure for great quality and protection. After redesigning and optimizing the packaging, we adopted high-quality non-colored recycled paper, and at the same time, simplified the printing as mono color with soy ink. We also improved the package structure design to reduce the package dimension, which also reduces transportation costs while caring for the environment.

In terms of society, as a leading brand company, we support the basic values of human rights, employ talents with equality and diversity. HTC stands strong on the ground of gender equality as one of the key human rights. As a well-known female entrepreneur, our chairwoman and CEO is a role model in our efforts to encourage women to be active in their profession, and we strive to create discrimination-free working environment and empower women to take high-level managing positions, enabling HTC to be a corporation where female managers and supervisors stand out in number, and parental leave and employment rights are secured as part of our welfare policy. Employees regardless of genders not only assist and support one another in our organization, but also jointly create a sustainable working environment.

In recent years, under the interaction of the COVID-19 pandemic and the global political/economic situation, the overall environment has undergone drastic changes. Fortunately, HTC has kept the production line in Taiwan, so the environment was relatively stable during the COVID-19 pandemic. We conducted early material preparation and strategic procurement to avoid supply chain disruption. We also paid more attention on production efficiency and the relationship with our suppliers, which further strengthened HTC's resilience to various risks. In the future, we will also strengthen our corresponding actions to the risks brought by climate change, and implement sustainable strategies in Governance. Our continuing internal disclosure of sustainability performance and information sharing helps raise HTC employees' awareness on sustainability, bring recognition for our dedication to Environment, Social, and Governance, and makes our employees proud to be part of HTC.

HTC
Chief Sustainability Officer



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About HTC

Name

HTC Corporation (TWSE stock symbol 2498)

Address

No 23, Xinghua Rd, Taoyuan Dist.,
Taoyuan City, Taiwan

Established

May 15, 1997

Sector

Telecommunications network Industry

Main business

Virtual reality device/Smartphone

Consolidated revenue

NT\$8,245,050,000



The global leader in innovative Virtual reality & Smartphone design – HTC

The HTC Corporation (HTC) was established in 1997. HTC brings brilliance to life through leading innovation in smart mobile device and experience design. Beginning with a vision to put a personal computer in the palm of our customers' hands, we have led the way in the evolution from palm PC to smartphone, and are now applying that same innovative approach to connected devices and virtual reality. To date, our Company has been through four major transformations that have helped us reinvent ourselves and achieve new growth. Starting from the beginning of the company's professional PDA design, HTC has continued to deepen innovation in R&D technology. HTC's first major turning point came in 1999, when the Company moved into the telecommunications arena. HTC was the first to integrate Internet, entertainment, video and personal assistant functions into a mobile phone with a large dimension onto high resolution and full-color display panel. Since 2007, the launch of the HTC brand globally has committed the Company to long-term global brand development. In 2014, HTC began to seek new fields to apply our distinguished heritage in design, engineering and manufacturing excellence as well as innovative thinking. In 2015, we began to enter the virtual reality industry, and explore and create a new real experience with HTC VIVE.

In 2018, HTC set a new vision: VIVE Reality, cutting-edge technology such as virtual reality (VR), augmented reality (AR), artificial intelligence (AI), 5G high-speed connection and blockchain. Integrate humanity, humanities and imagination to achieve a richer enjoyment of a better life.

At the same time, HTC continued to develop and refine our industry-leading mobile technology expertise. The smartphone division continues to integrate the latest technologies such as 5G and advanced photographic capabilities into some of the most beautifully crafted devices on the market. At the same time, HTC created a new division focusing solely on applying our world-class 5G networking expertise to consumer, enterprise and municipal sectors, supporting the drive to expedite 5G adoption and solve challenges for business and society.

Human health is fundamental to improving people's lives, and the HTC DeepQ business embeds advanced artificial intelligence and VR technologies into a range of hardware and software solutions aimed at raising awareness of health issues, enabling effective remote healthcare, and supporting the medical profession and government in a variety of ways.

The restructuring of HTC over 2021 saw the creation of separate business units out of VIVE Systems, VIVERSE (formerly Content and Platforms), G Reigns (formerly 5G Solutions), HTC Smartphones and Connected Devices, VIVE Arts, VIVE ORIGINALS and DeepQ. This new structure gives each business leader greater autonomy and clear focus on their own portfolio and resources, while obtaining operational support, and guidance on strategy and financing from the HTC mother company.

The advent of the metaverse sees the Company focused around VIVERSE, whereby the strategic direction of all business units is to enable, enhance or expand the remarkable wealth of experiences available in the metaverse, which can be accessed from virtually any connected device.

The pursuit of VIVE Reality sees HTC transition into a complete VIVERSE solution company, creating not only leading hardware in strategic markets, but also building industry-leading platforms, software, content and services to create new revenue streams and lay the foundation for our future growth.



Global Operation Locations



HTC is headquartered in Taiwan. Driven by effective branding, HTC now has operations, sales, and services covering most areas in the world, including Europe, the Americas and Asia. With the coordination and integration of our operational HQ, HTC provides customers with a network of professional services. Offices have been established in all the major markets of the world, including the USA, Canada, the UK, Germany, France, India, Australia, China, Japan, Hong Kong and UAE.

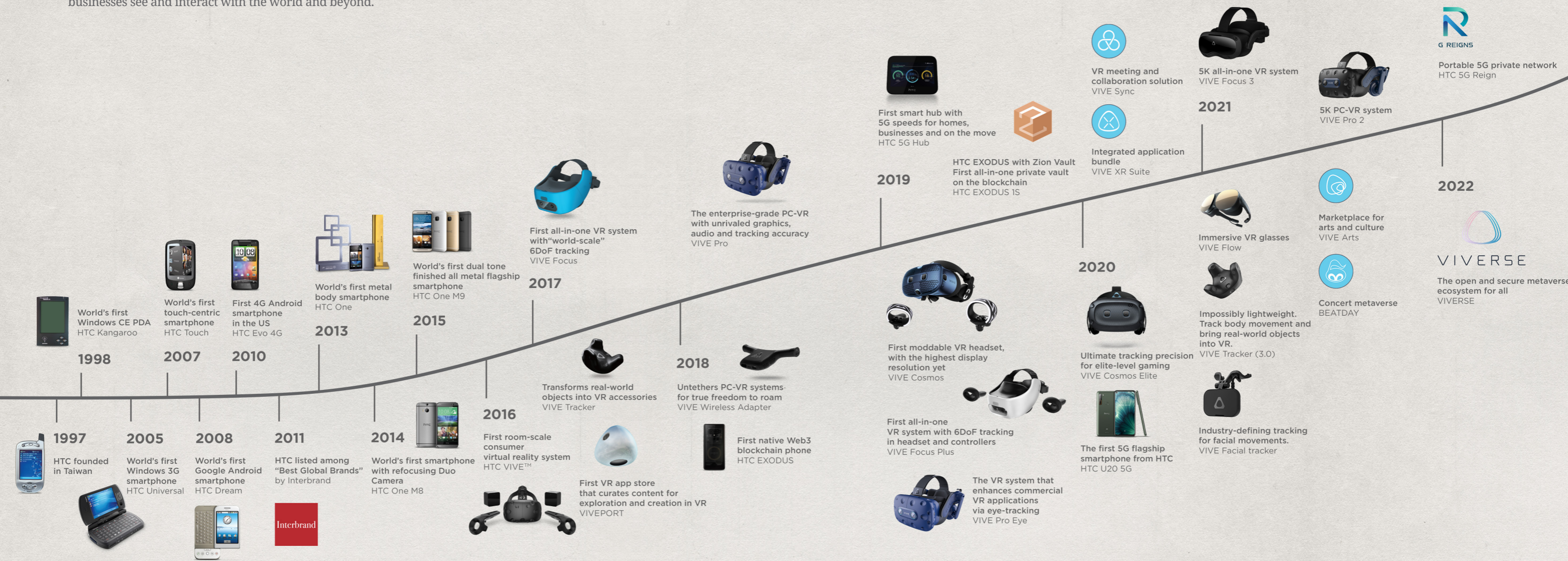
Note: The * is main operating base of HTC, of which "Important Operations Base" is Taiwan.



Industry Overview

Since its establishment, HTC has had very strong R&D capability that has been clearly demonstrated by producing a stream of first-class products for the international market. The company creates inspiring products and experiences through a strong line of mobile solutions, connected devices, and VIVE virtual reality (VR) hardware and ecosystem.

HTC offers a diverse portfolio of mobile and VR hardware, software, and content that transforms the way consumers and businesses see and interact with the world and beyond.

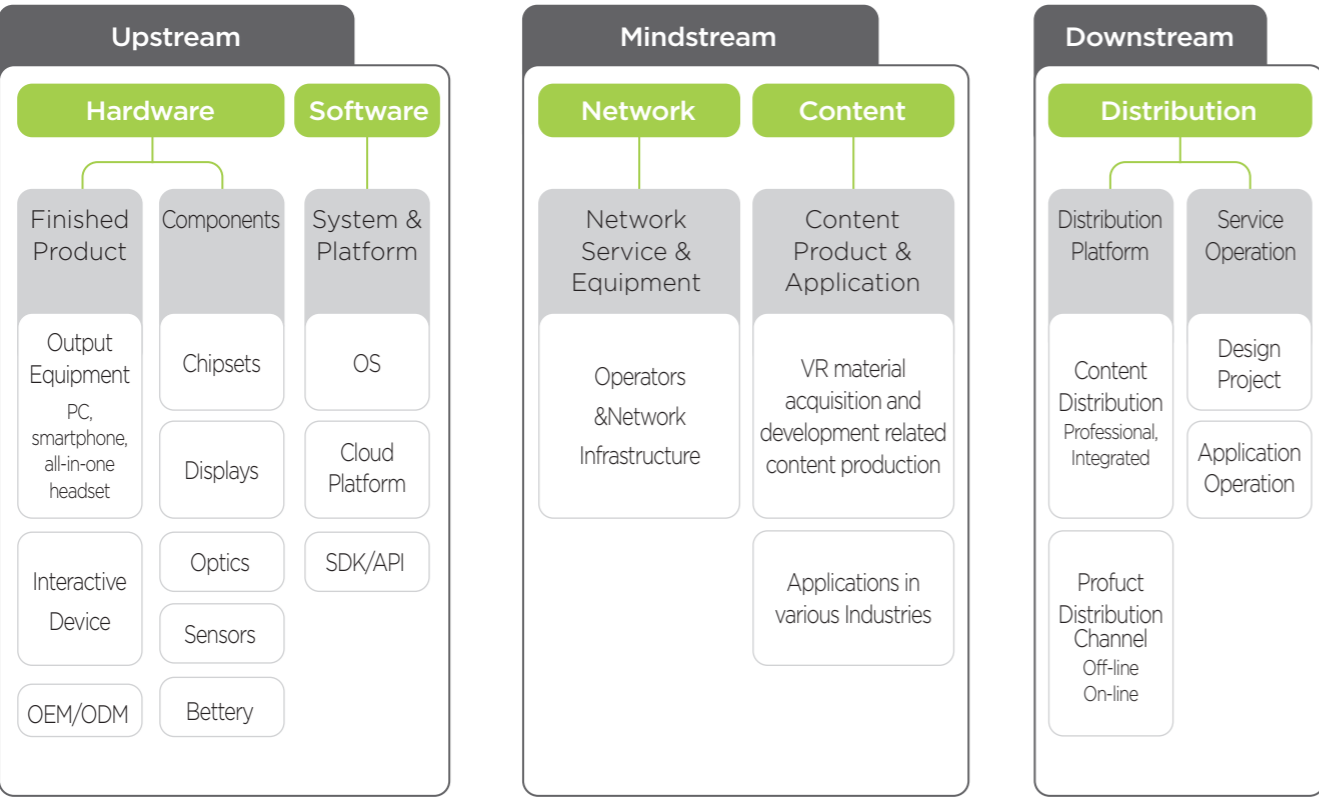


Virtual Reality

Virtual reality comes from the human pursuit of immersion. VR is also the technology development direction that has been encouraged by the smartphone industry through the advancement of various display technologies, processors, controllers and other key components over the past 10 years. While consumers are satisfied with visual effects, they also hope to experience “new virtual worlds”.

According to IDC’s public release of the 2020 VR industry research white paper, the VR industry chain can be subdivided into five parts: hardware equipment, software, network, content, and distribution. Each part is linked and inseparable.

The hardware and software sessions can be regarded as the upstream of the VR industry. The hardware includes component parts like chipsets, displays, optical modules, and sensors, as well as various types of integration with hand recognition, tracking and positioning, and somatosensory interaction; Software includes various development platforms and tools including OS, cloud platforms, SDKs. The network and content can be regarded as the midstream of the VR industry, where the network includes operators and various levels of network infrastructure; the content includes content production related to the VR applications in various industries. Distribution can be regarded as the downstream of the VR industry, including content distribution platforms, and product distribution channels.



Ever since the so-called “first year of VR” in 2016, when VR products began to enter the consumer market, first attracted the public with gaming applications. Playing games with VR not only provides advanced visual stimulation, but also delivers a more immersive content experience.

In the past, VR headsets were mainly connected to a computer. A gaming PC with strong graphics capabilities was required to have a better visual experience. Recently, standalone VR headsets have overtaken the market to become the mainstream form factor, as they have matured to include vital features of wireless connectivity, better mobility, accurate 6DoF spatial positioning, and powerful processing performance. Standalone VR headsets allow users to enjoy more freedom of movement, reducing interference from tethered cables, to provide an overall friendlier user experience.

To accelerate userbase growth for VR in the consumer segment, Meta (previously Facebook) rolled out Oculus Quest 2 by adopting an aggressively subsidized pricing strategy coupled with upgraded performance in devices. Thus, the overall standalone VR devices market for consumers also experienced growth after Oculus Quest 2 launched. Applications for VR is also quickly expanding with the introduction of various features like Passthrough, hand gesture recognition, and virtual keyboard mapping.

The development of VR hardware depends on the continuous cooperation of software developers. For example, game applications are represented by the well-known game platform Steam, and HTC cooperates with developers to independently develop for the VIVEPORT platform so that developers can offer their application services, allowing for the use of VR not only in games, but also in movies, social media, and other visual mediums. As for VR, we believe that abundant content and application support is the key to attract consumers and stimulate VR market growth. That’s why we are building a VR ecosystem that can integrate software and hardware to expand our penetration into the consumer market.

Another major development direction of VR is to develop useful applications for professional use. From the perspective of the currently known application industries, medical and architectural professional fields are especially quick to adopt and apply VR, especially for use cases which require heavy 3D visualization. HTC aims to use VR to make medical training more efficient and effective. By using VR for surgery simulation and medical equipment operation training, for example, students and surgeons have significantly increased their surgery success rate and their confidence in how to deal with high-pressure scenarios. With the emergence of the 5G era and the acceleration of network speeds, VR medical treatment can transmit high-resolution images and data in real time, facilitating real-time multi-party consultations, and even enable remote surgery.

Entering the new 5G era, 5G technologies and technical demands have contributed to the advancement and popularity of high refresh rate displays and other low-latency components critical for VR. The development of AI and big data technology has also accelerated the development of VR from consumer level to large-scale commercial-level applications.

The metaverse has become the focal point of conversations within the tech industry and investors in 2021. Development roadmaps were planned and announced by top global tech firms. Facebook also changed its name to Meta as a show of determination for their efforts to build their metaverse. The VR / AR industry quickly became the highlight of many metaverse market discussions, as this new direction fueled the market and triggered the development of more immersive applications and the growth of device shipment volume. Gartner projected that 25% of people will spend at least 1 hour per day for work, shopping, education, social, or entertainment in the Metaverse in 2026.

Since more tech firms and hardware manufacturers are also actively entering (or reentering) the VR industry, headsets and platforms have more market competitions. To make VR headsets more lightweight, comfortable, and stylish, manufacturers are trying new innovative designs like offsetting the processor and power from headsets to smartphones — the VIVE Flow immersive VR glasses launched in 2H 2021 from HTC is one such device.

The on-going experience of the global pandemic since 2020 has greatly accelerated the digitization of almost all activities, which is also simultaneously enriching the Metaverse concept and realizing different use cases for a digital virtual world. Thus, people see this year as the first year of the Metaverse. The Metaverse is widely regarded as an “always-live” and persistent virtual ecosystem where people can meet, interact, socialize, work, learn, and play games. These systems will also have to meet the data demands of millions, billions of people. And that’s where blockchain and cryptocurrencies come in. The Metaverse will be built on the foundation of blockchain technologies, and cryptocurrencies will enable its economy. This means that Blockchain and NFTs will play a vital role in the Metaverse, providing verifiable, undisputed ownership of characters, in-game items, or even virtual real estate.






The metaverse as it is being described today is what HTC has continuously built and heralded as VIVERSE since a few years ago, the future that’s enabled by the integration of VR, AR, AI, 5G, and Blockchain technologies. HTC has long since been leading the industry in paving the way to build and enable the metaverse.

5G, Smartphones and Connected Devices

Over the past few years, smartphones have been constantly and continuously updated with new and innovative functionality. Smartphones have fully transitioned from traditional feature phones into the touchscreen-enabled communication products with independent operating systems we all know today. Consumer demand has led to the development of components including high-performance miniature camera lenses and powerful batteries, and this has also greatly accelerated and stimulated the vigorous development of all communications-related hardware industries. At present, the smartphone industry is already a mature industrial chain with professional divisions of labor. Each specialized component integrated into smartphones comes from a different specialized supplier. After being assembled by the manufacturer, it is then sold by a dealer or a telecommunications company.

Recently the sales growth of the smartphone sector has slowed, partly due to the maturation and standardization of the hardware functions found on mobile phones, and partly due to developed markets including Europe and the United States have reached a saturation point, leading to longer life cycles and slower replacement rates for all mobile phone products.

The smartphone industry welcome new technologies to enter the 5G era in 2020. The global smartphone market was expected to embrace the new business opportunities with a wave of new 5G smartphone purchases after 5G was commercially deployed globally in 2020. However, due to COVID-19 since the beginning of 2020, the global smartphone supply and demand declined, and it also partially delayed the launch of 5G in some regional market. Therefore, global smartphone shipments continued to decline in 2020. Due to the incentive by the implementation of 5G use cases in Chinese market, the 2020 global 5G smartphone market still shared a 19% of penetration rate. Especially Chinese smartphone brands have around 60% of market share.

					
Time	1980	1991	2001	2008	2020
Technology	AMPS	GSM CDMA	WCDMA CDMA2000 TD-SCDMA	LTE	New Radio, Low Latency, Massive MIMO, Beamforming
Service	Call	Call, Message, Text mail	Call, Message, internet, Streaming service	Call, Message, internet, 1080P Video streaming service	Call, Message, internet, 4K Video streaming service, VR streaming, Auto Guided Vehicle
Speed	2 Kbps	10 Kbps	3.8 Mbps	0.1-1 Gbps	1-10 Gbps
Frequency	800-900 MHz	850-1,900 MHz	1.6-2.5 GHz	0.4 GHz-5.2 GHz	0.4 GHz-52 GHz

Smartphone market continued paying attention on 5G topic in 2021, while countries recovering back to 5G infrastructure, mobile processor manufacturers roll out low-end and middle-end processors, global 5G smartphone penetrate rate rapidly raised to around 40%. It was estimated that 5G smartphone will have larger scope than 4G smartphone to be the mainstream of the market in 2022.

In 2021, the world economy is still heavily impacted by the multiple variations and surge in cases of COVID-19; supply chain constraints impacted the output of certain components and also caused an increase in prices. Despite all of this, because the market was already at a low point in 2020, and the 5G is more mature with higher coverage and support, the smartphone market is finally able to get out of the continued period of recession of the previous 3 years.

Re-investment & Affiliated Companies

HTC's reinvestment policy is to provide different solutions for enterprise clients, personal consumers, and telecom operators, the company continues to deepen the enhancement of virtual reality and augmented reality related new technology, application software, and content expansion through strategic investment, to deepen the enterprise market and mass consumer market. 2021 HTC affiliated companies please referred 2021 annual report P188.

Product Overview

HTC has been tapping into the possibilities of smartphones through brand new technology in the telecommunications area. Extensive and innovative VR, AR, AI, blockchain, and high-speed 5G networks are amalgamated to create HTC's technological vision of VIVE Reality.

HTC VIVE™

VR (Virtual Reality) is an exciting feature of next-generation computing and entertainment. HTC VIVE allows users to browse through the VR world and use unique hand-simulation controllers to interact with objects.

VIVE Pro 2



A sharp, precise, and breathtakingly immersive device, VIVE Pro 2 pushes the boundaries of productivity, creation and play, delivering PC-VR experiences like never before.

— CES® 2022 Innovation Awards 「Virtual & Augmented Reality」



HTC's flagship PC-VR headset VIVE Pro 2 features a 5K 4,896 x 2,448 display resolution. The crystal-clear images show amazing details. The astonishing 5K is backed by 120° Field of View to engage real interaction with and easy immersion in virtual worlds. The 120Hz refresh rate gives ultimate smooth images.

VIVE Pro 2 enhances the ergonomic design. In addition to the specially designed front and rear balanced weights, the adjustable headband and quick adjustment knobs provide users with a comfortable experience. VIVE Pro 2 features an adjustable inter pupillary distance (IPD) function, balanced front-rear weight distribution, an adjustable strap and a quickly-scaled knob that allows adjustment to wearing configurations for different users. Aside from supporting third-party earphones, VIVE Pro 2 also features a set of headphones that is certified by Hi-Res Audio and capable of delivering 3D spatial audio. VIVE Pro 2 is compatible not only with the Steam VR system and peripheral accessories, including Tracker 1.0, Tracker 2.0, VIVE Controller, VIVE Wireless Module, or VIVE Tracker of whatever generation, and the new VIVE Facial Tracker, but also with other third-party Steam VR motion sensing accessories, e.g., Valve's Index knuckle controller.

With the above advantages, VIVE Pro 2 was named a CES® 2022 Innovation Awards Honoree in the Virtual & Augmented Reality category at the Consumer Electronics Show (CES), the largest international consumer electronics event in the United States.

VIVE Focus 3

● VIVE Focus 3



As a flagship-level standalone device, VIVE Focus 3 offers total solutions for commercial VR activities; it provides an optimum immersive experience and an outstanding wearing experience through its outstanding visual effects, ergonomic design catering to human needs, optimum audio effect and advanced inside-out tracking system and controllers. Featuring an industry-leading 5K resolution, a 90Hz refresh rate, a wide 120-degree field of view (FOV) closest to human eyes and a RGB sub-pixel display, VIVE Focus 3 offers the optimum visual immersion to an extent that even the sophisticated brushstrokes are well presented, enabling life-like interaction between the software designer and the user. VIVE Focus 3 is powered by Qualcomm's updated Snapdragon™XR2 platform that features stunning performance. Such a platform, if compared with the one that powered VIVE Focus of the previous generation, features a twofold higher GPU and CPU performance and an eleven-fold higher AI processing performance. In addition, VIVE Focus 3 has heat copper pipes and a cooling fan that can keep it cool under intense use.

In order to offer a wearing experience that is most comfortable and convenient and lasts for a longer session, VIVE Focus 3 is equipped with a curved and fitting swappable battery pack, as well as a new strap that makes the helmet a natural counterweight. Changing of VIVE Focus 3's battery pack only takes a few seconds; such swift battery changing enables the continuous use of the device even after it has been used all day long. In addition, only 30 minutes of recharging is required for reaching a 50% charge; the LED indicator light instantly shows the battery level.

VIVE Focus 3 is equipped with a new directional speaker that has a pair of built-in drivers, rendering a life-like and immersive audio effect. Its open-back audio design allows users to immerse themselves in the VR world while being alerted to external sounds. Its distinctively directional audio frequency design can reduce sound leakage. This minimizes the risk that the neighboring person can hear the voice when a meeting is conducted and so ensures privacy.

The VIVE Focus 3 uses an AI-driven inside-out tracking system for precise tracking; it stores all tracking data in the headset's encrypted partition (on-device end), as opposed to any cloud storage spaces to protect users' privacy. Being among the lightest 6 DoF (degree of freedom) controllers on the market, the redesigned controller offers more intuitive use experience; one single recharge can last for 15 hours.



● VIVE Tracker 3.0

The VIVE Tracker can bring real objects into virtual space with ease, regardless of the objects being a tool, a camera or a person's full body. It is an ideal equipment for simulation and motion capturing in VR production; yet, this is only the beginning. Compared with VIVE Tracker of the 2018 version, VIVE Tracker 3.0 has the same functionalities and precision but is 33% smaller, 15% lighter and 75% more durable in terms of battery life.



● VIVE Facial Tracker

The VIVE Facial Tracker accurately captures the facial expression and lips movements below the nose; it then authentically presents such capturing in the virtual world to express the users' emotions in real-time. The movement of the lips accompanies the voice, thanks to almost-zero latency. By capturing 38 blends of the movements of the lips, jaw, teeth, tongue and cheeks, the VIVE Facial Tracker is capable of accurately conveying expressions even as subtle as a smile or a look without a care. If working in tandem with VIVE Pro Eye, it can track all facial expressions.

VIVERSE

● VIVERSE



Virtual reality comes from the human pursuit of immersion. VR is also the technology development direction that has been encouraged by the smartphone industry through the advancement of various display technologies, processors, controllers and other key components over the past 10 years. While consumers are satisfied with visual effects, they also hope to experience “new virtual worlds”

HTC is the leading corporation in the VR industry. VIVERSE, the metaverse constructed by HTC, features state-of-the-art VR, AR, AI, Blockchain and 5G technologies that enable an immersive, highly interactive, in-depth explorable open ecosystem. In the 2022 MWC, HTC declared the VIVERSE vision: accessibility through any type of device on any platform. VIVERSE in the near future will present the ultimate colorful entertainment experience; work processing, meetings, trainings and education with high immersive capacity, helping you find the perfect place for your mind, body and soul while being surrounded by the heartwarming, gentle music provided by the meditation app on VIVEPORT.

At VIVERSE, everyone is given a unique virtual character and can be active on many platforms, socializing with and exploring virtual worlds created by others. The emerging NFTs can also be traded in VIVERSE, and there are growing ways to buy digital collections. Other than Ethereum, we have projects in the PoS (Proof of Stake) and PoSA (Proof of Stake Authority) spaces, and blockchains that consume much less energy, acting as platforms for a sustainable environment. In addition to its entertaining capacity, VIVERSE offers an educational element, especially when using it to learn about high-risk activity and how to perform surgery, allowing professionals to gain and accumulate experience in a shorter time. The VIVERSE application is an extension of the vision of VIVE Reality.

The VIVERSE business unit (formerly HTC Content & Platforms) is instrumental in the creation of HTC’s content ecosystem in the metaverse era. Through its advanced content, software and platform technologies, VIVERSE has maintained steady growth in both VR content and platform on its VIVEPORT platform, leveraging its virtual exhibition platform for enterprise use cases, and continues to build strong content and hardware partnerships to engage more end-users and accelerate the expansion of the VR ecosystem.

VIVEPORT has established a library of 3,200+ titles across a variety of genres. In 2021, it launched the Infinity Vista subscription plan for smart glasses such as the new VIVE Flow immersive glasses. VIVERSE also made its first investment in content IP by co-producing the anime, BIRDIE WING, the world’s first original anime featuring women’s golf, an important milestone in HTC’s VIVERSE strategy.

Besides the benefits of being eco-friendly by transforming physical to virtual platforms which can effectively decrease consumption of resources, VIVEPORT also emphasizes equality and mental health in the sustainable field. All content needs to be confirmed with the “Content Guidelines” of VIVEPORT before being released. If there is any discriminatory content related to race, ethnicity, social class, or language, etc., it will not be fit for the market. After content is released, it is still under surveillance for any violations of the guidelines. HTC exists to collaborate with all developers to create a high-quality virtual content environment.

● VIVE ORIGINALS

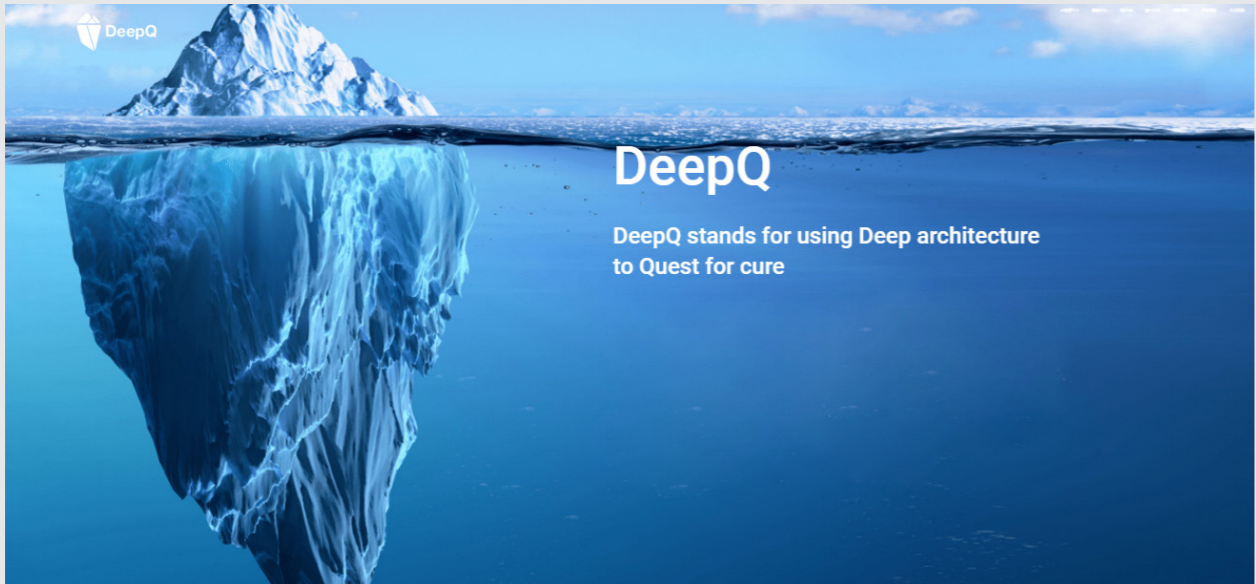
HTC VIVE ORIGINALS is a content brand owned by HTC VIVE. It is devoted to original IP development and original content production. It also engages in the distribution and exploration of VR in film, art, animation, music, cultural collections, as well as industries of cultural creativity and entertainment. VIVE ORIGINALS is also actively building a cross-domain team to create content and VR technical spec standardization. Moreover, it is aimed at creating content production SOP (standard operation process), and providing an extended variety of VR solutions. Meanwhile, profit comes from various channels such as licensing for public broadcasting, organizing exhibitions, and trading for art collections with cross-domain content. We also actively strive for collaboration with government to garner film and television investments. Additionally, we want to expand the scale of content, create industrial values, and build up a VIVE Reality ecosystem by content cluster to fulfill the ultimate goal of enriching human cultural life through new technologies and creativity.

The brand and goal of VIVE ORIGINALS is to “create entertainment experiences with cultural value in the virtual world for people”. To deepen the connection between the virtual and the real world, our four pillars of VR technology development can be applied to cultural and art collections, and video and audio recordings. These pillars are: “Content Production”

● VIVE Arts

HTC launched VIVE Arts in 2017 and kicked off the Global Virtual Reality Art Program. VIVE Arts is devoted to exploring art and culture ever since it was established. Virtual reality is a new medium full of potential that provides people with a different perspective of how to appreciate artistic treasures in the world. The revolutionary technology of VIVE has changed the way in which people can create and experience art. For example, VIVE collaborates with museums and content developers to launch their pieces of work in pioneering ways.

Healthcare



● DeepQ

HTC DeepQ is comprised of cross-domain experts and engineers in areas such as computer science, software engineering, medicine, regulations, user experience, design, through digital technology, big data and artificial intelligence technology, all with the goal of developing and providing precision personalized medical products and services to reduce costs and improve the effectiveness of healthcare.

● Medical VR

The HTC Medical VR team is committed to the vertical application of virtual reality to medical education and clinical applications. In addition to greatly improving the interest and effectiveness of medical education, it can also improve the communication between doctors and patients and the quality of medical care, creating maximum social well-being. At the same time, the Medical VR team accelerates the development of the global medical VR ecosystem and cooperates with virtual reality developers to implement the virtual reality of medical innovation technology in the actual field and integrate it into practical applications. It has established partnerships with many hospitals and universities. Successfully become a world-class benchmark, and jointly build the world's top virtual reality medical teaching center, so that medical education and training can be upgraded to the next generation.

G Reigns, Smartphone

HTC Desire 21 pro 5G Announced in January 2021, the HTC Desire 21 pro 5G delivers the power of 5G to a whole new audience. HTC Desire 21 pro 5G brings a rich cinematic display, AI-assisted camera solution and a big tier-leading battery, augmented by the power of 5G at an affordable price point.

The Desire 21 Pro 5G boasts a rapid 90Hz refresh rate on a stunning 6.7-inch FHD+ display, providing a compromise-free screen to enjoy high-fidelity 5G-streamed content. Dual connectivity support allows users to be seamlessly transitioned as 5G infrastructure matures, ensuring a fast and consistent connectivity experience.

The camera setup is led by a huge 48MP main lens, 8MP ultra-wide lens, 40mm macro lens, dedicated depth sensor and a 16MP front facing lens, allowing users to take excellent photos under all conditions. A suite of cutting-edge features, including low light, panorama, intelligent photo and pro mode provide users the flexibility to get the best out of their shots.

To accompany all this, the HTC Desire 21 pro 5G includes a whopping 5,000 mAh battery boosted by Qualcomm Quick Charge 4.0+, so that users can enjoy the best that the 5G era has to offer- without interruption.

In addition, HTC presented its 5G private network solution to partners in September 2020. The package featured HTC remote streaming software management, edge computing, open frame standard based 5G network software, all-encompassing highly secured network system, and one-stop XR service to deliver a 5G standalone private network of high-transmission, low latency, and broad connections. The application is best appreciated in large bandwidth, low latency and highly reliable vertical use, from cloud game to cloud VR, smart manufacturing, smart monitor, AGV, to name a few.

On one hand, HTC is committed to CU/DU development and optimization in 5G RAN for above vertical application. On the other hand, HTC's designs of 5G RU, Fronthaul switch, Grand Master and COTS server with a number of Taiwanese hardware makers form a national team and perfect the vRAN environment in Taiwan.

HTC 5G is a Intel FlexRAN based O-RAN option-7.2 compliant vRAN. It has aligned with world noted 5G core network software makers (Taiwan vendors included) for interoperability, targeting customer's choices to satisfy the needs for unique network settings.





Overview of Financial Performance

HTC's consolidated revenue for the whole year of 2021 was NT\$ 5.25 billion, the consolidated gross profit was NT\$ 1.64 billion, the consolidated gross profit margin was 31%, the operating income margin was -78%, the net profit after tax was NT\$ -3.1 billion, and the earnings per share (LPS) was NT\$ -3.75. Fewer inventory shipments led to a reduction in revenue in 2021. Nonetheless, changes in product mix resulted in improvements in gross profit and gross profit margin. Operating expense decreased due to the enforcement of HTC's austerity policy. Non-operating income increased as a result of a disposal gain recognized on a subsidiary. In 2021, HTC lost control over the subsidiary, subsequently accounting for the investment in accordance with the equity method of accounting. HTC's pre-tax loss was lower in 2021 as compared to 2020.

	Unit	2019	2020	2021
Operating Revenue	NT\$ Million	10,015	5,806	5,253
Operating Costs & Expenses	NT\$ Million	19,865	12,197	9,370
Income Tax	NT\$ Million	6	4	3
Employee Wages	NT\$ Million	6,476	5,267	3,777
Dividends	NT\$	0	0	0
Social Investment /Donation	NT\$ Million	0	0	0

Note:
1. The related figures are those listed in the consolidated statement.
2. Final decision after annual shareholders' meeting.

HTC Product: Virtual Reality, 5G, Smartphones and Connected Devices (including Accessories)

Year	Domestic Sales		Export Sales	
	Quantity (Thousands)	Value (Millions)	Quantity (Thousands)	Value (Millions)
2019	397	1,847	19,385	7,347
2020	168	978	1,559	4,436
2021	90	631	940	4,344

Note: The figures for the main products do not include income from maintenance and product development.

The Pursuit of Brilliance



Future Goal

- Integrate products and services to strengthen brand-added value.
- Create professional images of products with strong technological competency to increase market shares.
- Strengthen marketing resources to elevate the brand's image.

Current Achievement

- Creating a global smartphone with excellent designs
- The most valuable international brand from Taiwan
- The world's first virtual reality system VIVE brings real-world interaction and experience through space-based positioning technology
- Through virtual reality and augmented reality, big data, and artificial intelligence technology, with the goal of developing and providing precision personalized medical products and services to reduce costs and improve the effectiveness of healthcare



HTC is an innovation company, creating powerful new products, solutions, and platforms in mobile and immersive technologies. Beginning with a vision to put a personal computer in the palm of our customers' hands, we have led the way in the evolution of smartphones, and are now applying that same innovative approach to connected devices and virtual reality as we enter the era of VIVERSE, our version of the metaverse.

At the heart of this is a bold innovative spirit of pushing new boundaries, while leveraging our industry-leading capabilities. The notion of Dare to Dream is at the heart of our daily ambitions. We ask fundamental questions at the intersection of customer aspirations and our capability to delight and surprise with innovative solutions. We challenge ourselves and our customers to achieve their full human potential. What's your dream? Can you visualize it? Will it shift our perspective? Will we feel it? The future belongs to the dreamers to power creation and innovation. Because our dreams power the future. Dare to Dream.

As we live this philosophy, we employ powerful technologies and combine them in creative new ways in order to deliver this. At this time in history, building block technologies like VR, AR, 5G, AI, and blockchain are evolving and coming together in new ways with the potential to deliver utility and experiences previously unavailable. We call this VIVE Reality.

Today, VIVE Reality is the future that we strive to enable. That means understanding people's needs and desires, their hopes and aspirations, and embedding them into the building block technologies of today and tomorrow. Through creating wonderful devices, platforms, content and solutions, we can unleash imagination from the bounds of reality and realize the true potential of technology for the benefit of humankind. Our future is enhanced in a world where HTC innovation and VIVERSE experiences blend to create a new and better world. These three pillars are central to that mission:



For HTC, our innovation is human-centered in the broadest sense.
We endeavor to anticipate the needs of people, businesses and society as a whole, and expand our vision to impact people's lives in ways never before considered.



Our heritage of and commitment to technology excellence is the great enabler of our pursuit.
We strive for a world in which customers, large and small, have access to the most powerful hardware, platforms, tools, and services, a world where the technology becomes secondary to the experiences that it creates.



Imagination is one of the most powerful tools we know, and one we seek to unlock.
A world where a continuum of immersive realities is possible, and experience is unbounded.
Imagination that invents new ways to make life better for people and enable them to be the best they can be, help businesses achieve their vision, and solve the greater challenges faced by society.

This philosophy and approach are reflected in a steady stream of world-class innovation, as we continue to advance new products in VR, mobile, and 5G with greater capability and convenience. We also continue to advance our societal, environmental and cultural initiatives, and our support of education. From our people to our products, Dare to Dream represents a guiding philosophy that energizes HTC as a global organization.

The pursuit of VIVE Reality sees HTC transition into a complete VIVERSE solution company, creating not only leading hardware in strategic markets, but also building industry-leading platforms, software, content and services to create new revenue streams and lay the foundation for our future growth.

“Quietly Brilliant” is deeply rooted within HTC’s corporate culture. HTC strives to unlock the full human potential of our customers, employees, partners, and other stakeholders, and to achieve that, we must strive for our core values of truth, goodness and beauty in all that we do.

Truth

Truth means being real and authentic. The fields of science and technology are constantly pursuing truth to solve society’s problems through innovation. This is the most important essence of HTC.

Goodness

Goodness means turning heartfelt ideas into actions that improve people’s lives. Such as, high-quality content that can inspire empathy and compassion, products that can help people with disabilities, that serve the elderly or educate young people, and that solve problems for organizations.

Beauty

Beauty is simplicity and elegance. The simplest structure can hide complex details that each have a purpose. We design simple and intuitive user interfaces for high quality products that evoke a beautiful reaction in our customers.

Only when we launch excellent products instilled with truth, goodness and beauty can we implement our mission of “combining technology with humanity to unleash the imagination” and achieve our vision of VIVE Reality.

Our vision can best be understood through the VIVE Reality triangle logo mark, which represents the unity of three key elements – humanity, technology, and imagination – while the center symbolizes a portal to a new world of experiences that VIVE Reality delivers. VIVE Reality was born from a faith in humanity and forged by a respect for technology, paving the way for bringing people closer together, and closer to their imagination, than ever before. VIVE Reality is stimulating innovation in entertainment, education, training, design, healthcare, art, shopping and social networking, and many other industries, positively impacting the world, affecting the way we live, learn, and believe.

While we expanded from creating world-class smartphones into the fields of connected devices, virtual reality, 5G networking, blockchain, and now the metaverse, we are re-energizing the HTC brand story through the notion of an innovative parent company that will dare to dream, while expanding our brands to new audiences and segments. HTC’s approach to brand building is both pragmatic and effective, and is based on principles including:

- **Authenticity:** Being authentically true to the nature of our mission, and the belief that we can improve human lives and experience while creating value.
- **Entrepreneurial approach:** We are agile, attentive to costs, and aim to achieve maximum effectiveness through an obsessive and energetic approach to building our brand.
- **Innovative products:** For many customers, our products and services are the most concrete expression of our brand. By delivering a steady stream of innovation in mobile, virtual reality, 5G, blockchain, and more, we create proof through action.
- **Integrated solutions:** Far more than just a hardware company, we deliver true solutions through platforms, software, and services to create positive experiences and net promoter scores with our customers. Our VIVEPORT store provides access to content, VIVE Studios creates software, and VIVE Enterprise engages business customers with full solutions.
- **Broader audiences:** By continuing to improve and simplify our products and user experience, and support a broader range of software, we aim to access new customer segments and solve the challenges they face.
- **Developing the ecosystem:** HTC works closely with partners at each stage of innovation to build the ecosystem necessary to promote adoption, and actively participates in industry alliances to advance our industry thought leadership. Through the VIVE X accelerator program, we are supporting the development of the ecosystem for advancing the key and emerging technologies such as VR, AR, 5G, AI, and blockchain. We create opportunities to work closely with our portfolio companies to explore mutually beneficial ways to advance entrepreneurial innovation. VIVEPORT is helping to build an ecosystem of content developers by providing a dedicated VR app store for consumers and enterprise as well as creating VIVERSE, HTC’s version of the metaverse, while VIVE Wave is enabling other hardware companies to deliver immersive devices to broaden the market and fuel innovation. At every stage of product development, HTC considers the requirements of the ecosystem in order to drive the innovation.
- **Smarter communications:** We develop the types of products that people love and want to learn more about, that spark their curiosity and tap into their imagination. These make for great stories and social engagement, which are among the most effective ways to build a brand, and are a focus of our efforts on that front.
- **Building communities, forging customer relationships, and offering services that increase lifetime value:** We have moved well beyond the transactional nature of selling consumer electronics to developing an ongoing relationship with our customers. Through our platform, software, and service offerings, we can continue to engage with them, as well as increase customer lifetime value.

HTC 2021 SDGs Performance

The United Nation's Sustainable Development Goals

In 2015, the United Nations passed 17 Sustainable Development Goals (SDGs) aimed at ensuring peace and prosperity for all people. Each goal also details specific goals to be achieved in the next 15 years, thereby establishing the guideline and blueprint of the future sustainable development direction, serving as a global sustainable development agenda and action appeal. In order to achieve a more sustainable future, companies, governments, and society need to fulfill their responsibility and make an effort.

As global citizens, we spare no effort to implement the goals of the United Nations. We are committed to integrating SDGs into corporate operations and business development planning. In addition to establishing gender equality in practice and empowering female employees and providing them with benefits, we also focus on green sustainability in the manufacturing process, achieving responsible consumption and production. Externally, the HTC team has also collaborated with external institutions on the research and development of products and services that enhance healthcare quality, making full use of innovative technologies to promote sound health and well-being of people of all ages, while establishing multiple partnerships with teams from different fields to accelerate the implementation of goals.

HTC SDGs indicators

3 GOOD HEALTH AND WELL-BEING



- Taiwan V-Watch – COVID-19 Vaccination Health Report System
- Campus Influenza Vaccine System (CIVS), optimize the vaccination process to improve the vaccination record
- HTC in collaboration with Chunghua Christian Hospital to launch the first cross-hospital AI+Blockchain Medical Care Line Bot, Dr. Lan
- DeepQ AI Platform

4 QUALITY EDUCATION



- Goal of serving the community of The League
- Partnerships with all levels of school for XR, VR professional cultivation

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



- Development of 5G in the Asia New Bay Area with the Kaohsiung City Government
- VIVE Sync- Online Virtual Meetings

17 PARTNERSHIPS FOR THE GOALS



- VR training simulation system, a 2021 HQIC winning collaboration with VGH, Taichung
- VR Forest Disease Preventive Package upgrade with NTU
- Food safety VR training for a safer, healthier diet
- Incorporate global medical VR ecosphere resources to cultivate medical professionals
- VIVE ORIGINALS creates an entertaining experience with cultural values in the virtual world
- VIVE Arts, Building a Worldwide Accessible Unique Cultural Experience with Cutting-Edge Technology

Ensure healthy lives and promote well-being for all at all ages

With HTC's advantages in communication technology, seamless integration with government agencies and medical institutions has not only promoted the development of AI in medical technology, but has also made great contributions to the electronic integration of medical systems. During COVID-19, the Taiwan V-Watch was improved with the ability to report vaccination progress, supporting the CDC with vaccination reaction studies and safeguarding public health.

● Campus Influenza Vaccine System (CIVS), optimize the vaccination process to improve the vaccination record

In order to simplify the procedures of collecting paper consent form from students during October to November each year for the school influenza vaccination program, the HTC DeepQ Team and partnered with the CDC to issue the Campus Flu Shot Electronic System, which documents the whole vaccination process, the consent forms, vaccine inventory, post-vaccination reminders and individual e-records all on a single platform, offering schools a holistic solution for campus flu shot procedures.

Students and parents learn from the system the injection schedule and more; schools cut down on paperwork and improve their preparation for the willingness survey, while all jobs are recorded accurately and more efficiently, allowing individual records to be consulted and injection rates to be easily calculated.

The CIVS interface consists of four main sections:

- Electronic Signature on Consent Form:** Displays a consent form for the 109th school year. It includes student information (Name: 王心雨, Gender: 女, Date: 109/11/01) and a section for the parent/guardian to agree or disagree to the vaccination. A green button labeled "同意接種" (Agree to Vaccinate) is highlighted.
- Electronic Student Record:** A list of students categorized by grade and class. For example, Grade 1, Class 1 (1年乙班1號) to Grade 1, Class 4 (1年乙班4號). Each entry shows the student's name (王OO) and a dropdown menu to select the student.
- On-site Electronic Vaccination Record:** A form for recording individual vaccinations. It shows student information (Grade 1, Class 1, Name: 王大明, Date: 2010年9月2日, Temperature: 36.5度) and a section for the vaccination status. A green button labeled "可接種" (Can be Vaccinated) is highlighted.
- Electronic Vaccination Statistics:** A table showing vaccination statistics for the school. It includes columns for "全校接種率" (Overall Vaccination Rate) and "本場完成接種" (On-site Completion). The data shows a rate of 600/760 and 222 completions. It also lists the number of students by grade and the number of vaccinations administered.

● Taiwan V-Watch – COVID-19 Vaccination Health Report System

HTC cares about public well-being, and our HTC DeepQ joined forces with CDC in 2017, and developed "Disease Control Butler". The new function in Disease Control Butler 3.0 - Taiwan V-Watch Vaccination Report System in 2021 tracks whether people have adverse reactions after being vaccinated against COVID-19. The public can get information and report their health conditions after the vaccination easily with the official LINE@taiwancdc from the CDC.

Scan the Taiwan V-Watch QR code at vaccination sites to join the report system, which sends regular notifications as a daily status report. The system then follows up and gives responses according to the reports it receives. Through such a simple approach, the public can monitor their own health status, while making contributions to the CDC for their COVID-19 post-vaccination effect studies.

Taiwan V-Watch

The Taiwan V-Watch app interface includes four main sections:

- Join Taiwan V-Watch:** A screen for users to join the system. It features a QR code and a message from the Disease Control Butler. A green button labeled "繼續填寫相關資料" (Continue filling out related information) is highlighted.
- Friendly Reminder:** A screen showing a reminder to complete the vaccination report. It includes a message from the Disease Control Butler and a green button labeled "填寫健康回報" (Fill out health report).
- Instant Response and Care:** A screen showing a response to a health report. It includes a message from the Disease Control Butler and a green button labeled "撥打119" (Call 119).
- Check My Vaccination Record:** A screen showing the user's vaccination record. It includes a message from the Disease Control Butler and a green button labeled "接種紀錄已更新" (Vaccination record updated).





Ensure healthy lives and promote well-being for all at all ages

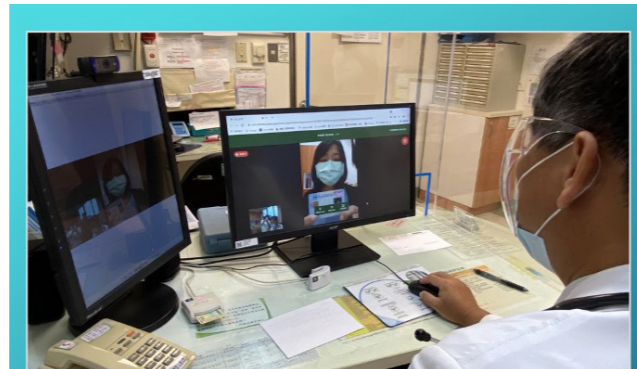
● HTC in collaboration with Chunghua Christian Hospital to launch the first cross-hospital AI+Blockchain Medical Care Line Bot, Dr. Lan

HTC DeepQ launched the Medical Care Line Bot, Dr. Lan - the first AI + Blockchain Medical Care Line Bot across 10 hospitals in Taiwan. Through DeepQ's medical blockchain technology can strengthen the information security of inter-hospital medical care networks. Everything from AI medical department guidance, pre-consultation questions, to personal health education after consultation; this combines medical blockchain information security to begin comprehensive medical care in 10 hospitals in just one click. It completely upgrades the quality and experiences of the entire medical care process.

Since the outbreak of COVID-19 in February 2020, the Ministry of Health and Welfare adjusted the regulation for online diagnosis for people who underwent home quarantine or isolation, or who could not go out for medical purposes. Thus, people who are home-quarantined can receive medical services remotely. Chunghua Christian Hospitals provide remote medical diagnoses via telephone reservation. Dr. Lan will remind users of the time of the appointment through the Line Bot, and provide the link for the online virtual ward half an hour in advance. During the process, besides being diagnosed via video conference, the video will be recorded for the doctors. Because home-quarantined individuals cannot go outside, families or relatives can collect the prescriptions from the "drive-through" counter with their national health ID without having to enter the hospital.

In June 2021, National Health Insurance Administration to open telemedicine during the severe pandemic period. The Linebot of "Dr. Lan" upgraded the telemedicine again. The doctor can continually stay in the original consultation room to see patients by on-site, video or telephone consultation, to provide the public with a choice of multiple consultation methods.

As of the end of 2021, the total number of users for Dr. Lan has reached 26,000 people.



The Dr. Lan LineBot telemedicine is a project presented by HTC DeepQ and CCH (Changhua Christian Hospital), allowing face to face discussion through info-tech assisted video clinics. Doctors perform detailed observation of patient status and give better assessment based on visual results, rather than voice contact on phone call, while eliminating proximity associated risks.

Lin Ching-hsiung, Deputy Executive Officer, CCH



● DeepQ AI Platform

The future of medical education relies greatly on modern technology. To tackle the learning threshold of medical AI model training and speed up the inclusion of AI in the medical industry, in September 2019 the HTC DeepQ Team launched the "DeepQ AI Platform" for medical application. It is composed of a DeepQ AIP workstation and NVIDIA DGX-1 and is designed to operate inside a hospital IT environment. The acceleration technology features a system/algorithm optimized training environment through AI models and full automation of parameter adjustment built within, while its simple user interface mitigates the learning threshold and the cost of AI training models.

DeepQ AI Platform is easy to learn and use, and can complete tasks that used to take ten weeks in three days. Without having to write or design a deep learning program, DaaD (Doctor as a Developer), a completely new design concept in medical AI model training applications, enables doctors to teach AI how to determine medical images.

The product was successfully sold to medical centers in Taiwan in 2020, where doctors develop AI models based on clinical procedure needs to cater for clinical studies or work flow improvement. In 2021, the cloud version of "DeepQ AI Platform" launched to provide individual doctors or a small number of project teams to easily complete AI model development without investing high hardware costs.





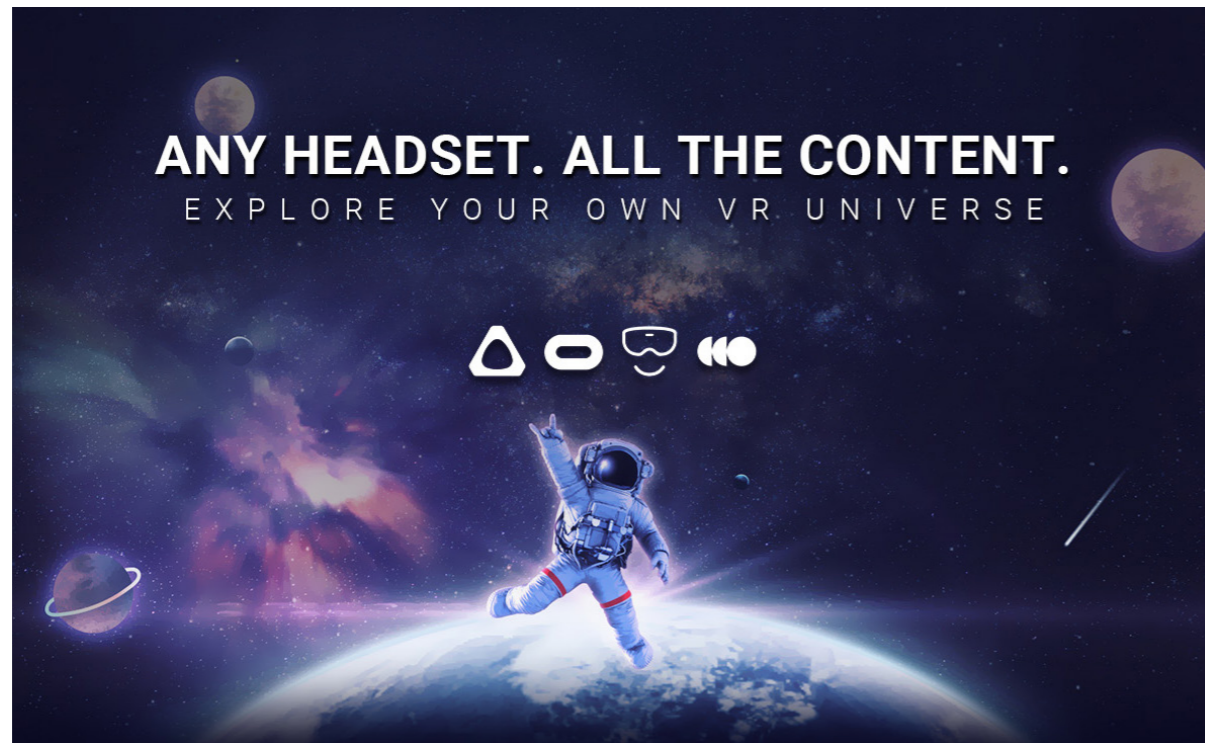
Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

VIVE combines reality and virtual reality, software and hardware to visualize abstract knowledge and the involvement of education for the young generation, where learning is an immersive experience in virtual spaces. The current education pattern will change when VIVE interactive media engages in the classroom, in the community and in work. Partnerships with more universities will help cultivate more VR, XR professionals, and enhance industry development capacity.

● Goal of serving the community of The League

VIVEPORT sponsored the High School Heroes Esports League with 150 VIVEPORT Infinity memberships, making the total prize for the first season game (June – December) in 2021 even higher. And also helped to achieve the goal of serving the community of The League.

Outrun Digital is the founder of the High School Heroes Esports League, a non-profit, health-oriented, mid-level education body centered on a VR e-sports match. The League is the sole STEM-recognized VR e-sports league and allowed students to continue with their sporting activities and matches during the pandemic. It also encouraged educators to learn how to apply VR in the classroom. Moreover, the application expands to university, community and the workplace, giving solutions to previously un-surmountable issues and difficulties.



● Partnerships with all levels of school for XR, VR professional cultivation

With the advance of the pandemic and better development of the global VR ecosphere, Virtual Reality is becoming key in the work and life transformation. HTC took the initiative and worked with local and overseas educational bodies to train VR professionals with abundant learning resources. The project welcomes new blood to build a stronger team. A memorandum signed with NDHU(National Dong Hwa University) in 2020, dedicated to the first VR talent incubator in eastern Taiwan, strengthening Taiwan's innovation power with a good foundation of VR development ability.

In February 2021, HTC announced a collaboration with NTVS (New Taipei City Municipal New Taipei Industrial Vocational High School) in the New Taipei City Innovation Education Accelerator Project and built a VIVE Training Center for students to learn through progressive program design and practice, expand XR core technology and take root. This Project also engaged middle schools in the area to design career-exploring programs, in which mid-school students get their hands on emerging technologies to help cultivate their interest and potential, while also bridging the gap due to education resource inequality through industry-academia partnerships.

The age of 5G has arrived, where dreams are made possible with AR/VR. Accompanied by the digital transformation of business patterns due to the pandemic, the VR industry is expanding its territory at an inconceivable speed, opening up a great deal of needs for XR professionals and content development. HTC continues to introduce industry-university cooperation programs in various regions to enable Taiwanese students to understand virtual reality from basic education, expects to fortify our future manpower in the XR territory by familiarizing students with the idea of virtual reality and the infinite possibilities of XR technology.



Build resilient infrastructure, promote inclusive and sustainable industrialization and foster

HTC has excellent industry experience and uses its experience to support government construction of smart 5G. On one hand, the southern Taiwan technology smart city we built provides employment opportunities and develops local business; the VR meeting software, on the other, makes face-to-face discussion and virtual interaction possible, breaking distance limitations with online meetings where people generally speak to the webcam.

● Development of 5G in the Asia New Bay Area with the Kaohsiung City Government

HTC has been working with the Kaohsiung City Government since 2018 on talent cultivation, business match-up, international collaboration, and Front Shop, Back Factory plan, and promoting more innovative Motion-sensing Technology applications. In 2021, our efforts with local government continued to boost 5G and XR applications, injecting a new wave of the digital Motion-sensing Industry in Kaohsiung, expanding the 5G innovative smart application market, and contributing to the digital construction and development of the country. HTC retains and drives talent and business in Kaohsiung, leading the transformation of the city into a smart technology base that shines on the world stage.

The Asia New Bay Area in the Big South Development-Southern Taiwan Development Project, key in the national development strategy proposed by the NDC (National Development Council) in 2020, coupled with digital technology and Kaohsiung Port development to invest in the high-tech industry, including Motion-sensing Technology, IoT, and smart cities, focusing on local prosperity, large-scale employment opportunities, and turning the area into a critical cluster for the development of the southern Taiwan technology industry.

Traditional business and new startups can upgrade their technology for free in our first 5G XR O-RAN Experiment Base in Kaohsiung, a dedicated 5G development platform to support the renovation and evolvement of local industries; the first in Taiwan to combine the 5G Standalone Architecture Private Network and Edge Cloud VR Solution, the KOSMOSPOT x VIVELAND in Kaohsiung is open to individuals and corporations in Taiwan for a 5G experience.

HTC has many years of experience in the development and operation of software, hardware and platforms. Kaohsiung has long been the base for Motion-sensing Industry development, digital content, AR/VR, blockchain and Fintech supply chains. Together we are committed to a powerful 5G and digital technology environment in Taiwan, realizing the vision of the “Asia New Bay Area, Technology for a Smart Kaohsiung”.

HTC 5G environment and solutions for businesses in Kaohsiung

The HTC 5G Standalone and Private network field

Bringing the HTC 5G Standalone Architecture Network technology and advanced and complete end-to-end enterprise private network solutions together, with the HTC remote streaming software platform management service, the all-direction high-security network protection system, open framework based on 5G network software, edge computing technology, and a one-stop XR solution, we present the high-speed, low latency and wide-connection 5G Standalone and private network.

The HTC 5G Standalone private network and Edge Cloud VR solution

This is a solution that supports all types of terminal applications, making real-time video monitor possible. Engaging multiple people online and running applications that require massive traffic such as XR, 4K, or even 8K video and audio outputs by turning plants or office spaces into high-speed, consistent, secured 5G environments that align with business transformation, all possible within a short time.

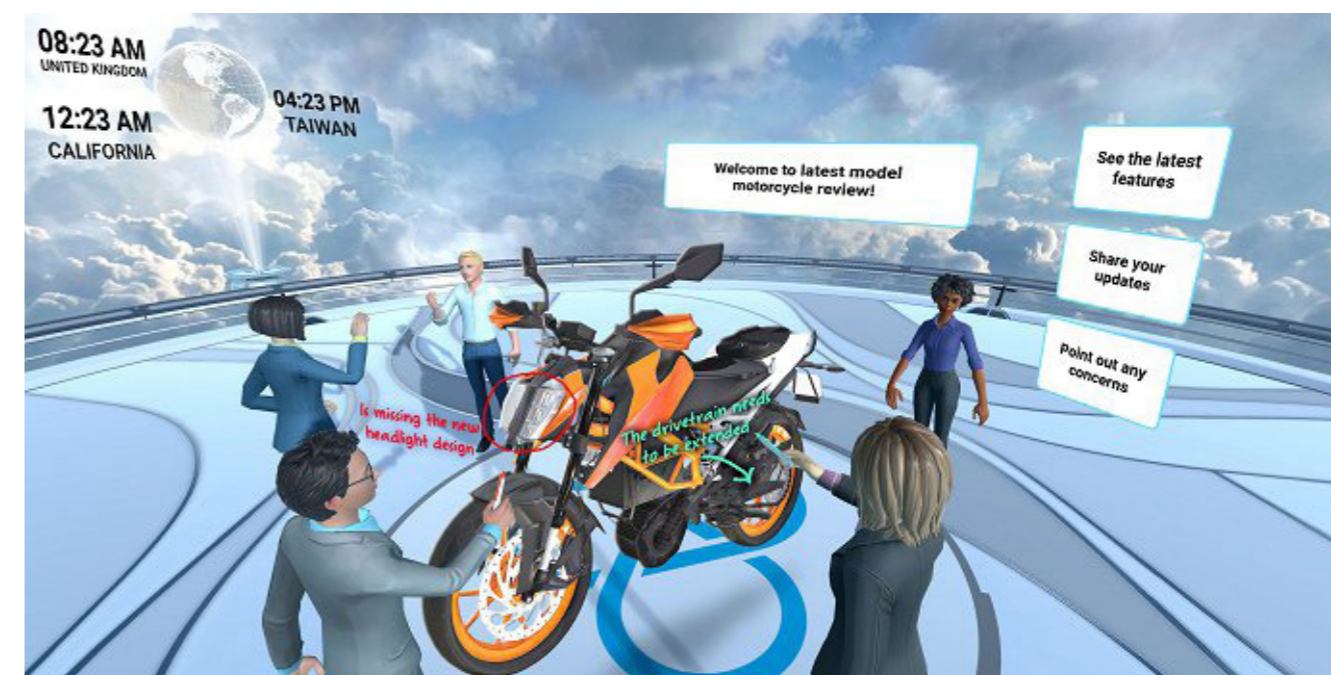
Effective training settings can contribute to improved business performance. Good examples include the cloud managed educational system for practice and cooperation that improves employee work safety through plant site training simulations and VR group training sessions.

● VIVE Sync- Online Virtual Meetings

Since the global outbreak of COVID-19, businesses adopted more online meetings, however when the video is out of sync, it can pose a problem. To tackle this, HTC VIVE Sync is developed as a VR meeting service for virtual meetings where participants speak face-to-face without delay.

VIVE Sync speaks seven languages and meetings can be arranged with just one click. Individual avatars can be created using the Sync XR Avatar Creator, which is available on iOS/Android App; the service caters for up to 20 users in a single meeting. The service also supports both PC VR and Standalone VR, meeting the equipment requirements of most VR users today. The photo feature during the meeting helps leave a record with your fellow workers.

VIVE Sync paints as well. Users simply wave the remote control in the air to create colorful 3D artwork. Other actions such as file sharing, labeling and more are available in this virtual space, boosting team communication and convenience. Blend 3D virtual objects, 3D drawings, share your screen or documents, or simply play with a PDF are all possible in this space. To meet corporate needs, VIVE Sync is MS OneDrive / OneDrive for Business compatible, which means you can upload files to MS OneDrive / OneDrive for Business with one chain.





Strengthen the means of implementation and revitalize the global partnership for sustainable development

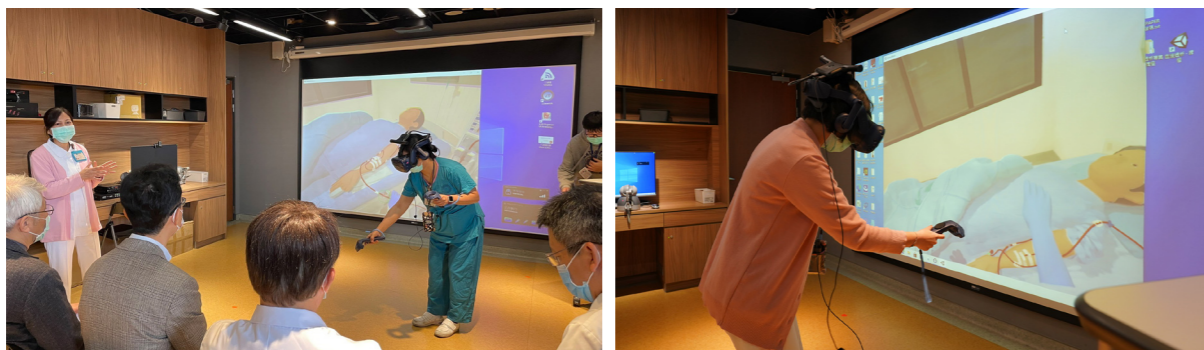
HTC works cross-border with several core strategic partners, including schools, medical bodies, food safety agencies, and the entertainment, culture and arts industry, to expand the VIVE ecosystem using our expertise in VR to improve lifestyles and drive a sustainable world.

● VR training simulation system, a 2021 HQIC winning collaboration with VGH, Taichung

The HTC Medial VR team cooperated with Taichung Veterans General Hospital to develop a VR hemodialysis accident simulation training system to solve the inconvenience of physical simulators such as high cost of consumables, limited space, and a lot of pre-preparation. In 2021, remote instructions were sent cross-hospital for the first time to share dialysis techniques and a SOP for emergencies. High-quality educational programs can continue without the constraints of the pandemic.



In the 2021 Healthcare Quality Improvement Campaign (HQIC) competition, we proposed VR training simulators as the future, and demonstrated an assessment of and approaches to adverse events during dialysis with the use of VR materials to reduce simulation costs and enhance caregivers' reactive capabilities to minimize incidents and improve patient safety. Taichung VGH's "Intelligent Dialysis Simulator Incorporated e-Assessment System in the Application" of Clinical Teaching was awarded the bronze medal in the Smart Solution category of the 2021 HQIC.



● VR Forest Disease Preventive Package upgrade with NTU

Working together with the NTU School of Forestry and Resource Conservation, in October 2021, the HTC Medical VR team commenced a VR Research & Education Project to launch forestry expertise and VR technology based the VR Disease Preventive Kit for international students.

During the pandemic, international students had to quarantine temporarily in a hotel following arrival. HTC assisted students through the stress of this process by inviting them on a trip in the forest in Taiwan to enjoy the beauty of the country through NTU's student-made VR natural experience materials, HTC VIVE Flow, and the HTC VIVE Focus VR Standalone. Users enjoyed the unrestricted beauty of the therapeutic forest of Taiwan from the comfort of their hotel rooms. Such devices are expected to feature in hospitals and caring homes in future to comfort users.



Strengthen the means of implementation and revitalize the global partnership for sustainable development

● Food safety VR training for a safer, healthier diet

The HTC Medical VR Team partnered with TMU (Taipei Medical University) in November 2021 to establish the TMU Instructional VR Resource Center for Food Safety for the incubation of food safety (FS) professionals, and the provision of quality FS training and education through innovative technology, facilitating the smart transformation of a Taiwanese food factory and a complete upgrade of the local FS industry.

FS education can now be conducted through virtual reality, which replaces physical restaurants, factories and central kitchens in training and allows sufficient practice of work procedure so food workers can save time familiarizing themselves with the working environment and equipment. For new employees and students, through practice in a relatively safer (virtual) environment, mis-operation of equipment or food contamination due to a lack of experience may be reduced.

The Resource Center also discusses with smart food factory administrators the SOP and training procedures for employees and develops VR materials accordingly, incorporating in the VR kitchen food material procedures, pre-treatment, cooking and delivery of meals, as well as providing training for observation and analysis of critical control points of hazards, and proper procedures for handling rush hour pressure, fires, and other incidents. Trainees gain a lot of experience in a shorter period of time and learn how to handle crises on-site faster.



● Incorporate global medical VR ecosphere resources to cultivate medical professionals

HTC cooperated with British developer partners to introduce the “VR immersive learning platform - Virti” into medical education and medical communication training. Not only acknowledged by the country’s National Health Service (NHS), Virti has since been adopted by Cedars-Sinai Medical Center, a leading non-profit hospital in the United States, was trained to wear personal protective equipment when fighting against the COVID-19 epidemic. The project contribution is honored on the Nasdaq Tower of New York’s Times Square, and recognized as the most innovative education corporation in 2021 by Fast Company.

The Medical VR team developed customized VR teaching plans through VR workshops with top hospitals and schools in Taiwan, such as the National Taiwan University Hospital, Taichung Veterans General Hospital, Far Eastern Memorial Hospital, National Yang Ming Chiao Tung University, Taipei Medical University, and Chang Gung University, etc., to develop VR teaching plans for clinical skills training, cross-team integrated care, Da Vinci surgery training, neonatal emergency care, anesthesiology, medication dispensing handling, dietitian supervision of meals, chronic disease care, and doctor-patient communication, etc. The project improves patient safety and medical services, and contributes to long-term plans for developing professionals in the industry.

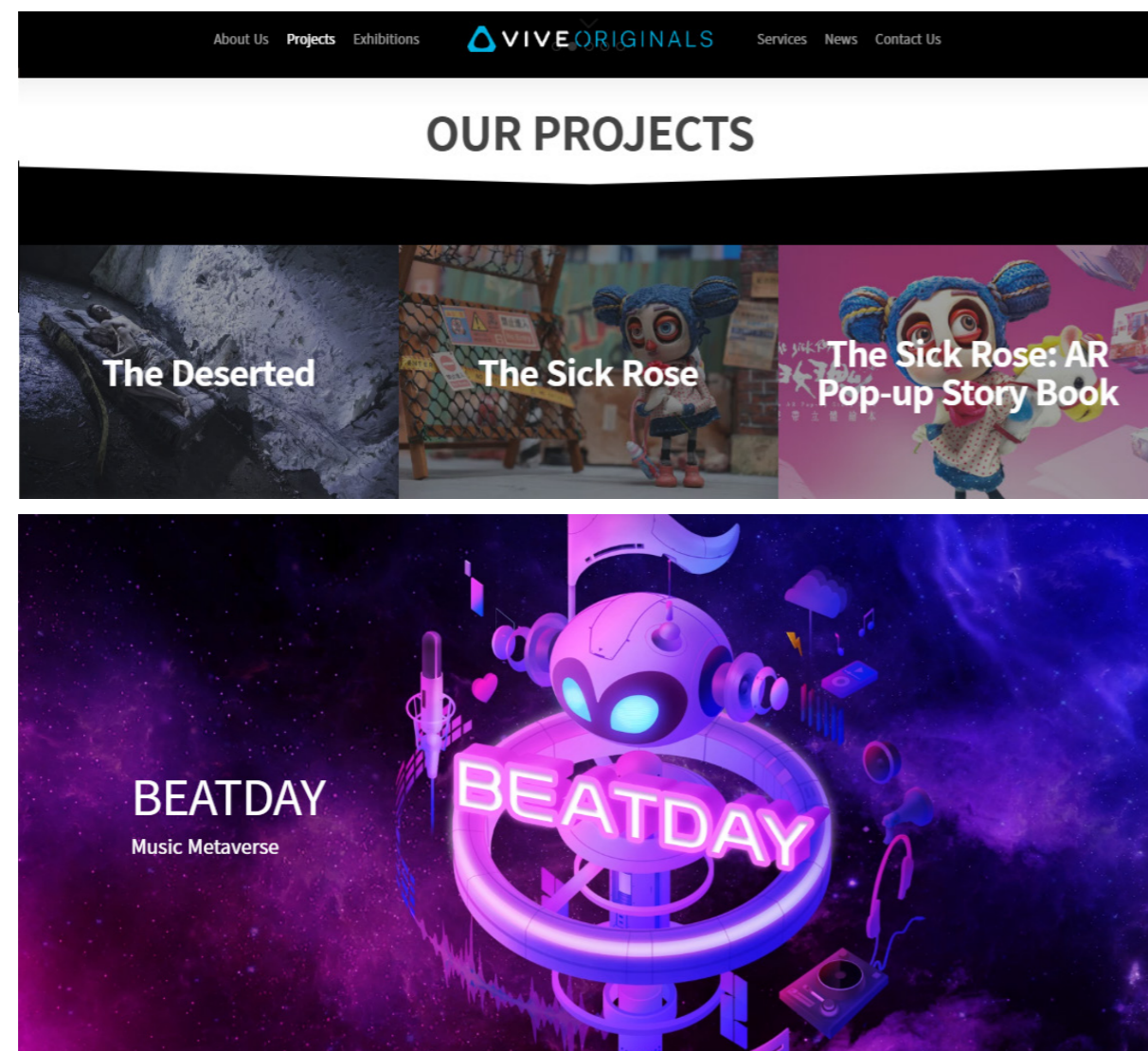




Strengthen the means of implementation and revitalize the global partnership for sustainable development

● VIVE ORIGINALS creates an entertaining experience with cultural values in the virtual world

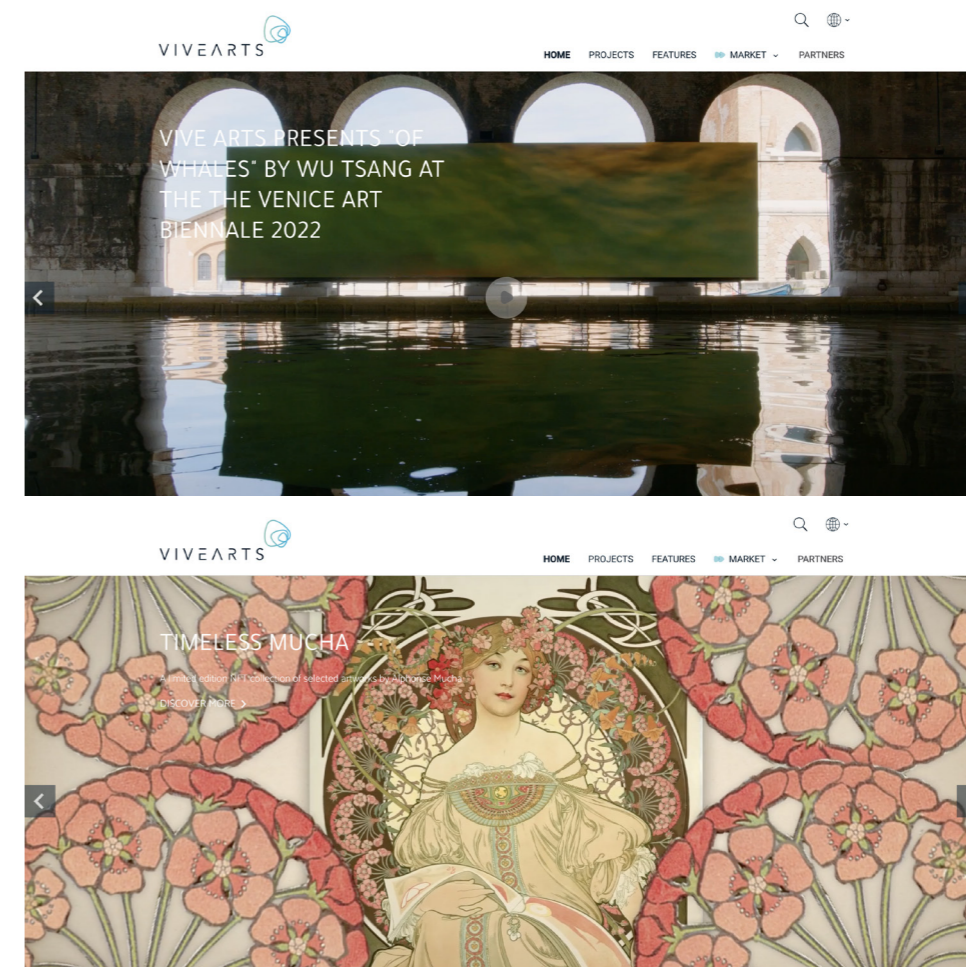
HTC VIVE ORIGINALS is a content brand owned by HTC VIVE. It is committed to the development of native IP, the production and publication of original content, and the exploration of VR movies, art, animation, music, cultural collections, creative entertainment, and other industries. Furthermore, we want to expand the scale of content, create industrial values, and build up a VIVE Reality ecosystem by content cluster to fulfill the ultimate goal of enriching human cultural life through new technologies and creativity. Cross-border cooperations including: Frame-by-frame animation with VR technology, The Sick Rose, VR Interactive Artwork by Fang-Yi Sheu, BEATDAY Metaverse Subversive Entertainment Experience. More information about VIVE ORIGINALS in website: <https://viveoriginals.com/>



● VIVE Arts, Building a Worldwide Accessible Unique Cultural Experience with Cutting-Edge Technology

VIVE Arts continued its mission to enhance cultural appreciation through immersive technology, democratize creativity and preserve our cultural heritage for the world. VIVE Arts is devoted to a NFT platform that combines the mainstream art industry and encrypted virtual world, supporting artists to integrate XR and blockchain technology in their practice and to build a strong and loyal community of artists and collectors. In addition to Ethereum, VIVE Arts plans to support the more energy-efficient Proof of Stake (PoS) and Proof of Stake Authority (PoSA) blockchains in the future, creating a sustainable and environmentally friendly platform for digital arts.

Leveraging VIVE Arts' extensive network, including museums, culture institutions, art fair and biennale, as well as galleries and contemporary artists, VIVE Arts is committed to integrating ground-breaking art with cutting-edge technology, enabling artists to reinvent how we experience art and to build a richer digital art ecology. By providing valuable support to the most forward-thinking artists of our time, the VIVE Arts program enables the most brilliant digital innovation in the arts and furthers HTC's longstanding commitment to arts and culture. More information about VIVE Arts in website: <https://www.vivearts.com/>



COVID-19 Prevention Management _____

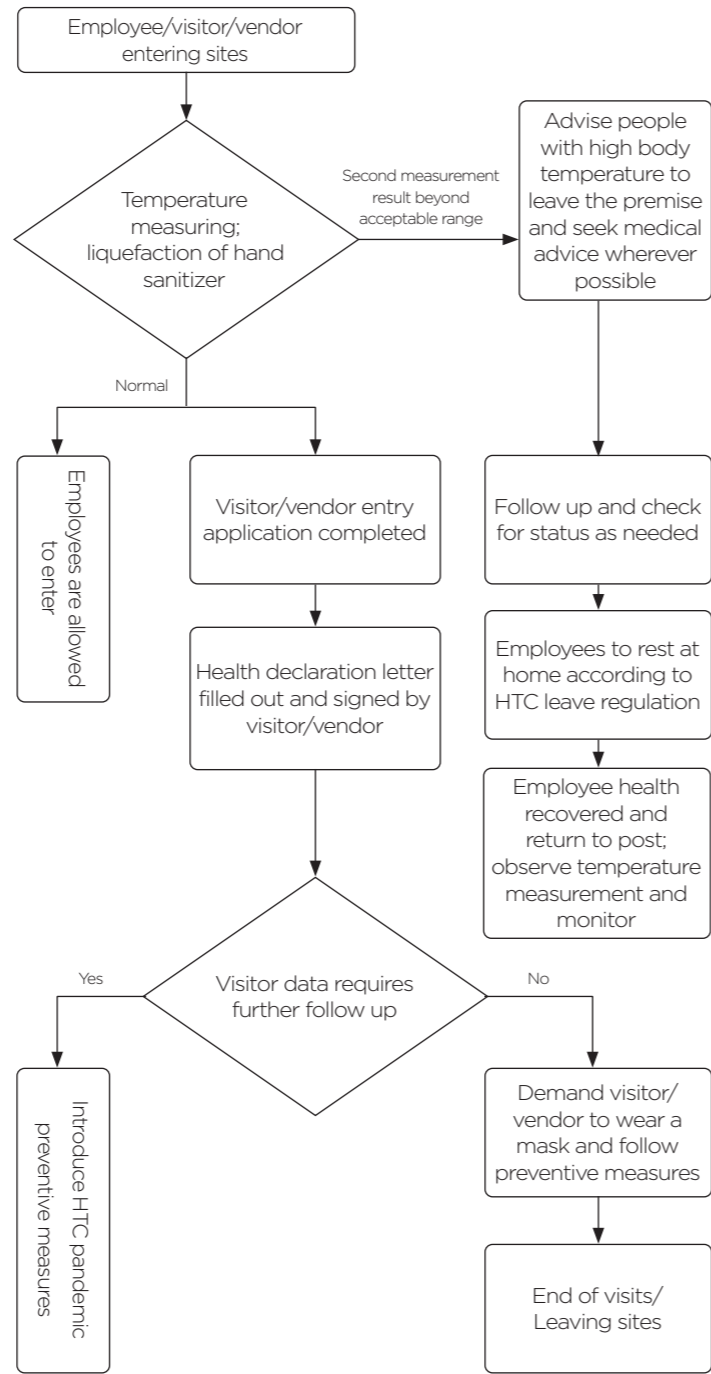


Following the further outbreak of COVID-19 in 2021, HTC reinforced pandemic prevention management inside the Company. Daily body temperature and health status checks are commonplace for our employees. The use of the Microsoft Teams to discuss work and proximate contact dividers in meeting rooms minimize the chance of infection, while wearing masks and frequently disinfecting public areas are further essential measures we have taken for disease prevention. Both inside and outside elevator buttons and panels, doorknobs, tables and chairs of meeting rooms, and exit door knobs on each floor are sanitized every hour by cleaning staff. The entire building and its environment undergo weekly sanitization with disinfectant as well.

When it comes to individual health monitoring, employees are backed by their health declaration letter. WFH (working from home) has become an effective approach to work according to the status of the pandemic. Such measures help minimize the chances of group infections and reduce carbon emissions from shuttle buses, MRT, scooters and car. Those who experience respiratory symptoms, fever, or other signs similar to those of a cold after returning from a business trip abroad should immediately seek medical advice, rest, and commence a 7-day WFH schedule after notifying our Health Center.

As the pandemic worsened, we arranged several on-site Covid-19 tests with Cardinal Tien Hospital to safeguard our workers' health and safety, as well as our family and friends. All test results were negative. Rapid test kits are available at our Health Center if employees believe they may have Covid-19, and visitors and contractors are subject to test screening depending on whether they are vaccinated. Only people who test negative are allowed on our premises.

HTC personnel access control measures flow



HTC COVID-19 Executive Summary

1. The mutation of the virus in 2021 extended the pandemic and greatly shifted our daily routines and work schedules. HTC acted following CECC information and pandemic prevention measures, leveraged our previous experience of the outbreak in 2020 and updated preventive measures accordingly. Extra disease prevention measures implemented include our employees, visitors and contractors observing preventive measures in our offices, dining area and exercise area.
2. The Chief Global Management Officer supervises the epidemic prevention response team to ensure epidemic prevention measures and related tasks are implemented and meet the Company's changing needs to stop the disease from spreading.
3. Additional personal protective equipment such as masks, ear, forehead and infrared thermometers, hand sanitizer, oximeters, and other eye and face protection are in place as the situation requires.
4. A health declaration letter is mandatory for visitors and contractors entering HTC's premises. Everyone is asked to seek medical advice if they have a fever ($\geq 37.5^{\circ}\text{C}$), cough, respiratory or other cold-like symptoms.
5. Receptionists, and security, cafeteria and exercise area staff have their body temperatures monitored. If anyone has a fever ($\geq 37.5^{\circ}\text{C}$), cough, respiratory or other cold-like symptoms, they will be sent for a medical check and a notification sent to the Health Center.
6. Access control has been implemented to limit the number of people in the cafeteria, sports fields and exercise area.
7. Meeting rooms, breakrooms, restrooms, elevators, the cafeteria and exercise area are sanitized with 75% alcohol by cleaning staff. The entire building undergoes weekly sanitization with disinfectant.
8. Our fellow workers are provided with a health self-management report form, health status care and promotional information, as well guides for a psychological counseling service. If anyone has a fever ($\geq 37.5^{\circ}\text{C}$), cough, respiratory or other cold-like symptoms, they should notify their supervisor immediately, will be sent for a medical check and a notification sent to the Health Center.
9. When at home quarantining or under autonomous health management, HR must be notified so staff can WFH according to the Regulations for WFH due to COVID-19
10. Campaign to remind colleagues to regularly sanitize their hands, and sterilize office desks and chairs, computers, keyboards, mouse and other electronic devices with 75% alcohol.
11. Rapid test kits are available for employees at our Health Center if they believe they may have COVID-19. Visitors and contractors must undergo screening depending on whether they are vaccinated, and only those who test negative are allowed on work premises.
12. The Health Center is notified immediately of any suspected cases, contact, and confirmed cases in the Company and act accordingly. Confirmed cases are required to notify the head of the department and Health Center, and the latter is to report such information to the Chief Global Management Officer, PR department and HR. The Chief Global Management Officer considers the actual situation and determines the infected area and countermeasures, reports to the Company's highest managerial level, follows health agency guidance and policy, and cooperates in disinfection work.

Human Resource Prevention Measures During the Pandemic

As COVID-19 continued in 2021, HTC followed the CECC information and pandemic measures, and adopted preventive measures accordingly. We prepared disease prevention items and asked all employees, visitors and contractors to observe preventive measures.

Apart from existing Company group insurance, HTC and the Welfare Committee covered all employees under Chung Kuo Insurance's pandemic insurance. Those quarantining and confirmed cases are protected and entitled to insurance proceeds.

- Recruitment: According to the prevention standards of the CECC, masks are required for interviewees and interviewers. Interviewees need to fulfill the requirements of the Company's health investigation and fill in the health statement before the interview. Remote interviews will be carried out with Teams if the pandemic worsens.
- Training: Attendees of offline courses need to wear masks and sit separately during the entire session. Offline courses will be paused if the pandemic worsens.
- Conference-related: In response to the severe COVID-19 epidemic, all company meetings are held online using Teams in 2021.
- Employee Relationships: Collaboration with the health center to ensure the pandemic status and set up a contact window within the HR department to investigate and control manpower of the Company. At the same time, employee activities were changed to online activities (such as Mid-Autumn Festival online quiz, Father's Day online photo voting activities, etc.) to facilitate employees' participation.
- Business Trips: During the pandemic, domestic business trips need to be approved by the head supervisor of the division, and international business trips need to be approved by CEO. It is necessary to report to the health center and receive information about precautionary measures when leaving the country. Home quarantine is required by the CECC when re-entering the country. Additionally, reporting to the supervisor and health center is necessary.

Canteen Preventive Measures

Well-rounded preventive measures have been adopted to people can dine in safety. Only takeaways were offered from the cafeteria during the pandemic to avoid group infection, dividers were put up in the seating area and alcohol sprayed on tables, a checkerboard seating plan was implemented to minimize contact and areas were disinfected regularly, food service providers' and staff's body temperatures were taken and reported daily and travel routes recorded to check for close contact, staff followed up after injections, non-kitchen food staff were asked to wear masks, and rapid tests were provided for food service staff.



Preventive Measures for Manufacturing Centers

Strict measures are adopted in manufacturing centers and plants to maintain production while safeguarding the premises from the pandemic.

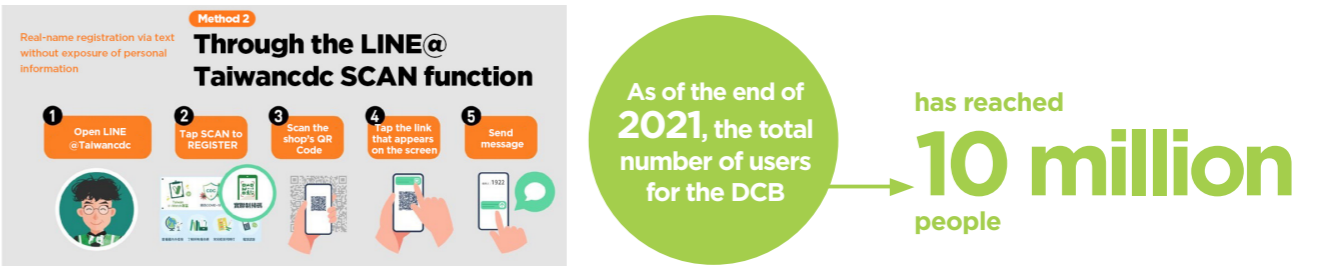
1. Sterilizer has been placed at site entrances and the epidemic prevention announcement was played repeatedly. Plant personnel are required to wear masks, eye protection, gloves and finger cots (cleanroom level) at all times while in the plant. The body temperature of staff is taken two times per day. Travel routes and health status records must also be reported to manage colleagues' current status and minimize production line infection risk.
2. Work shifts at the plants are divided into shift A and shift B. Disinfection of the area is carried out when handing over to the next shift and there is a six-hour gap between each shift to ensure there is no contact with people from one shift to the other.
3. Body temperatures are taken at the cafeteria entrance, which is sterilized with alcohol. Dining hours are scheduled in three sessions. Other measures taken include social distancing along specified routes, dividers on tables, a checkerboard seating plan and regular disinfection.
4. At least one rapid test is required for all colleagues and contractors at manufacturing centers.



Line Bot, Disease Control Butler 3.0+SMS Contact Tracing System - the Best Helper for Prevention

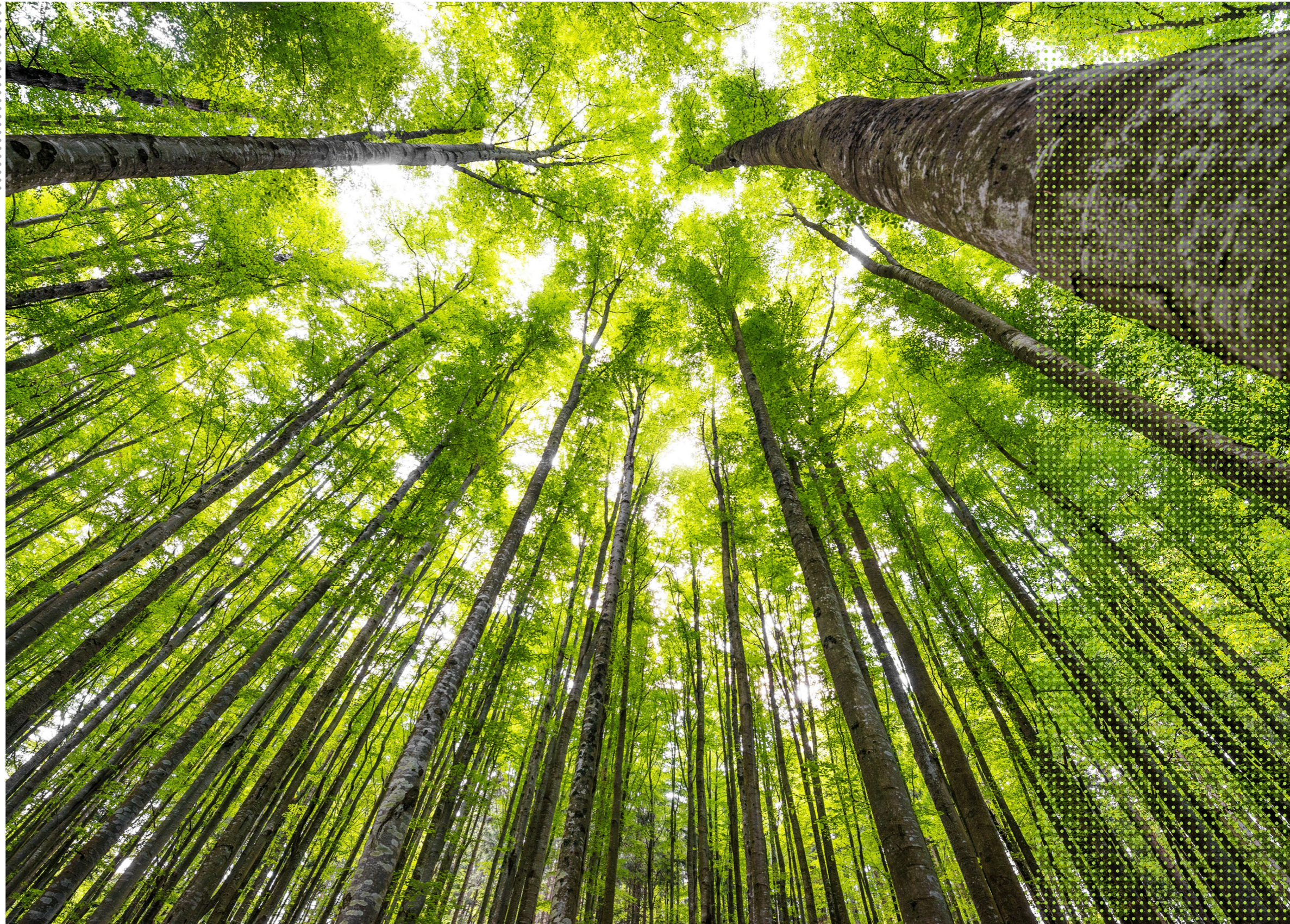
In addition to the COVID-19 measures within the Company, in 2020, HTC DeepQ cooperated with the CDC to upgrade Disease Control Butler (DCB) to provide the latest COVID-19 news, precautionary measures, quick look-up of nearby pharmacies and mask inventories, government policies and health education, CECC news flashes, COVID-19 live press conference streams, and a clarification column regarding false information. In May 2021, the LineBot of DCB added the function of 1922 SMS Contact Tracing System. The public can use the LineBot of DCB to scan the QR code of the store for automatically bringing in the place code, and then send it to 1922 to complete the user location and contact information tracing. It will assist the CDC investigation of COVID-19 infection.

As of the end of 2021, the total number of users for the DCB has reached 10 million people.



ESG Management

To ensure effective discussion and treatment of CSR issues, HTC has run a CSR Committee since 2012, and has also set up a dedicated team- Quality and Sustainability Management for formulating CSR policies, drawing up related action plans, performing cross-department coordination, and handling communication with, and feedback from, the external stakeholders and our key suppliers. The annual CSR performance and next year execution plan will review by the Auditing Committee under the Board of Directors at least once annually. After the FSC officially launched the Corporate Governance 3.0 - Sustainable Development Blueprint, in addition to our existing corporate social responsibility, HTC has also incorporated economic, environmental, and social-related issues to respond to the expectations of stakeholders.



2021 ESG Performance

ESG	2021 Performance
Governance	<div>NT\$ 5.25 Billion</div> <div>Annual revenue of NT\$ 5.25 billion while operating costs and expenses decreased</div> <div>NT\$ 2.26 Billion</div> <div>R&D investment accounted for 43% of HTC revenue</div> <div>ISO 27001 ISO 27701</div> <div>Completed the inclusion and audit of ISMS and international standards for Privacy Information Management</div>
Environment	<div>50%</div> <div>Inclusion of ecology awareness to extend plant sites' ISO 14001 coverage.</div> <div>NT\$ 916,524</div> <div>recycled in 2021, boosting the recycling rate to 86.9%</div> <div>163,760 kWh</div> <div>of Solar energy generation continued in 2021 with 518,048 kWh generated to date</div> <div>346,135 kWh</div> <div>of electricity conserved with 2021 power conservation measures, achieving 1% power conservation and the goal for the year.</div> <div>2,965 metric tons</div> <div>of rainwater recycled in 2021 by the Taipei office showing a great effort in water conservation</div>
Social	<div>NT\$ 2,518,708,000</div> <div>paid to employees as salary and welfare expanses in appreciation of their contributions</div> <div>109,250 ml</div> <div>of blood donated in 2021, showing our care with physical action.</div> <div>Zero</div> <div>violations against customer privacy and loss of customer data in 2021.</div>
ESG Achievements	<div>CDP –Climate Change : B- level</div> <div>Rated level B- in Management in the 2021 CDP Climate Change Rating (the international average of suppliers is Level B-).</div> <div>CDP –SER : B level</div> <div>Rated level B in Leadership in the 2021 CDP Supplier Engagement Rating (the international average of suppliers is Level B-).</div> <div>Sliver</div> <div>Achieved the Silver rating in the EcoVadis Sustainability Rating 2022 for our achievements in sustainability indicators</div>

HTC won the 2022 EcoVadis Sustainability Silver Medal



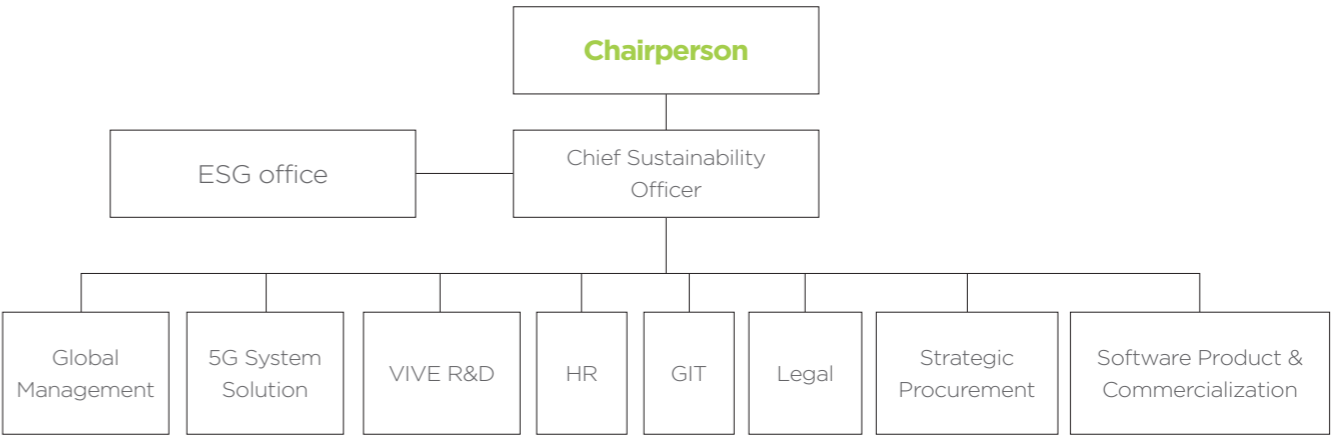
In the latest EcoVadis Sustainability rating released in April 2022, HTC receives silver medal, ranks top 15% among more than 90,000 evaluated companies around the world. In Manufacture of communication equipment industry, HTC ranks among the top 11%. In the four key themes, HTC ranks among the top 5% in "Sustainable Procurement" and among the top 13% in "Environment". It reflects our efforts to be a frontrunner in our industry.

The EcoVadis Supplier Sustainability Rating system assesses a wide range of sustainability indicators in the core areas environment, labor & human right, ethics, and sustainable procurement. Founded in 2007, EcoVadis is one of the world's most trusted providers of business sustainability rating and has compiling sustainability scorecards for nearly 90,000 companies in more than 200 different sectors and 160 countries around the world by 2022. HTC is one of the global companies committed to effectively driving sustainable performance.

ESG Committee

In early 2022, HTC upgraded CSR Committee to ESG (Environment, Social, and Governance) Committee, chaired by the Chairwoman. HTC also appointed its first Chief Sustainability Officer in Senior VP Madeline Chen, and members of executives as ESG committee members. We established dedicated working groups to respond to various ESG issues and founded the ESG Office to assist in formulating sustainable strategies, connect sustainable development issues from various departments, and continue to promote sustainable development responsibilities. We hope to implement the sustainable operations of our corporation by striking a balance between the economy, environment, society, etc. areas. With a clear organization and division of labor, relevant departments can be included in management actions through interdepartmental meetings, thereby driving the overall sustainable development and innovation of HTC and ensuring that relevant policies and initiatives are incorporated into the company's daily operations.

Structure of the HTC ESG Committee





The HTC Environment, Social, and Governance (ESG) Policy

HTC is committed to observing all the International and Regional laws in the countries where it operates and to do business with honesty and integrity. We will continue to provide innovative and quality products, protect the environment, care for the health, safety and human rights of our employees, and positively maintain our stakeholders' rights and interests.

This ESG policy helps HTC maintain social responsibility and realize the vision of sustainable development. All our related business partners advocate and share this policy with us and in this way, we all protect and enhance the rights and interests of our internal and external stakeholders.

- Using Responsible Business Alliance Code of Conduct as a reference for code of conduct, developing HTC as a good corporate citizen and participating in international Initiatives
- Promotion of energy efficiency, carbon-reduction practices and various environmental protection activities
- Sustainable innovation from creation to development
- Sustainable supply chain management
- Be a responsible corporate citizen, with the highest ethical standards



ESG Management Procedures and Systems

This HTC ESG report is based on the GRI Standard with a focus on disclosing GRI material issues, mainly concerning disclosure of material issues related to action, performance and achievement.

ESG Material Issues management process followed last year: based on the relevance of the industry, the five key stakeholders have been identified as employees, customers and consumers, shareholders, suppliers and contractors, and others (rating agencies, academic bodies, local communities), as well as major issues of concern.

Questionnaires were extensively provided to stakeholders and collected on a designated date to gather statistics. A total of 152 copies were collected, of which 135 were valid. Thirty-five issues were given in the questionnaire, each with scores of 1 to 5 to represent importance related to the Level of Concern and ESG Impact Level. Considering that each issue may represent various degrees of importance to stakeholders, the weighted scores of the Level of Concern applied in the calculations. Nine issues were identified as material issues with scores of at least 4.2 on average of weighted Level of Concern and ESG Impact Level. Four topics: Training and Education, GHG Emissions, Energy Management, and Pandemic Management were added considering local and overseas trends and risks (such as the 2021 WEF Taiwan's concern for risk issues, and the 2020 Ranking of major issues of concern to Taiwan) to result in 14 material issues for the 2021 HTC ESG Report.

HTC held a major theme discussion meeting to confirm the impact of the material issues on the internal and external organization. In other words, the positive, negative, or potential impact on the economy, environment and society, taken as a whole in accordance with internal considerations, industrial conditions, industrial chain practice, and stakeholders' suggestions, as well as to confirm the impact of each issue. At the same time, HTC attaches great importance to communication and interaction with its stakeholders. In addition to setting up various communication channels, we respond to important suggestions or opinions from stakeholders based on their concerns and impact on HTC's operational impact. The feedback is submitted to the relevant departments for response and processing, than regularly disclosed in the ESG report. We will gradually invite and encourage internal and external entities to join the ESG disclosure process in the future.

In addition, to ensure that the policies and decisions of the ESG Committee can be put into practice, we have divided ESG activities into four areas, "green products, environmental protection, occupational safety & health, and social responsibility," and have set up a dedicated management system for each. These have been verified as aligned with the applicable international regulations and standards, and help integrate company policy for sustainability and social responsibility into our daily operations. ESG annual performance and next year's operational targets will be reported to the board of directors at least once a year.



ESG related management system and initiative

The Green Products Management System	Since the end of 2007, HTC's HQ & Plants and the Taipei offices have regularly passed all audits conducted by the international certification agencies, and obtained and maintained certificates of IECQ QC080000 Hazardous Substance Process Management. Through HTC's "Hazardous Substances Management Regulations", we require our supply partners to comply with the regulations for reducing hazardous substances in products
Green Product Verification	To comply with the Restriction of Hazardous Substances (RoHS) of EU, HTC products are sent to third-party international verification institutions for chemical analysis, ensuring that the products are free of concerning heavy metals, bromine-containing flame retardants and plasticizers. The verification on products' energy consumption in compliance with the US Department of Energy's battery charging and energy consumption requirements is performed. Verification on power supply's energy efficiency is conducted to ensure that the energy conversion efficiency of products is higher than the standards in various countries. The new or revised standards in 2021, include: TSCA, TPCH, French Product Repairability Index, etc.
The Environment Management System	We strive to minimize the impact of our operation on the environment. In addition to establishing the ISO 14001 environment management system, and make sure all our manufacturing sites around the world obtain and maintain ISO 14001 certificates. HTC was fined NTD 6,000 by the EPB, Taoyuan City, in 2021 for non-registration in the industrial waste disposal plan of the disposal procedure for waste produced from after-sale maintenance. The procedure proposed in the disposal plan has now been revised and approved by the EPB. ISO 14001 factory cover rate reach 50%, introduce environmental awareness through PDCA principles.
The Occupational Safety & Health Management System	<p>To reduce the risks of workplace injury and reduce accidents, the Occupational Safety & Health management system has been established according to OHSAS 18001, and make sure all our manufacturing sites around the world obtain and maintain OHSAS 18001 certificates.</p> <p>The conversion has been carried out in 2020, and the ISO 45001:2018 certificate has been successfully obtained. Through the introduction of ISO45001, the HTC factory has reached the goal of zero occupational disasters in 500 days.</p>
The Energy Management System	ISO 50001 energy management system enables planned energy management to be realized, thereby supporting sustainable operation.
Information Security and Personal Information Management System	<p>HTC introduced ISMS (Information Security Management System) and PIMS (Personal Information Management System), which includes 42 management policies and guidelines, such as the HTC personal information protection, Information security risk inventory and implemented the System in employee education and training, product development and design, vendor management, and information security incident management. HTC is BS 10012, ISO 27001, and ISO 27701 certified, and has received ISO/IEC 27001:2013, ISO/IEC 27701:2019 certificates in 2021. The dates of validity are between 08/13/2021 and 08/13/2024.</p> <p>DeepQ, a subsidiary of HTC, has long been an investor in medical and AI development, and closely monitors information security and personal information protection within the medical industry. DeepQ plans to obtain ISO 27001/27701/27799 certification in Q3-Q4 2022 having started the process at the end of 2021.</p>
Supplier Management	HTC conducts supplier audits in accordance with the RBA Code of Conduct and the HTC Checklist. In addition to routine new supplier audits, it is conducting on-site audits on 6 high-risk suppliers in 2021.



HTC 2021 Material Issues and Boundary

2021 HTC Material Issues Matrix

Level of Concern	High	Level of Impact		
		Low	High	High
Level of Concern	High	<ul style="list-style-type: none">● Freedom of Association and Collective Bargaining● Biodiversity● Materials● Marketing and labeling● Anti-corruption	<ul style="list-style-type: none">● Economic Performance● Supplier Environmental Assessment● Labor/Management Relations	<ul style="list-style-type: none">● Information Security● Customer Privacy● Employment● COVID-19 Prevention Management
		<ul style="list-style-type: none">● Human Rights Assessment● Supplier Social Assessment● Anti-competitive Behavior● Security Practice	<ul style="list-style-type: none">● Emission● Energy● Training and Education	<ul style="list-style-type: none">● Occupational Health and Safety● Socioeconomic Compliance● Waste● Environmental Compliance
	Low	<ul style="list-style-type: none">● Tax Practices● Rights of Indigenous Peoples	<ul style="list-style-type: none">● Innovation Management● Procurement Practices● Non-discrimination● Local Communities● Indirect Economic Impacts● Water and Effluents	<ul style="list-style-type: none">● Forced or Compulsory Labor● Child Labor● Customer Health and Safety● Diversity and Equal Opportunity● Market Presence

● Economic

● Environmental

● Social

2021 HTC Material Issues and Boundary Identification

	GRI	Material Issue	Page	Within the organization		Outside the organization							
				HQ	R&D Center	Investor	Corporate Customer	Consumers	Employee	Supplier	Contractor	Governmental Agencies	Local Community
Economic Standard	Custom theme	Information Security	P.75-81	V									
	GRI 201	Economic Performance	P.28	V		V				V		V	
	Custom theme	COVID-19 Prevention Management	P.51-54	V	V	V	V		V	V	V		
Environmental Standard	GRI 307	Environmental Compliance	P.61	V								V	V
	GRI 308	Supplier Environmental Assessment	P.131-132	V						V	V		V
	GRI 306	Waste	P.118-121	V									V
	GRI 305	Emissions	P.87	V		V	V					V	V
	GRI 302	Energy	P.89-91	V	V	V	V					V	V
Social Standard	GRI 418	Customer Privacy	P.98	V	V		V	V					
	GRI 401	Employment	P.141-157	V	V				V			V	
	GRI 402	Labor / Management Relations	P.156-157	V	V				V			V	
	GRI 419	Socioeconomic Compliance	P.156-157	V	V							V	
	GRI 403	Occupational Health and Safety	P.163-168	V	V				V	V	V		
	GRI 404	Training and Education	P.145-149	V	V				V				V

Diversified Channels for Transparent Information Disclosure Significance

	Investors	Enterprise customers	General Consumers	Employees	Suppliers	Contractors	Governmental Agencies	Local Communities
Significance for HTC	The support of shareholders and investors has positive impact on HTC's sustainable operation	The support of shareholders and investors has positive impact on HTC's sustainable operation Through cooperation and product development, enhance the company's value and pursue growth, gradually improving corporate sustainable operation	Customers satisfying with our after-sales service is essential to maintain customer relations	HTC upholds the people-oriented philosophy, the key to maintaining the company's momentum in innovation comes from employees, which are the company's most precious assets	Partner with suppliers is an indispensable key to the continuous growth of business operations	Maintain a safe working environment in the company, strengthen the company's cohesiveness and enhance the company's image	The foundation of the Company is to build an excellent external environment for the corporation, by following the legal guidelines, cooperating with government policies, and earning trust, support, and collaboration with the government.	Maintain good relations with the local government and neighbouring communities to enhance the company's image
Concern Issues	<ul style="list-style-type: none">● Finance & business information disclosure● Compliance with laws and regulations● Operation Status● Corporate governance● Risk management	<ul style="list-style-type: none">● Product quality● Service quality● Price competitiveness● On-time delivery● Green products● Carbon footprint/ carbon disclosure● Restricted substance management● Corporate responsibility● Human rights	<ul style="list-style-type: none">● Pre-sales consulting● After-service● Product quality● Service quality	<ul style="list-style-type: none">● Learning & growth● Working environment/labor conditions● Wage/welfare● Health & safety● Career development● Work-life balance	<ul style="list-style-type: none">● Raw material quality● Price competitiveness● Continuously stable supply● Supply chain management● Compliance with various regulations● Technical capability● Cooperation with logistics/ transportation providers to conduct effective packing● Raw material selection● Working environment & health● Machine/equipment safety● Carbon management training and contests	<ul style="list-style-type: none">● Construction safety & health	<ul style="list-style-type: none">● Corporate governance● Compliance with laws and regulations● Innovative products and services● Human Rights● Energy and climate change	<ul style="list-style-type: none">● Environmental impact● Shaping the Corporate image● Economic contribution● Social concerns● Public welfare● Cultivation of talent
Communication Channels	<ol style="list-style-type: none">1. Shareholder conference Yearly2. Annual report Yearly3. Monthly revenue statement. Monthly4. Visiting investors Irregular5. Market Observation Post System Irregular6. Investor Relationship Website Standing7. Spokesperson Standing	<ol style="list-style-type: none">1. Business review with key customers (QBR meeting). Quarterly2. Reply to customer inquiries. From time to time3. Customer audit and replies to customer's questionnaires. By customer request4. Meeting the customer requirements about environmental and ESG. By customer request	Daily ongoing - <ol style="list-style-type: none">1. Local service contact channels in 11 languages to provide customers with real-time communication and assistance.2. Websites in different languages for customers to give feedback and to access information in a real-time manner (59 established).3. Dedicated email boxes for different functions (Support, Copyright, Security, etc.) to provide convenient customer contact with HTC.4. Automated support survey invitations to collect customer satisfaction feedback.5. Immediate corrective actions in place based on customer's insights.	<ol style="list-style-type: none">1. Department quarterly meeting. Irregular2. One-on-one interview with supervisors. Irregular3. Annual performance appraisal/ interview. 2/ Yearly4. New employee seminar. Weekly5. Employee assistance hotline and mailbox, Health Center, Employee Aid Scheme. From time to time6. Labor-management meeting. Quarterly	<ol style="list-style-type: none">1. Supplier communication conference. Irregular2. Guidance and audit for suppliers Yearly3. Cooperation project with suppliers for addressing CSR and greenhouse gas issues. Yearly	<ol style="list-style-type: none">1. Induction training. Weekly2. Patrol inspection in the facility. Daily	<ol style="list-style-type: none">1. Official document E-mail Visit. Irregular2. Meeting such as Forums Seminars... etc. Irregular	<ol style="list-style-type: none">1. Positive employee engagement in public interest activities. Irregular2. HTC cooperation with governmental agencies and non-profit organizations in eco, environmental and other public welfare activities. Monthly

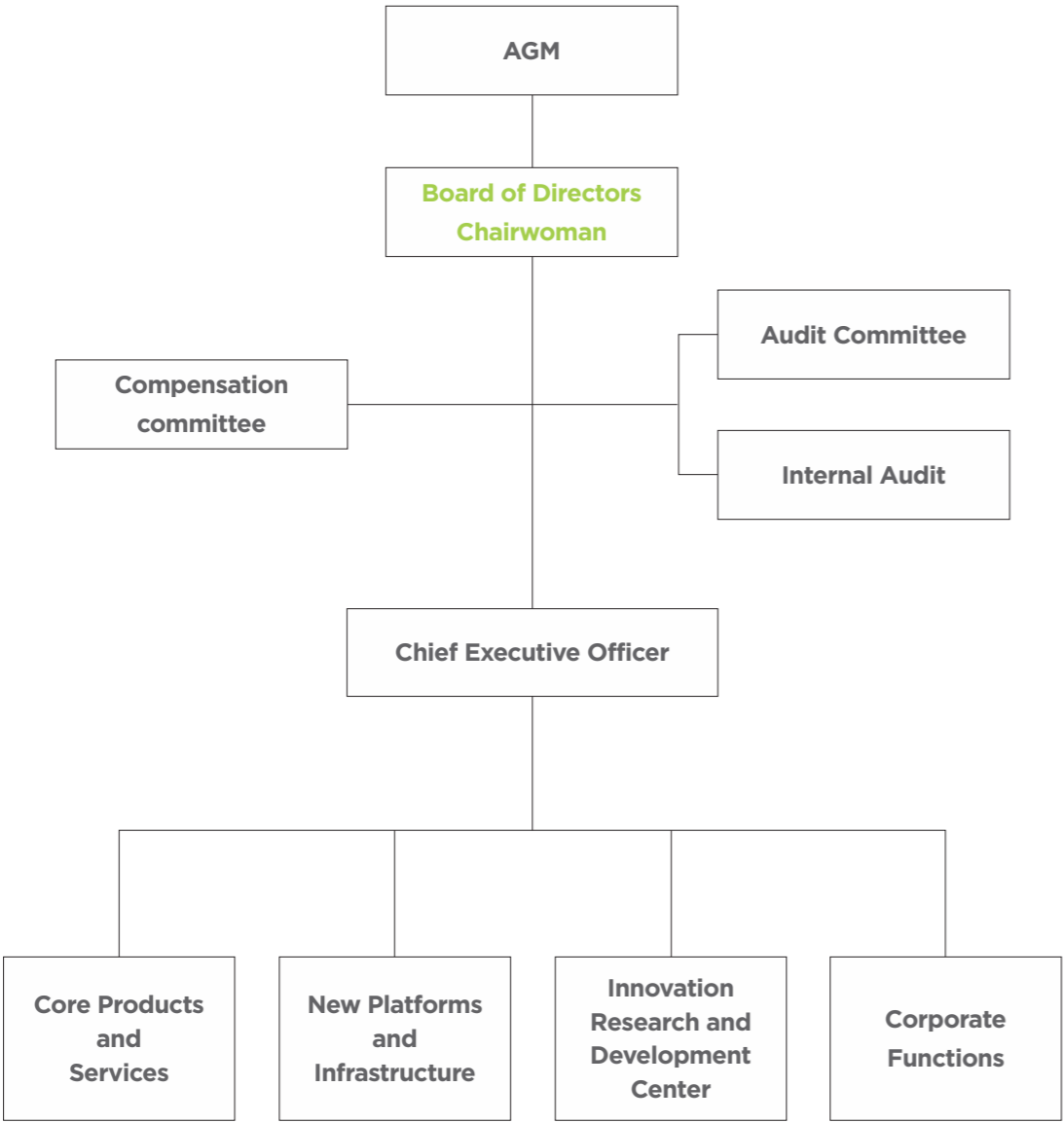
Responsibility Management _____



Corporate Governance

We place great importance on corporate governance and operational transparency, and have formulated and implemented corporate governance guided by the Company Law, Taiwan’s Securities Exchange Act, and other relevant laws to continue improving our management performance, and protect the interests of our investors and other stakeholders through the comprehensive and systematic implementation of ESG.

Organization Structure



To achieve this high standard, we formulated the HTC Corporate Governance Framework in 2014, which has been approved by the Board of Directors and complies with the “Corporate Governance Principles for TWSE/GTSM Listed Companies” as a basis for establishing an effective corporate governance structure. The objectives being:

- 1. Protect the rights and interests of shareholders.
- 2. Strengthen the powers of the board of directors.
- 3. Fulfill the function of the Audit Committee.
- 4. Respect the rights and interests of stakeholders.
- 5. Enhance information transparency.

Board of Directors

The Board of Directors are elected by stakeholders and aims to monitor the management of the Company to ensure the long-term benefits of the stakeholders. Additionally, it is committed to taking care of various related parties including employees, customers, suppliers, government, and the general public.

There are seven directors on the HTC Board (including three independent directors), the group of directors includes one female director and is primarily responsible for setting and monitoring management goals and long-term business strategy. They are also responsible for maintaining an internal financial and accounting inspection system, assessing operating risks, and proposing strategies for the reduction of such risks.

The composition of HTC Management (Directors) by Age & Gender

Age	Male	Female	Total
<30 (Excluding 30)	0	0	0
30 - 50	0	0	0
>50 (Excluding 50)	6	1	7
Total	6	1	7

Independent Directors

HTC believes that good corporate governance is critical if a business is to gain the long-term funding that underlies further investment and growth. We recognize that to achieve good corporate governance, it is necessary to widen the scope of independent viewpoints in order to win the trust of the public and the shareholders. During the re-election of directors in 2019, three independent directors were elected according to the provisions set forth in the Securities and Exchange Act. This action served to solidify our corporate governance, strengthen the independence and functions of the directors, and improve the general performance of the Board of Directors.

Compensation Committee

The Compensation Committee is set up under the HTC Board of Directors. The committee is comprised of an independent director, and two independent external experts. The Compensation Committee assesses the salary remuneration policies and system of the Company directors, supervisors, and managers from a professional and objective viewpoint. The committee also makes suggestions to the Board of Directors for discussing. For HTC corporate governance organization and members, please refer to P62 in 2021 Annual report.

Audit Committee

HTC established the "Audit Committee" to replace the Supervisors, which is composed of all independent directors. The Audit Committee assists the Board of Directors in fulfilling the quality and integrity requirement while carrying out the company's supervision work in accounting, auditing, financial reporting process and financial control. The Audit Committee has the right to conduct any appropriate audits and investigations, and has direct communication channels with the company's internal auditors and independent accountants. The Audit Committee convenes a meeting at least once a quarter. The audit supervisor and accountants should report on audit and financial statement review results, and report important discussions and resolutions to the Board of Directors.

Internal Audit System

HTC has set up our internal audit unit as subordinate to the Board of Directors. The internal unit is responsible for assisting the Board of Directors and management in checking any defects in internal control and in the assessment of operational efficiency and performance, as well as the accuracy of the financial statements and compliance with the related laws. The unit also addresses areas that need improvement in a timely manner to ensure internal control is continuously and effectively implemented. The audit results are used as a basis for the review and amendment of the internal control system to advance sound management in HTC.

Complete Disclosures

HTC is committed to improving the immediacy and transparency of information disclosure. In addition to the timely disclosure of important financial and business-related information at the Market Observation Post System in accordance with regulations, it also actively participates in forums and investor conferences organized by domestic and foreign securities firms to help investors understand more about HTC's financial and business information.

We disclose our practice of corporate governance and legal compliance on the company website. For more information about HTC governance policy and other related guidelines, please visit <https://investors.htc.com/en/>

Transparent Information Disclosure

Spokesperson & Deputy Spokesperson	In accordance with the "Corporate Governance Principles for TWSE/GTSM Listed Companies", a spokesperson and acting spokesperson are appointed to ensure that information that may affect the decisions of shareholders and stakeholders can be promptly disclosed.
Press Release, Press Conference & Media Interview	The company's latest developments are also communicated to our investors and the public through press releases, press conferences, and media interviews.
Website Platform	HTC has established an Investor Relations Website (in both Chinese and English) through which the investors can access and download the company's financial statements, annual reports, other financial news, information about investor conferences, and correspondence with shareholders.
	In the "Investor Service" section, contact information and electronic forms are provided for investors to make contact with the Investor Relations Division by phone or by email.
Press Release, Press Conference & Media Interview	The Investor Relations Website is continuously maintained and updated with the latest HTC Company development information.
	HTC participates irregularly in international and domestic forums held by foreign brokers. Details of these are provided to explain company operation, financial profile, strategic development, and business policies to the investors.

Strict Mechanisms for Avoiding Conflicts of Interest

To prevent potential risk of corruption and being unethical, in addition to "Anti-corruption and Bribery Statement" passed by the chairman of the board, HTC has established "Rules for Derivatives Transaction", "Credit Policy & Operational Procedure", and "Regulations for the Appointment of Directors/Supervisors in Re-investment" and has revised the "Operational Procedures for Transactions of Specific Companies, Business Conglomerates, and Parties", "Regulations for Budget Management", "Regulations for Management of Subsidiaries", and "Operational Procedures for Processing Internal Material Information and Preventing Insider Trading" as bases for internal operations. Also, in its Rules of Procedure for Board of Directors Meetings, it has duly set out a system for recusal and avoidance of conflicts of interest by directors, for compliance in the operations of the board of directors. And add legal compliance training to the compulsory training courses for new recruits to strengthen the anti-corruption awareness of new recruits.

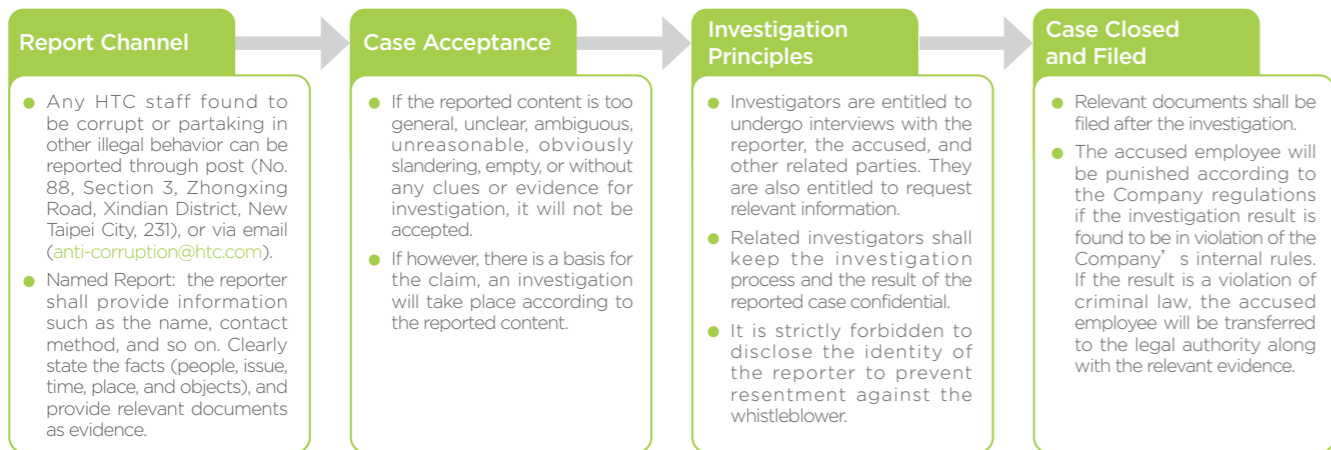
After the establishment and subsequent revision of the “Operational Procedures for Processing Internal Material Information and Preventing Insider Trading,” the company makes internal announcements to all employees through e-mail, and also posts related information to our Intranet website. Furthermore, the latest version of the rules is always accessible for immediate reference on the corporate website and on the Intranet.

A risk evaluation will be carried out every year, including on the impact related to ethical issues. The Legal and other responsible divisions will provide an advanced analysis according to information collected about anti-corruption and ethics. The risk levels assessed these years are relatively low. Thus, those divisions proceeded to risk management for possible issues, internal trainings, statements of anti-corruption, and control measures according to the processes.

In addition, as clearly set forth in the HTC Employee Manual, involvement in fraud, bribery, embezzlement, and violation of business competition limitation may lead to a punitive dismissal. Any reports about the above offenses may be sent to the heads of the related departments, the Human Resources Division, or the auditing unit. The Human Resources Division is responsible for disciplinary action. Also, HTC set up an email inbox specifically for corruption reporting (anti-corruption@htc.com). Anyone can report via this email with proof, if they are aware of any corruption-related events or infringement of the Company. The identity of the reporter will remain confidential to prevent inappropriate treatment. There were no corruption related events in 2021.

When signing procurement contract or engineering contract with the suppliers or manufacturers, HTC will require its suppliers or manufacturers to sign the “Integrity Policy Statement” or the Letter of Integrity Commitment which specifies that the cooperating partners should abide by the national laws and shall not acquire business or work advantages through improper conduct (such as offering kickbacks, banquets, or other improper interests). The contract clearly states that HTC will take the initiative to terminate any collaboration with suppliers or manufacturers who violate the “Integrity Policy”. If damage has been occurred due to violation of the Integrity Policy, reimbursement shall be provided by the violating party to ensure that both parties are in line with the Integrity Policy.

Report process of corruption is as following,



2021 Anti-corruption training rates for Board of Directors and all levels of the Employees in Taiwan

	General Employees	Middle Supervisors	Senior Supervisor	Highest Governing Institution
Number of training recipient	135	43	0	0
Number of employees by grade in Taiwan	435	878	42	7
Recipient rate	31%	5%	0%	0%

Note: The calculation for the training recipient rate at each level is based on the number of person completing the training/ Number of employees by grade in Taiwan. The calculation for the training recipient rate of the highest governing unit is based on the number of Directors completing the training/the total number of Directors.

HTC New Employees Legal Training in Taiwan

Course Content	Number of participants			Course hours(Minutes)		
	2019	2020	2021	2019	2020	2021
General new employees legal training - confidentiality and anti-insider trading	329	82	174	36	36	36
General new employees legal training - intellectual property rights	329	82	0	38	38	0
General new employees legal training - patent litigation	329	82	0	38	38	0

Tax Management

The Company upholds the spirit of tax compliance and corporate social responsibility. Therefore, we aim to create corporate value and improve tax risk management. We set out tax management and transfer pricing policies to establish a sound tax stewardship regulation and culture, as well as an instant management process. The Company has formulated the following tax governance policies to elevate corporate value and carry out corporate sustainability.

Tax Guidelines

- Comply with the local tax law and the rule of law. Calculate tax carefully and file it before the deadline.
- Ensure that experienced and professional internal and external personnel are involved in the evaluation and decision-making of tax-related issues.
- Ensure that information on tax reports is transparent, such as reports to tax authorities in different countries, master files, and transfer pricing reports.
- Trades between affiliate companies shall follow the principles of transfer pricing of OECD, as well as the Base Erosion and Profit Shifting (BEPS).
- Ensure that the corporate structure and trades are in accordance with the commercial substance. The structuring and trades are not to be aimed at reducing the tax burden.
- Utilize legitimate and transparent tax incentives without tax deductions that violate the rules of law.
- HTC works with tax authorities in different countries in honesty, integrity, respect, and fairness following three pillars: mutual trust, information transparency, and legal protocol. In addition, HTC provides solutions for major tax issues to help improve the tax system and institution on business environment.

Tax and Risk Management

All companies in the group appoint a large-scale local accounting firm for their tax visas, and the company provides the tax signature accounting firms with annual financial information for tax signature declaration.

Stakeholder Engagement

The major stakeholders are tax authorities in different countries. The Company files and pays its taxes in accordance with the legal regulations of each country. Furthermore, the Company consults with any of the four major accounting firms or contacts the authorities directly if there is anything unclear or a lack of understanding about the regulations. For any tax audit, the Company prepares the relevant information and cooperates with the tax authority after receiving the notification.

Risk Management

HTC manages corporate risk with a focus on sustaining value for the shareholders and stakeholders. We have established an appropriate control mechanism after careful consideration of all the various operational uncertainties that ensures a rapid response to uncertainty, as well as to any attendant risks and opportunities. Such careful risk management enhances our ability to create value.

Management of Operating and Financial Risks

HTC has never made high-risk, high-leverage investment, yet, as a part of our long-term business strategy, we are still positively evaluating the risks and benefits of introducing new technology. To remain responsive to the potential risks caused by increased costs as a result rapid industrial development, we control operating cost risks by strengthening the functions of our products, reducing overall costs, and strictly controlling expenses.

We carefully evaluate all kinds of uncertainties of business operations, and thereafter accordingly formulate control mechanisms. For example, business continuity planning (BCP) is set up to cope with the uncertainties of different situations, including risks and opportunities derived, and to increase value-creating ability.

Working capital required to support HTC business operations over recent years has been supplied mainly from cash on hand. As the corporation has not taken out long-term loans, fluctuations in interest rates have had no effect on the Company’s liabilities. HTC is prudent in its financial policies, and our asset allocation decisions prioritize security and fluidity, with most funds kept in time deposit accounts.

In 2021, HTC foreign exports accounted for around 83% of our total business revenues. HTC’s revenue are denominated primarily in the US dollars(USD) and Euros (EUR), the manufacturing costs are denominated primarily in US dollars, so the significant fluctuations in the international exchange rates may affect the operating income, operating costs and operating net profits in foreign currency denominations. Apart from efficient management of the quality and payment cycles of its foreign currency denominated accounts receivable, HTC uses forward exchange contracts to minimize its forex risk.

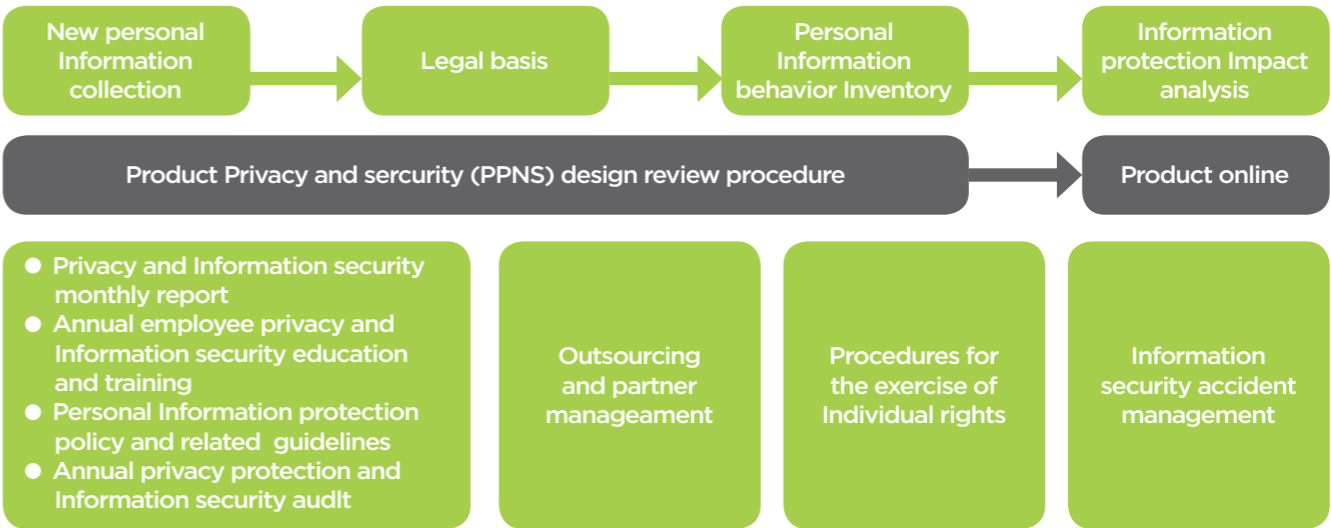
Privacy protection and information security risk management

Protecting the company's R & D achievements and customer information is the duty and responsibility of all HTC employees. In order to ensure that information security and privacy protection are fully integrated into the organization's culture and the company's core values, HTC actively establishes and promotes information security and personal data protection policies, ensuring that they are in compliance with relevant information security and privacy protection regulations from various countries.

Under the influence of COVID-19, HTC strictly protects confidential and personal information and continues to create a win-win situation among HTC, partners, clients, and consumers. HTC is optimizing “personal information management system” and “information security management system” to control potential risks. The legal, product safety, and information security departments are working together as a team to promote privacy protection and information security.

Personal Information Management System

Structure of HTC Personal Information Management System (PIMS)

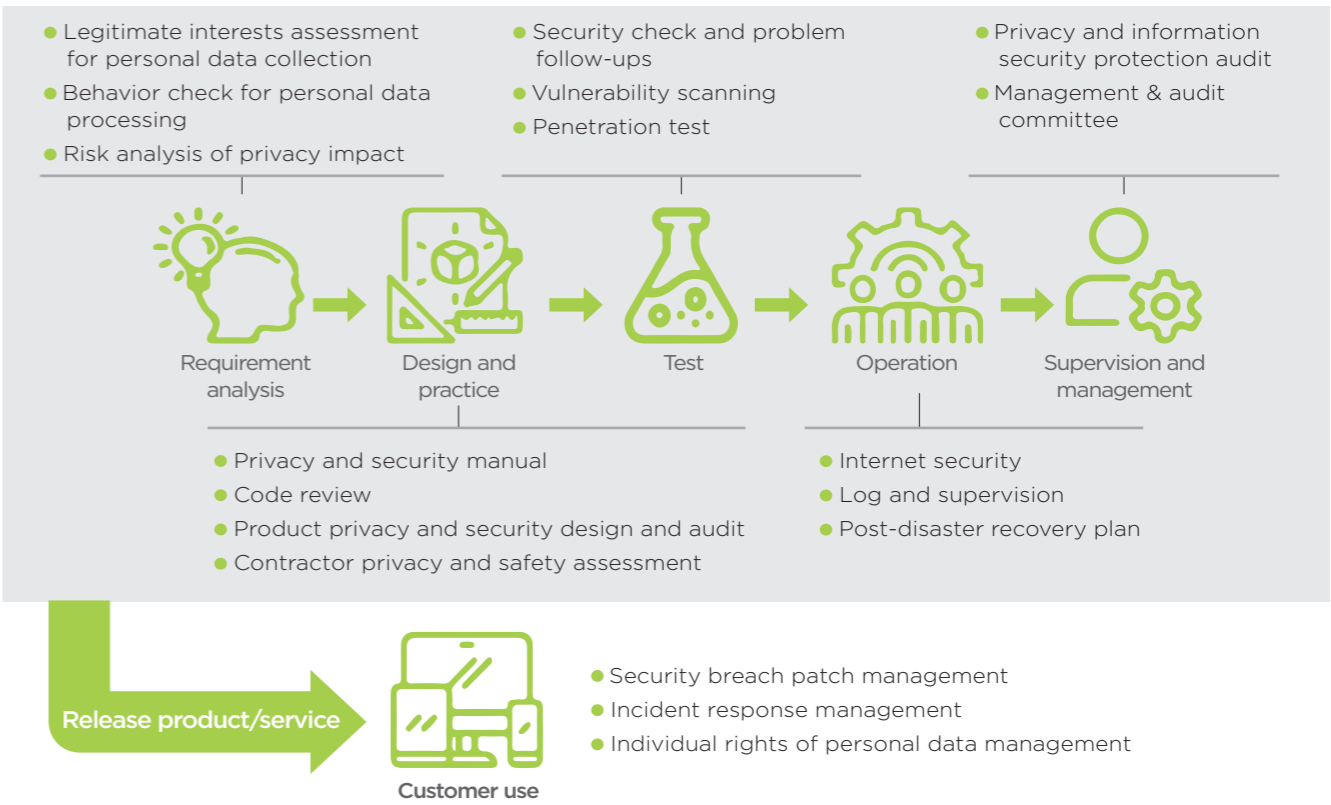


HTC's privacy protection system complies with Taiwan’s Personal Information Protection Act, and refers to applicable international privacy protection regulations, such as the General Data Protection Regulation the European Union, the Children's Online Privacy Protection Act of the United States, and the California Consumer Privacy Act. HTC also introduced the ISO 27701 Personal Information Management System (PIMS) developed by the British Standards Association for personal information management based on OECD, APEC and data protection laws, and implemented these policies in areas such as employee education and training, product development and design, manufacturer management, and security incident management.

In order to reduce the risk of operation management and ensure the continuous operation of businesses, HTC has moved the core basic systems to the cloud and introduced various cloud services to create a cloud working environment that advances with time. By utilizing the flexibility and high availability of the cloud, deploy and disaster recovery can be performed quickly when failure occurs, effectively improving work efficiency.

Product Information Security

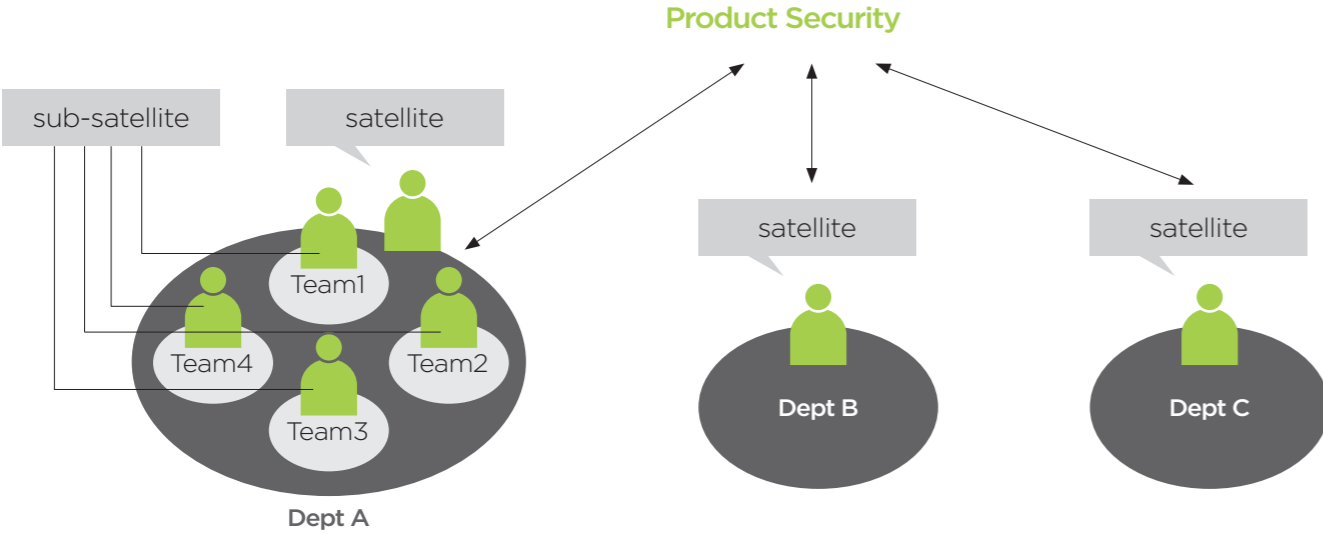
Software Security Control Measures of HTC Products



HTC requires the development team to strictly comply with information security rules from the design stage of products, and provides relevant training on product and information security protection measures to the team. The training refers to the laws and regulations of different countries, as well as the most prominent case studies in the industry. Furthermore, the training materials include a lot of knowledge and experiences in information security which are contributed by HTC's internal resources. Hence, trainees can easily absorb and utilize this knowledge.

We require all the data collection, utilization, processing and storage of our products and services to go through the product privacy and security (PPNS) design review procedure. The products and services include the virtual reality system - VIVE, enterprises virtual reality solutions, global VR application stores and subscription platform - VIVEPORT, 5G applications, smartphones, VIVE Arts, VIVE Originals, DeepQ AI Platform. As a result, we can comply with the privacy protection principles, such as legitimacy and transparency, minimization of data collection, limitations of purposes and storage, and so on. Therefore, we can ensure the completeness, confidentiality, and accuracy of information.

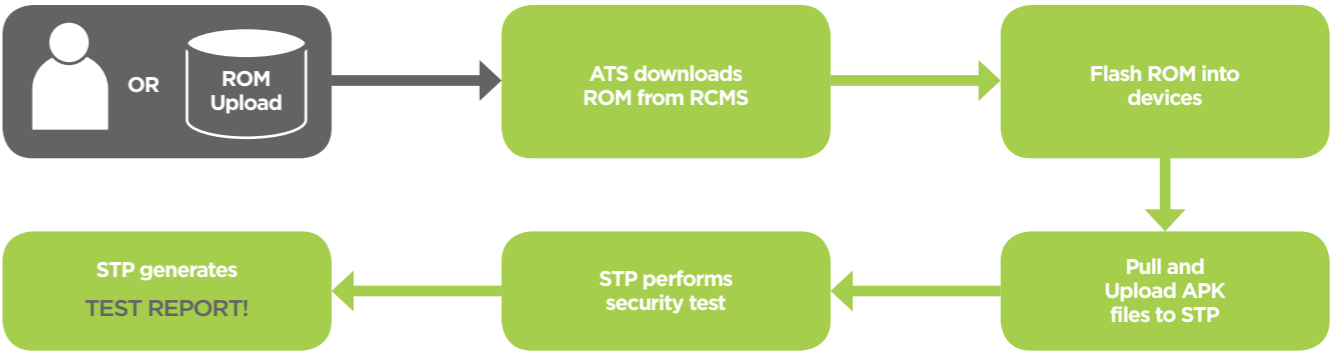
Structure of Product Information Security



In terms of the product security in the structural planning, we have set up security satellites in major development teams to implement privacy and information security policies more effectively. Besides promoting relevant policies, the security satellites are highly familiar with the products of their own teams and are requested to participate in the PPNS design review procedure mentioned above. Consequently, we enhance the positive meanings of the effect of the review procedure.

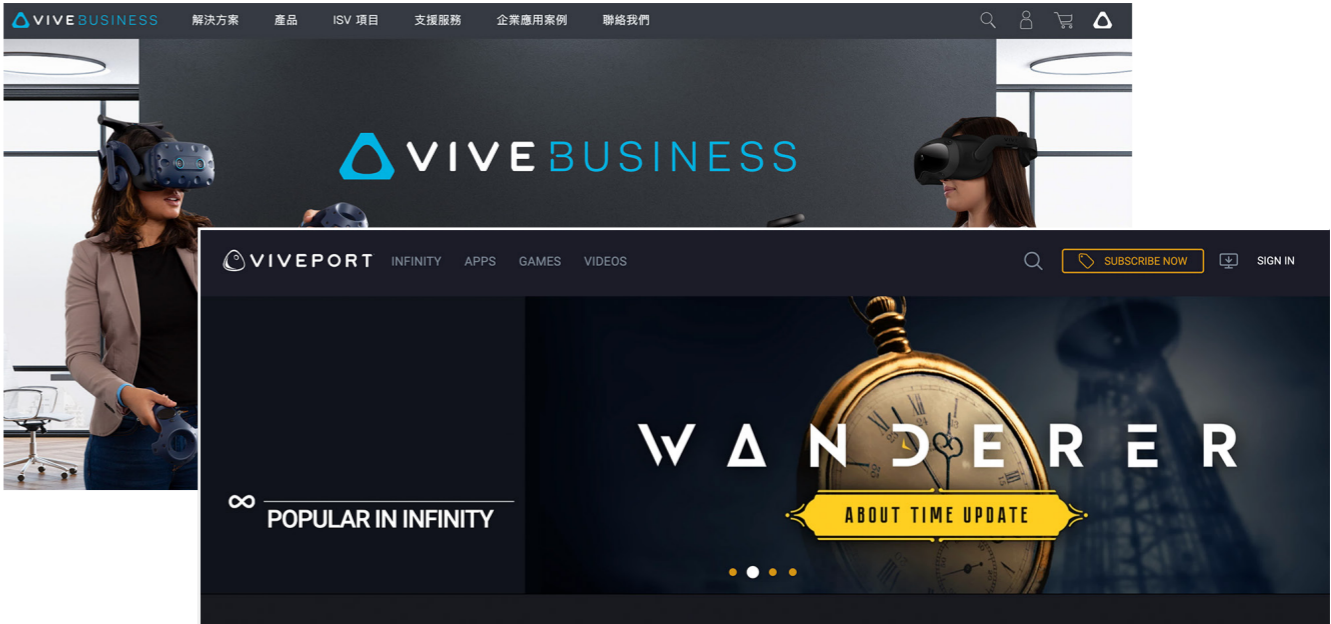
In the design and development of software, HTC publishes a privacy protection and safe software development manual to assist the development team for R&D and to execute code reviewing in accordance with the manual. This helps to avoid the involvement of unstable or malicious codes, as well as to ensure that the developed products comply with the expectations of consumers and clients regarding the privacy and information security of HTC's products.

HTC Security Test Platform (STP) Flowchart



During the development process, HTC introduced automation instruments, such as information security test and weakness scans to verify our products in case any damage by consumers causes a security breach.

Our management of privacy and information security does not end after the launch of new services or after the purchase of products. Instead, we continue to work on information security control. We follow up the software patches for security breaches and provide these to the relevant development teams. We also provide designated contacts for external personnel to report information security problems. Additionally, we also equip professional teams to conduct the assessments and replies - demonstrating our highest concern for consumers' privacy and security. The most important we strive to ensure is that HTC's services can be provided to our customers correctly and continuously.



In order to ensure that HTC employees comply with the policies and guidelines issued by the “HTC Personal Information Management System”, all HTC employees must complete privacy protection and information security education, training and test every year. Training covers following topics: The Importance of Data Protection; Guidelines for Company Data Handling; Key Information Security Protection and Control; Guidelines for Personal Data Handling; Supplier Evaluation; Guidelines for Social Media and Marketing Activities; Reminders of Information Security and Personal Information Protection; and Introduction to Information Security Threats. Other information such as our resources for personal data protection and information security are provided as well. People involved in the planning, development and testing of products, or in system management, operations and supplier management are required to attend courses and pass Safety Procedure Regulation of Products and Personal Information Protection Guide exams. Product development staff are required to take trainings and Threat Modeling and Secure Coding Standard for Key Coding Languages exams.

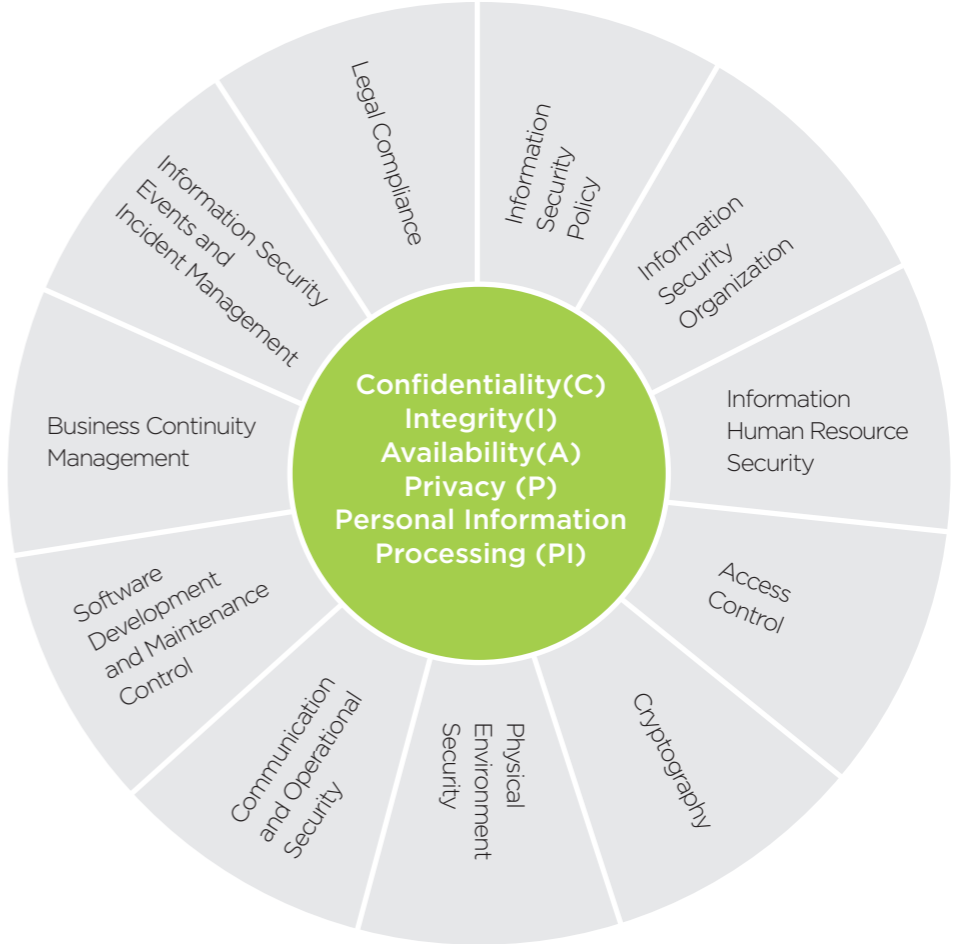
HTC also sends the Privacy and Security Newsletter monthly, which encloses up-to-date information about privacy and security and summaries of HTC privacy and security policies, and topics in 2021 includes HTC WFH Information Security Process, caution Phishing Emails and Ransomware, notice on policies updates, sharing of regulations related to privacy and security, etc.



HTC requires its employees to abide by the “HTC Privacy Protection System”, and also requires its outsourced vendors as well as cooperation partners to comply with applicable privacy protection regulations and HTC privacy protection and information security requirements to jointly protect privacy and information security.

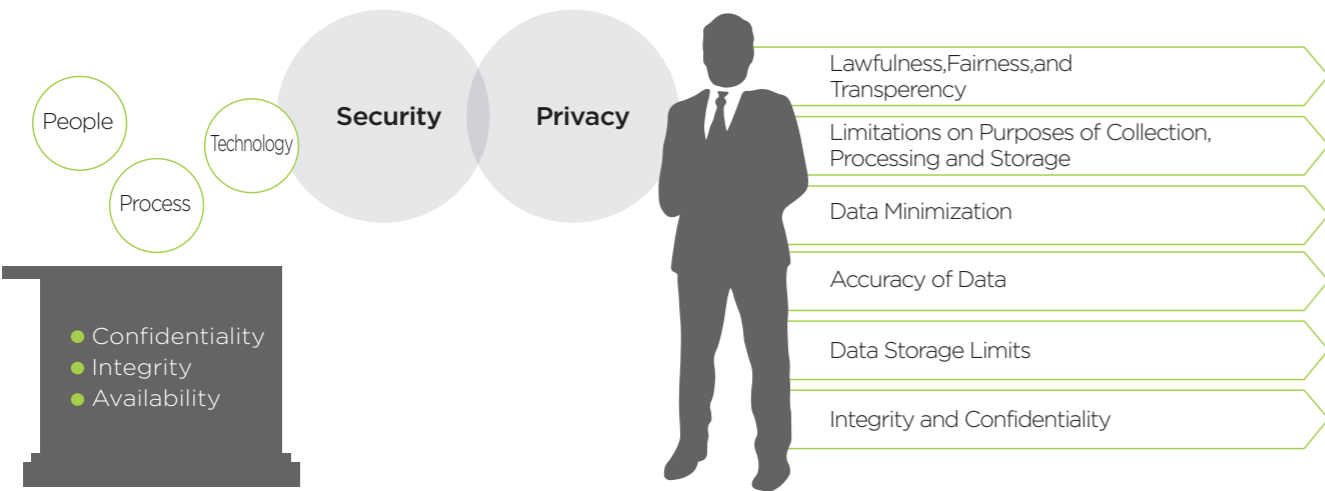
HTC's information security actions are not only internal. We also extend information security measures to external vendors through holistic inspections of information security controls, which include, but are not limited to: their Information Security Policy, Information Security Organization, HR Management, Communication and Operational Security, Information Security Events and Incident Management, Business Continuity Management, Physical Environment Management, and Access Control. As the pandemic continues to impact the world, so does the digital transformation in local and overseas industries, driving IT technology applications forward and forging new patterns of cyberattacks and system vulnerabilities. Thus, the HTC vendor assessment includes whether suppliers are capable of managing public vulnerabilities, and closely monitoring information security incidents within the industry.

Vendor Assessment Controls



As for information security, HTC follows ISO 27001's information security standard, and establishes and promotes all kinds of information security management measures. In this way “security” becomes part of employees' daily life. Meanwhile, risk assessments, and privacy and security internal audits are conducted annually. Through these audits we can ensure the implementation of management systems and modify relevant policies to lower the risks in a rolling manner.

HTC Privacy and Security Internal Audit



Cyberattacks are among the common risks in the WEF Risk Report. In addition to ISO 27001 daily practice and management to maintain confidentiality, availability and integrity, the monthly security letters to employees also raise awareness of privacy and information security issues. Other reinforcements include firewalls, intrusion detection and antivirus systems. No material information security event took place in 2021 thanks to our robust security mechanisms.

In terms of reducing operational management risks and ensuring continuous operation, HTC has focused on cloudification of key core basic systems and introduced various cloud services to create a cloud working environment that keeps pace with the times. By utilizing the flexibility and high availability of the cloud, deploy and disaster recovery can be performed quickly when failure occurs, effectively improving work efficiency.

DeepQ, a subsidiary of HTC, has long been an investor in medical and AI development, and closely monitors information security and personal information protection within the medical industry. DeepQ plans to obtain ISO 27001/27701/27799 certification in Q3-Q4 2022 having started the process at the end of 2021. This will protect business user and customer information, while the HTC Personal Data Management System is committed to the security of employees' personal data. For example, HTC promotes diverse information security protection mechanisms to cope with any possible information threat. HTC is also dedicated to delivering important messages to employees about how to maintain the “information security” during the prevention period. In particular, by strengthening information security, such as remote connection security, remote video conference security, remote communication assistance tool security, system security, network security, physical security, information security, and so on during WFH, we make “security” part of an employee's life. In addition, in the privacy and information security newsletter, HTC reminds employees to be cautious about phishing e-mails regarding COVID-19. HTC also ensures that the personal data of staff who go through epidemiological investigations is processed by specialists and is well-protected in accordance to the CECC's “contact-based policy”. Furthermore, we abide by the constraint of data purposes, minimization of data collection, and data deletion principles; this means that all the data collected for the investigations will be deleted after the storage period is over.

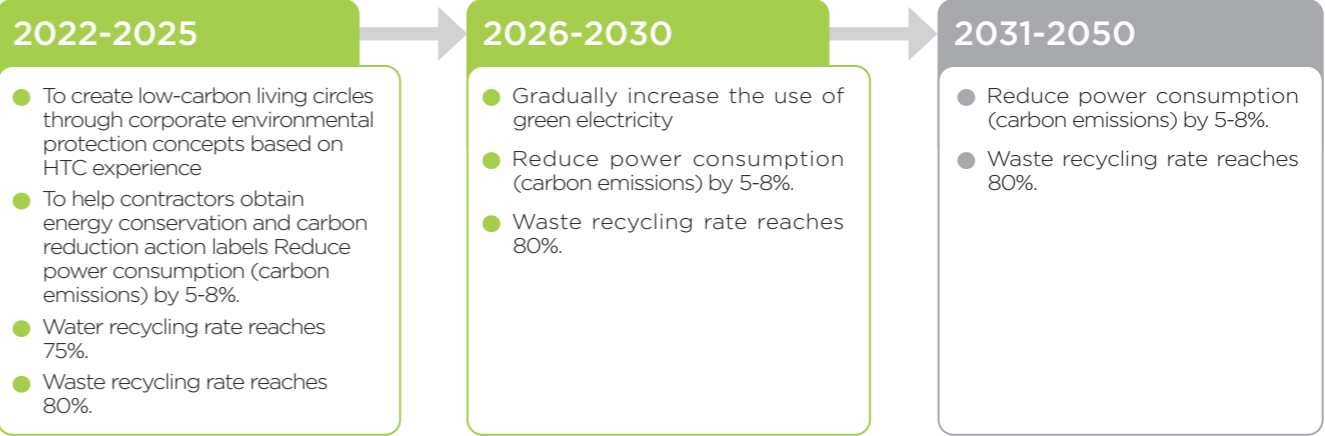
Management of Climate Change Risk

HTC joined the Carbon Disclosure Project (CDP) in 2008. We voluntarily disclose information about our climate risks, future development opportunities, emissions, and strategic management mechanisms. In 2021, HTC's rating on the CDP climate change questionnaire reached B- level (the international average level is B-).

In the 2021 CDP Supplier Engagement Rating (SER), HTC was rated as level B (international average is level B-). The Supplier Engagement Rating uses the responses of the company's CDP climate change questionnaire in terms of governance, objectives, scope 3 emissions, and value chain participation to evaluate the performance of supplier engagement.

In addition, HTC keeps requiring our suppliers to respond HTC Suppliers GHG Emission Survey in 2021, proactively contributing its corporate influence, and calling on its supply chain partners to work together in carrying out further assessments and actions for climate change. The supplier response rate in 2021 reached 100%. In 2022, HTC will initiate a full scope carbon emission analysis, calculation and assessment based on the SBTi methodology, along with the development of a Net Zero Emissions roadmap, outlining the short-, mid- and long-term decarbonization strategies and management indicators.

Sustainability Management Vision



A quick look at HTC management of energy and climate change

- As a response to the issue of greenhouse gases and global warming, HTC implemented the ISO 14064-1 Greenhouse Gases Emissions Inventory Program and has an ISO 14064-1:2006 Greenhouse Gases Emissions Verification Opinion Statement for the planning of energy strategy and action.
- All the HTC plants have been included in the Taiwan organizational boundary area and have been subject to inspection since 2009.
- Between 2010 and 2015, the HTC plants in China were also included in the scope of inspection and disclosure and external verification was launched. Electric power was found to be the main source of emission.
- The ISO 50001 Energy Management System can achieve energy management according to plan. HTC has implemented the system since 2011 in an effort to reach the goal of sustainable management.
- After joining the Carbon Disclosure Project (CDP), HTC is obliged to regularly report its plans, systems, and achievements regarding carbon risk and carbon management. In 2018-2019, HTC participate in CDP Supply Chain program members and invite suppliers to participate in the carbon disclosure.
- The introduction of ISO14064-1:2018 in 2022 is a means to manage carbon emission volume of the organization and products. The carbon content of the VR product VIVE Flow will be confirmed by the Product Carbon Footprint certification. Other practices include full scope carbon emission analysis, calculation and assessment based on the SBTi methodology, the adoption of a Net Zero Emissions roadmap, and short-, mid- and long-term decarbonization strategies and management indicators.

Climate-related Financial Disclosure

Framework	HTC Action Plan		
Governance	<div><div></div><div>In 2021, HTC CSR Committee members will identify the potential impact of various issues within and outside the organization based on industry relevance, including the identification and assessment of climate change-related risks, and responses to climate impacts. The CSR Committee reports annually to the Audit Committee of the Board of Directors on annual ESG performance and targets for the next year, including issues related to climate change.</div></div> <div><div></div><div>In early 2022, the HTC CSR Committee was promoted to the ESG Committee, with our chairperson Cher leads the ESG Committee as the chairperson. Senior Vice-President Madeline Chen was appointed Chief Sustainability Officer. Several task forces were placed under the Committee, including the Climate Change and Carbon Management Related Team. The ESG Committee reports directly to the Board.</div></div>		
Strategy	The virtual reality products and smart devices produced by HTC, combined with a new way of operation, life, work, learning and travel, will help users to achieve the goals of energy saving and carbon reduction. Through continuous performance demonstration, management mechanism promotion and system establishment, as well as planning at different stages of environmental protection cooperation between society and enterprises, short-, medium- and long-term goals of sustainable development can be achieved gradually.		
Risk Management	In order to identify and evaluate current and future activities related to sustainable operations, and products and services that may cause significant impacts or risks, the HTC risk assessment team will conduct regular organizational risk assessments, including climate change status, serving as a basis for formulating policies and goals. The evaluation results are as follows: In 2022, the risk assessment mechanism recommended by TCFD will be introduced to assess specific issues of climate change and to understand potential financial impact.		
Indicators and Goals	<div>The mid-to-long-term plan is to reduce carbon emissions by 5 ~ 8% in 2025 (2020 is selected as the basis).</div> <div><div></div><div>Since 2009, ISO 14064-1:2006 verification statement has been introduced and continuously acquired in order to fully grasp the energy use. Therefore, energy-saving strategies and actions can be determined and planed in response to international greenhouse gas and global warming issues.</div></div> <div><div></div><div>Since 2011, ISO 50001 energy management system has been introduced so that energy management can be implemented more effectively, achieving the goal of sustainable business operations.</div></div> <div><div></div><div>The carbon content of the VR product VIVE Flow will be confirmed by the Product Carbon Footprint certification. Carbon footprint inventory procedures will be implemented according to ISO 14067 to monitor new product carbon emissions, and the emission volumes at each stage of the product life cycle will subsequently be analyzed. A full scope carbon emission analysis, calculation and assessment based on the SBTi methodology, along with the adoption of a Net Zero Emissions roadmap, and short-, mid-and long-term decarbonization strategies and management indicators will be used for the Net Zero Emissions roadmap of future products.</div></div> <div><div></div><div>We are committed to improving the energy efficiency of ourselves and our customers. In addition to setting carbon reduction goals, waste reduction and water saving goals have also been determined to reduce impact on the environment.</div></div>		

HTC climate-related risks and financial impact

Type	Climate related risks	Potential financial impact	Responding actions in 2021
Transition Risks	Policy and Legal		
	<div><div>1. Laws and standards of energy-saving products</div><div>2. Local regulations (i.e., Greenhouse Gas Reduction and Management Act in Taiwan)</div></div>	<div><div>1. Regulations, carbon fees and carbon taxation could lead to higher operational costs (such as the increase of compliance costs and raw materials and parts).</div><div>2. Writing-off and advance retirement of the existing assets due to policy changes</div><div>3. Increased costs and/or reduced demand for products and services due to fines and court decision</div></div>	<div><div></div><div>We consider using recyclable green materials in product design phase, and make compliant material choices to meet international regulations and customers' requirements.</div><div></div><div>Through purchasing in volume and purchasing strategies to reduce unit costs and optimize cost structures.</div><div></div><div>Successful conservation of 346,135 kWh, saving NT\$ 1,038,405 in a 2021 energy saving project.</div><div></div><div>Partnership with suppliers for regular GHG inventory and disclosure.</div><div></div><div>Keep a valid ISO 14064-1:2018 Assurance Statement to record energy use and ISO 50001 for effective, well-planned energy management.</div></div>

Type	Climate related risks	Potential financial impact	Responding actions in 2021
Transition Risks	Technology		
	<div><div>1. Unsuccessful investment in new technologies</div><div>2. Transitioning to lower emissions technology</div><div>3. Substitution of existing products and services with lower emissions options</div></div>	<div><div>1. Capital investment for technology development</div><div>2. New and alternative technology R & D expenditure</div><div>3. Decreased revenues due to reduced demand for products and services</div><div>4. The cost for adopting/building new practical operations and processes</div></div>	<div><div></div><div>Sustainable design of products, such as improving energy efficiency, recycling and reducing harmful substances, was implemented to enhance the green competitiveness of products.</div><div></div><div>Improve product applications with an accessory functionality. Easy replacements and upgrades can extend the design concept of the product life-cycle.</div><div></div><div>VIVE Flow has been revamped to a smaller size, which means fewer raw materials and less packaging are used. More items in single shipments has successfully reduced shipping frequency and CO₂ emissions.</div></div>
	Market		
	<div><div>1. Change of customer behavior</div></div>	<div><div>1. Products with low power consumption have become mainstream as consumers' awareness of carbon emissions and energy consumption rises.</div><div>2. Environmental compliance requirement for raw materials and suppliers</div></div>	<div><div></div><div>Compliance with Energy Star, CEC and ErP, Energy Efficiency Certificate by third-party certification bodies, as well Level VI energy efficiency and the highest level of energy efficiency are required for power adaptors of all HTC products.</div><div></div><div>We followed the provisions of the US Department of Energy and Natural Resources Canada relating to product battery requirements, of which the charging efficiency should be increased as much as possible, and the energy loss kept low after being fully charged so the overall energy consumption is minimized.</div><div></div><div>We joined the CDP and produced regular reports about carbon risk, and the plan, system and achievement of carbon management.</div><div></div><div>VIVE Flow is expected to obtain ISO 14067 product carbon footprint standard verification in 2022.</div></div>
Physical Risks	Goodwill		
	<div><div>1. Change in consumer preferences</div><div>2. Industry stigmatization</div><div>3. Concerns of stakeholders</div></div>	<div><div>1. Reduced revenue due to customers' turning to better energy-saving products.</div><div>2. Reduced revenue due to labeling of high carbon emissions in the company/industry</div><div>3. More or less willing to collaborate according to stakeholders' concerns about the Company's environmental sustainability efforts</div></div>	<div><div></div><div>Environmental regulation compliance, supplier environment assessment, and management of waste, GHG emissions and energy are the material topics responded to in the 2021 HTC ESG Report.</div><div></div><div>While HTC operates in a non- high pollution or high carbon emission industry, nonetheless we do our best to extend product life, exclude toxic materials, reduce product energy consumption, increase recyclable parts, and mitigate the environmental impact of manufacturing processes.</div></div>
	Acute risk Increased severity and frequency of extreme weather events such as typhoons and floods		
Physical Risks	Chronic risk Changes in precipitation patterns and extreme variability in weather patterns		
	<div><div>1. Decreased revenues due to reduced production capacity (such as production line shutdown, transportation difficulties, and supply chain interruption)</div><div>2. Labor power of employees is affected, resulting in reduced profits and increased costs (i.e., health, safety, absence from work)</div><div>3. Unstable room temperature, which affects the lifetime of instrument and equipment. Decreased asset value or asset useful life leading to write-offs, asset impairment or early retirement of existing assets, which increases the infrastructure cost</div></div>		

HTC climate-related opportunities and financial impact

Type	Climate related opportunities	Potential financial impact	Responding actions in 2021
Resource Efficiency	1. Use of recycling 2. Move to more efficient buildings 3. Reduced water usage and consumption	<ul style="list-style-type: none">● Reduce operating costs (i.e., reduced costs through the use of solar energy and recycling)● Increase the value of fixed assets (i.e., high-efficiency green buildings)● Benefits to labor management and planning (i.e., improved health and safety, employee satisfaction), which reduces costs● Reduce energy consumption to lower operational costs and/or manufacturing costs	<ul style="list-style-type: none">● Waste reduction strategy was adopted; continue to reduce waste generation from the source through classification and waste-reduction promotion, and take recycling as the first consideration to increase the reutilization of resources● Continued to promote the management of energy performance through various energy-saving improvement and management programs such as improvement of building lightings and air-conditioning systems● Recycled water is used for the landscape, which is in accordance with the effluent standards of sewage disposal. Therefore, the consumption of water can be reduced.● SMT scheduling is centralized as double production lines. We saved a total amount of NT\$7,664,298 of nitrogen and electricity in 2021. HTC developed relevant production and testing equipment that can effectively share and recycle jigs and accessories simultaneously. As a result, parts can be recycled with zero waste.● NT\$1,140,924 saved in 2021 through material recycling and reusing.● Through improving production process and quality control, HR educational training, raw material QA control, jig development and improvement, automated production and testing, and precision testing, we increase the product life-span and life-cycle, as well as reducing electronics waste and damage to the environment. By adjusting trial production lines, we are able to enhance the production efficiency.● Install a heat pump system in the Taipei office, which can provide partial cooling energy in addition to heating energy, and can provide air-conditioning.● 4 Tesla superchargers were installed, and bicycle parking is provided in our Taipei offices. This encourages our staff to use transportation vehicles with low emissions and high energy efficiency.● Use photocopying paper with carbon footprint label to support green and low-carbon products.● Production line optimization and merging of process units of high similarity. The merger between warehouse and packaging line in 2021 not only reduced manpower cost in warehouse management but also conserved NT\$ 376,857 worth electricity.● Introduce and continue to obtain ISO 14064-1 verification statement to grasp the GHG usage status, and introduce ISO 50001 energy management system to make plans to implement energy management.
	1. Use lower-emission sources of energy	<ul style="list-style-type: none">● Reduce operating costs (i.e., reduced costs through the use of solar energy)	<ul style="list-style-type: none">● Continued to use green energy, including the use of low-polluting energy sources and equipment such as solar panels and heat pump systems. Building a low-carbon life through the implementation of various energy-saving measures such as improvement of lightings and air-conditioning systems, and the offering of shuttle buses for work.● Solar panels at the Taipei Office convert sunlight to electricity to light the stairways and basement. A total of 15,156kWh of electricity was generated in 2021.● A 180kW-capacity rooftop solar energy system was constructed at the Taoyuan site, creating wholesale solar energy for the power supply system of TaiPower through the internal parallel circuit. So far, a total of 518,048 kWh of electricity was generated by December, 2021.

Type	Climate related opportunities	Potential financial impact	Responding actions in 2021
Products and Services	1. Develop or expansion low emission goods and services 2. Development of climate adaptation, resilience and insurance risk solutions 3. Development of new products and services through R & D and innovation	<ul style="list-style-type: none">● Increase revenue through the demand for low-carbon products and services● Increase revenue by developing new solutions that meet the needs of climate adaptation (i.e., VIVE product applications and services)	<ul style="list-style-type: none">● The use of VIVE product applications and services; Use of digital technology can shorten time and distance, which in turn saves transportation time and costs.● The BEATDAY holographic concert successfully reduced carbon emissions from transportation to and from the concert venue.● VIVE enterprise solutions help enterprise users to expand their businesses, creating a framework for enterprise users to reach customers, develop products and train employees in the future.● For enterprise users, we published contents for applications that are related to training, health care, sports and education.
	1. Access to new markets 2. Use of Public-sector incentives 3. Access to new assets and locations needing insurance coverage	<ul style="list-style-type: none">● Increased revenues through access to new and emerging markets (i.e., cooperate with government, public agencies, hospitals)● Choosing sustainable packaging materials and minimal packaging helps reduce packaging and transportation costs.	<ul style="list-style-type: none">● VIVE ORIGINALS- combines films, cultural entertainment and art industries, and is committed to the production of original content. We continue to receive subsidies from the Ministry of Culture.● VIVE Arts- uses cutting-edge technology to create unique art and cultural experiences that can be enjoyed all over the world. We continue to cooperate with the world's top art galleries, museums and artists.● The VIVE Tracker 3.0 battery stores 75% more energy is an alternative in the low-carbon market.
Resilience	1. Participation in renewable energy programs and adoption energy-efficiency measures 2. Resource substitutes/ diversification	<ul style="list-style-type: none">● Improve market valuation through resilience planning (i.e., infrastructure, land, buildings)● Enhance supply chain reliability and operational capacity under different conditions.● Increase income through resilience-ensured new products and services.	<ul style="list-style-type: none">● Using solar power generation systems, and connect the power lines of the systems to the grid to sell the generated electricity back to Taipower, alleviating the power loading burden in Taiwan and reducing carbon dioxide emissions.● Measures of electricity and paper-saving in manufacturing plants.● Paperless daily/ weekly /monthly report/SOP/testing spec with OQC introduced. In 2021, we adjusted testing frequency according to the material quality risks. Thus, we can reduce the time of equipment and instrument use. We can save up to 38% of electricity (about 1121 degrees)/ 30% aluminum plate consumption/ elongate 50% lifespan of an X-Ray light pipe annually.

GHG Emission and Reduction

Total greenhouse gas emission by HTC was 10,053.764 t-CO₂e in 2021. 2013 continues to be the base year, and the greenhouse gases inventory in 2021 didn't exceed over 3% of significance threshold. The majority of emitted gas was CO₂. It is notable that HTC's GHG emissions contained little percentage of CH₄, N₂O and HFCs. PFCs, SF₆ and NF₃ emissions were maintained at zero.

Besides, we have extended greenhouse gas emission investigation and external verification scope 3 to include control over subsidiaries, including comprehensive statistics, and the monitoring of greenhouse gas emissions to improve the overall energy use efficiency and create better energy revenue since 2014. HTC's emissions contained no Sulfur oxides or other waste gases, and HTC does not use any substances that might endanger the ozonosphere. Moreover, the cooling and air-conditioning systems in HTC's buildings all use environment-friendly coolant R-134a to further preserve the ozonosphere.

HTC greenhouse gas emissions in the past three years

Total Emission					
ISO 14064-1:2006	ISO 14064-1:2018	Unit	2019	2020	2021
Scope 1	Scope 1 - Direct emission	t-CO ₂ e	552.461	372.0549	199.4583
Scope 2	Scope 2 - Indirect Emissions from imported energy	t-CO ₂ e	12,601.900	9513.1854	8,124.9297
Eco-Efficiency Value		NT\$	0.76	0.59	0.69
Scope 3	Scope 3 - Diesel emission from shuttle bus	t-CO ₂ e	149.197	72.0351	69.4247
	Scope 3 - Diesel emission from garbage trucks	t-CO ₂ e	20.932	26.7939	-
	Scope 3 - Transportation emission during overseas travel	t-CO ₂ e	1,487.798	276.9665	46.26
	Scope 4 - Upstream emission from outsourced electricity	t-CO ₂ e	N/A	N/A	1,493.8865
	Scope 4 - Upstream emission from outsourced diesel (mobile)_shuttle bus	t-CO ₂ e	N/A	N/A	36.4931
	Scope 4 - Upstream emission from outsourced gasoline	t-CO ₂ e	N/A	N/A	1.4779
	Scope 4 - Procurement _ tap water	t-CO ₂ e	N/A	N/A	18.6425
Scope 4 - Waste disposal (and transportation)		t-CO ₂ e	N/A	N/A	63.1915
Emission: CO ₂		t-CO ₂ e	14,417.127	9,602.0662	9,920.9085
Emission: CH ₄		t-CO ₂ e	353.032	253.5848	80.2844
Emission: N ₂ O		t-CO ₂ e	0.186	0.3445	0.2385
Emission: HFCs		t-CO ₂ e	41.943	29.2448	52.3328
Emission coefficients		1. Power Conversion CO ₂ equivalent emissions are calculated in accordance with the power emission coefficient(0.502) of the year announced by the Bureau of Energy 2. GHG Emission Coefficient Table, version 6.0.4 3. The scope includes HTC Headquarters & Plant and Taipei Offices.			
GWP (Global Warming Potential)		2019-2021 based on IPCC 2014 5th Assessment Report.			

Note: Eco-efficiency value (revenue generated from each unit of greenhouse gas emission) = Operating revenue (in millions) / greenhouse gas emission (Scope 1+Scope 2).

Energy Consumption Analysis

The power used by HTC is mainly electricity. To decrease the use of electricity, we persistently promote various energy efficiency management. We achieve energy savings through the improvement of the lighting and air conditioning systems, and the installation of renewable energy equipment. In 2021, the design on energy efficiency contributed to 350,250.45 kWh (1.26 GJ) of reduction, and the total amount of reduction in carbon emission was 170 t-CO₂e which translates into a saving of NT\$1,050,750.

Energy Saving and Carbon Reduction Results of Office buildings and Plants

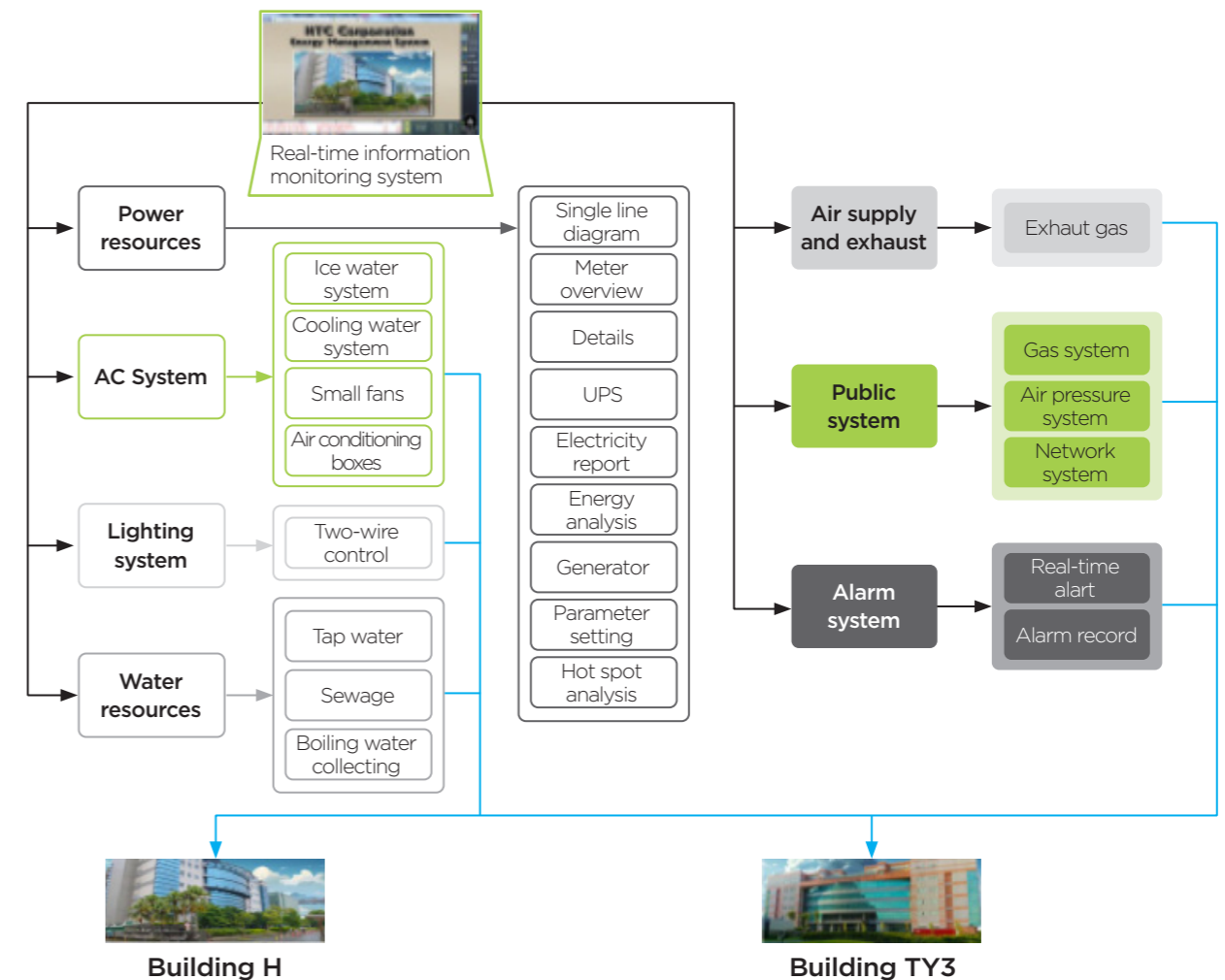
2021	Total Use of Electricity (GJ)	
HQ & Plants	TY3 Building	27,320
	H Building	8,192
Taipei office 1		30,692
Taipei office 2		9,878
Total		76,082

Energy-saving and carbon reduction Actions

HTC introduced an energy management system as per ISO 50001 to gain a full picture of internal energy use. The applicable regulatory requirements and energy benchmarks were implemented and HTC set energy performance indicators, and short-, middle-, and long-term improvement goals. And gradually develop and implement energy-saving action plans with the target of "conserving electricity and reducing carbon emissions" was set up to eliminate the waste of energy caused by bad habits or incorrect information.

In order to achieve the goal of saving 1% of electricity consumption, energy management has become our key energy saving direction. Since the manufacturing center and the factory facilities and computer rooms are the places where equipment energy consumption is concentrated, different energy-saving strategies and measures are adopted according to the conditions of each plant.

HTC has built a new energy management system for the HQ & Plants area. Through the additional monitoring system, the energy-consuming equipment inside buildings can be monitored. Through monitoring, control, management, analysis, and other steps, an insight is gained into equipment operations and energy consumption situations. Then, based on the judgment made through the comparative analysis of the monitoring system big data, continuous energy conservation improvement can be made. In addition, according to the equipment deployment and operation time during factory working hours and off-work hours, the equipment is turned on and off according to the automatic scheduling. This project was completed in August 2019, and energy-consuming equipment was included in the centralized management of the monitoring system to achieve the goal of continuous energy saving.



2021 Energy Saving and Carbon Reduction Results

Program	Energy Savings (kWh)	Amount of Money Saved (NT\$)	Carbon Emission Reduction (Kg-CO ₂ e/kWh)
HQ & Plants			
Exhaust System update of toilet in TY3-4F	9,315.65	27,947	4,741.66
CHP5 ice water pump energy saving scheme in ice machine room in H-B1	64,454.40	193,363	32,807.29
Lighting change from T8 to LED in TY4-2F-4F	7,200.00	21,600	3,664.80
Lighting change from T8 to LED of Stairwell in H building	10,800.00	32,400	5,497.20
Exhaust System update of toilet in TY3-5F	10,742.40	32,227	5,467.88
Exhaust System energy saving of male toilet in TY3-6F B stairs	72.00	216	36.65
Exhaust System update of toilet in H-1F C stairs	1,372.8	4,118	698.76
Energy saving scheme for secondary ice water pump in ice machine room in H-B1F	111,060.00	333,180	56,529.54
Energy saving solution of FFU fan in TY3- 5F C stairs	7,761.60	23,285	3,950.65
Energy saving solution of FFU fan in TY3- 5F D stairs	9,504.00	28,512	4,837.54
AHU#1-1 Air Handle Unit energy saving in TY3-1F	11,088.00	33,264	5,643.79
AHU#1-2 Air Handle Unit energy saving in TY3-1F	7,308.00	21,924	3,719.77
MAU#5-1 Make-up Air Unit energy saving in TY3-5F	12,632.40	37,897	6,429.89
Air handling unit energy saving in H-B2F high voltage electrical room	22,608.00	67,824	11,507.47
MAU(Make-up Air Unit) energy saving in TY3-4F	8,019.00	24,057	4,081.67
Lighting change from T8 to LED of ORT office in H-6F	5,486.00	16,458	2,792.37
Taipei Office 1			
#1, #2 Elevator machine room- split-type air conditioner replacement	29,726	89,178	15,844
#3, #4 Elevator machine room- split-type air conditioner replacement	16,985	50,955	9,053
Total	346,135.25	1,038,405	177,303.93

Note:
1.The money saved through energy conservation is calculated on a basis of the industrial electricity price announced by the Taiwan Power Company in 2020: NT\$3/kWh.
2.The CO₂ carbon emission coefficient is calculated on a basis of the 0.502 kg/kWh standard announced by the Bureau of Energy in 2020
3.Calculation method of estimated value: machine operating power * operating time = actual value

The Use of Green Energy

To create a low carbon life, we use only green energy, which includes the use of solar panels, eco-cooler air conditioners, and other low carbon emission sources like electric cars.

Energy-saving program	Descriptions
Solar panels	1. Taipei Office 1 has solar panels that generate electricity used for lighting the staircases and basement in 2012. The cumulative total number of solar panels since it was built has reached 130,235 kWh, including 11,418 kWh in 2019, 14,963 kWh in 2020 and 15,156 kWh in 2021.
	2. Taoyuan plant is set to install solar energy system on the roofs; the total capacity is 180kW. By means of internal line parallel series, the power was sold in bulk and included in Taipower supply system to solve the power shortage problem in Taiwan.
Heat pumps for air conditioning	We installed a heat pump system in the Taipei offices to provide hot water for showering in the staff gymnasium and hot water for cleaning in the kitchen. Besides providing heat, it can also provide partial cooling energy. The iced water produced during the heat exchange can be used for air conditioning. This system provides hot water and cold air at the same time.
Electric vehicles and bicycles	Four Tesla superchargers were installed, and bicycle parking is provided in our Taipei offices. This encourages our staff to use transportation vehicles with low emissions and high energy efficiency. The total power charged at the superchargers is 408kWh in 2021 (including solar energy).
R22 refrigeration split system air conditioners are gradually replaced by R410A	Traditional R22 refrigeration includes chlorofluorocarbons (CFCs), the culprit of ozone layer destruction. We gradually replaced the current R22 refrigeration split-system air conditioners with R5410A refrigeration to save the ozone layer that protects the earth against most ultraviolet (UV). We replaced two 10 kW one to one split-system air conditioners in 2021.



Electric vehicle charging area



Solar Power Generation System



Free bicycles for rides



Solar panels at Taipei headquarters

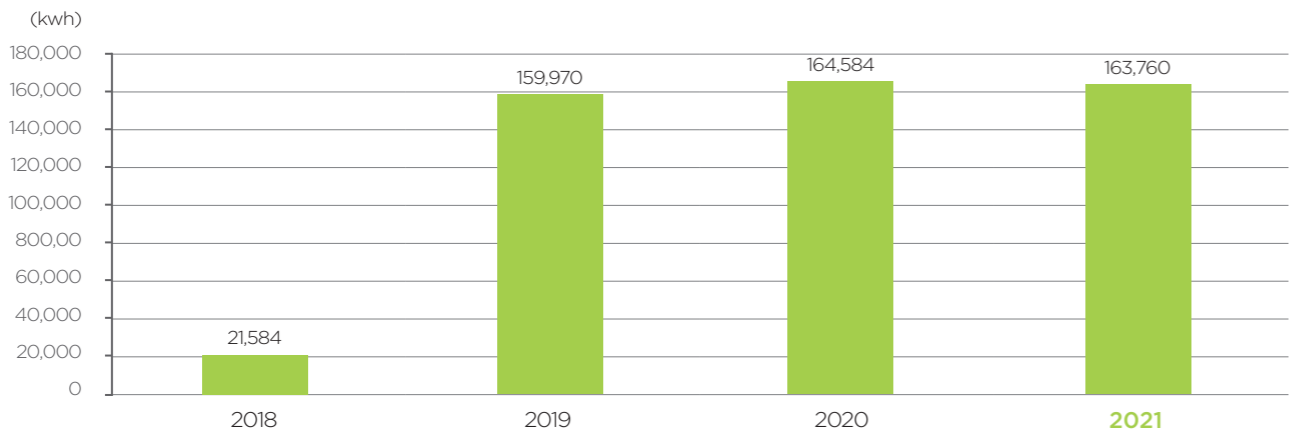


Infrared switch of safety ladder lighting

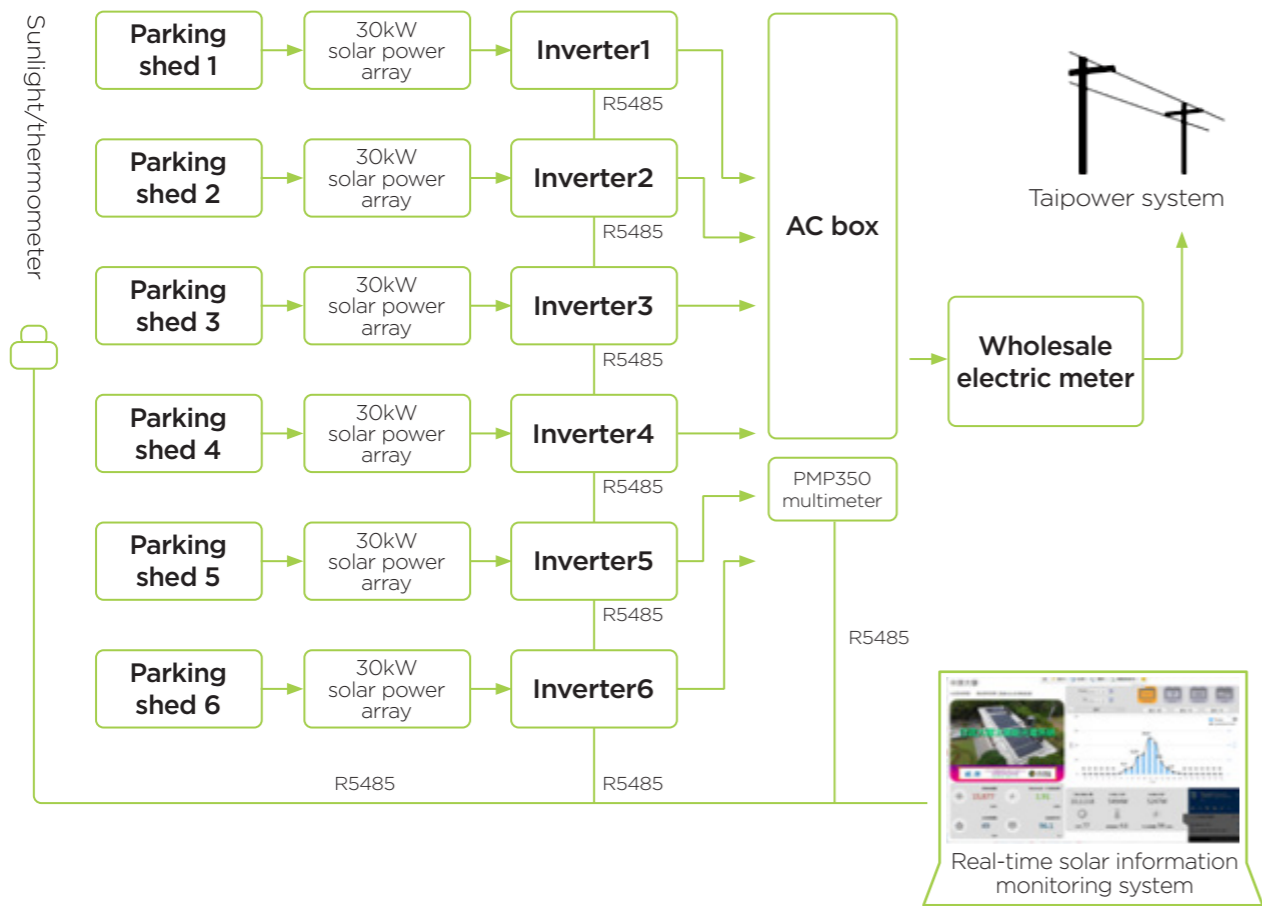
Setup of Renewable Energy Devices

The Taoyuan plant uses the roof of parking lot to install a solar power generation system, replacing the metal roof of the parking shed with solar panels, a total generating capacity of 180KW. By means of internal line parallel series, the power was sold in bulk and included in Taipower supply system to solve the power shortage problem in Taiwan. This project was completed in September 2018 and put into parallel trial operation, and started electrical energy in in bulk. From the trial operation to December 2021, the cumulative total power generation has reached 518,048 kWh.

HTC renewable energy power generation in recent years



180kW Solar Power Generation System



Current Achievement

- VIVE Pro Eye eyeball tracking upgraded; set a new standard for high-end VR HMD(Head-Mounted display).
- The VIVE COSMOS and the VIVE Reality System has unleashed the unlimited imagination of the VR world.
- HTC collaborated with content developing partners to create a new pattern of VR content.
- VIVE FOCUS won the gold medal of IDEA 2018 (2018 International Design Excellence Awards).
- VIVE Pro Eye won the "CES 2020 Innovation Awards" .
- VIVE Cosmos series won "Fast Company Innovation by Design Awards" .
- HTC collaborated with Chunghwa Telecom to launch VIVE Sync- the VR virtual conferences with 5G network featuring high speeds and low latency.
- VIVE Flow won the "2021 Esquire Gadget Award- Best Wearable Tech"
- VIVE Pro 2 won the "CES 2022 Innovation Awards"

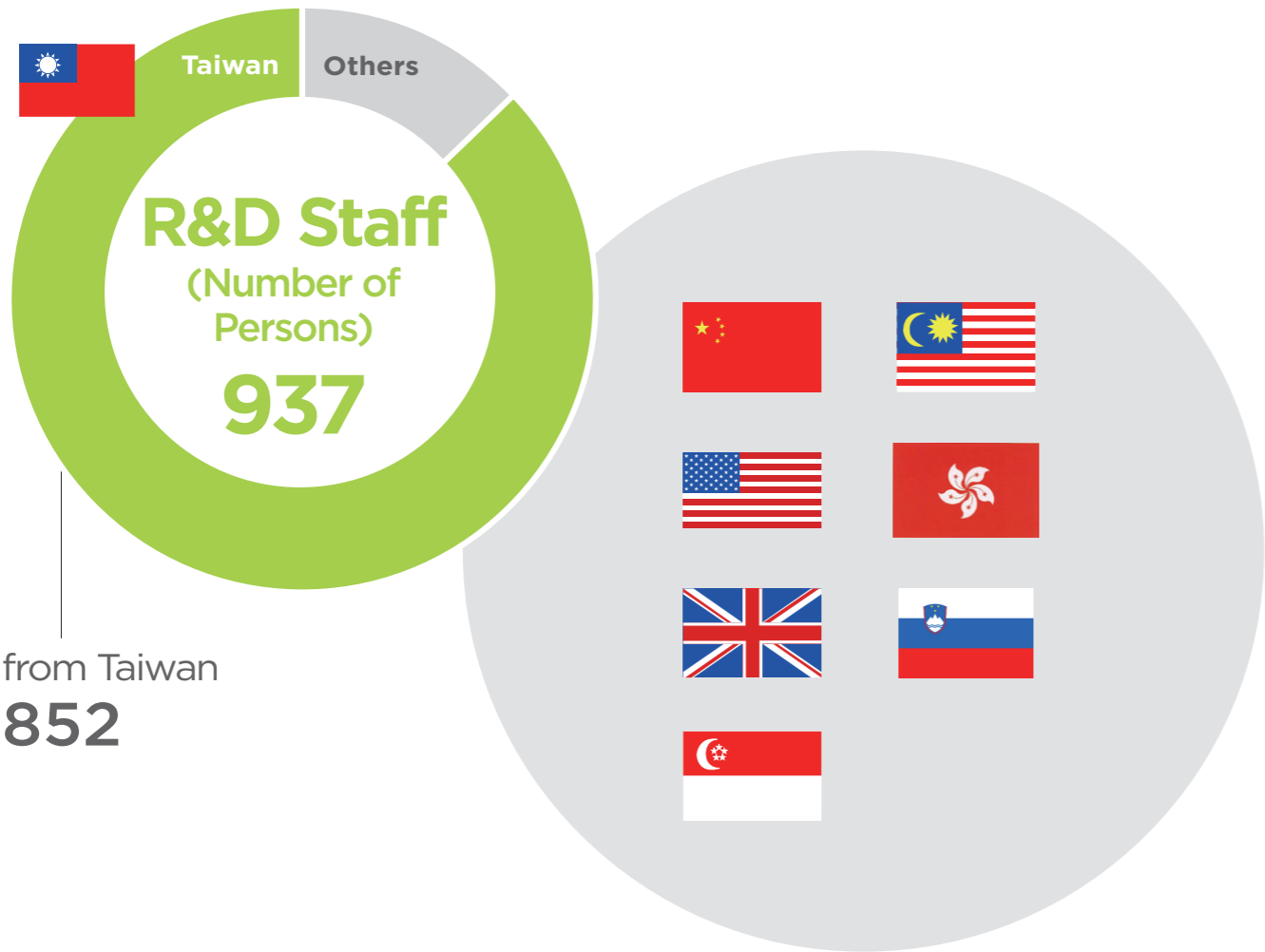
HTC's Challenge

Expediting patent layout
Strengthening advertising
of product innovation

Engaging Diversified R&D Talent

In 2021, a total of 937 R&D workers joined HTC globally. In addition to those in Taiwan, we have many R&D employees coming from, or based in, other countries, such as Europe, America, and Asia. We expect that the different cultural backgrounds of our diverse employees will fuse and fuel innovative thinking, so as to support HTC in the development and launch of products that meet consumer needs in different regions and with different cultural characteristics.

Since our establishment, HTC has invested heavily in cultivating R&D talent and developing technical innovation. Currently, our in-house R&D employees make up 43% of all HTC's global employees, the investment of which is about 43% of the total operating revenue. With this strength of innovation, HTC has special insight into industry trends and the outstanding capability for meeting consumer demand. This puts HTC always in the lead.



Investment in Innovative R&D		Unit	2019	2020	2021
Fixed R&D Investment	Million(NT)		5,652	3,585	2,256
Total Revenue	Million(NT)		10,015	5,806	5,253
Percentage	%		56	62	43

Note: The related figures are those listed in the consolidated statement.

Smart Innovative Products

2021 can be considered as Year One of the Metaverse. As smartphones become part of everyone's daily lives, the combination of virtual reality devices with smartphones allows people to truly experience the Metaverse where virtuality and reality meet. With rich experiences in the VR industry and innovative thinking, HTC created the VIVE Flow, a compact and portable immersive glasses that allows you to access the Metaverse anytime, anywhere simply by using your smartphone as a controller and projector. This easy accessibility offers infinite applications, including the moment of silence of the meditation app to boost your energy level.

Mobile immersive experience powered by HTC VIVE Flow – a new gateway of the Metaverse

In HTC's vision, Metaverse is a lifelike virtual reality world. We leverage 5G and VR technologies, combining our expertise in interactivity, diversity and immersive experiences in building an engaging virtual world that consumers can access and explore through their smartphones, computers or VR devices.

From there, HTC launched VIVE Flow in 2021. The immersive glasses weigh only 189g – the weight of a bar of chocolate. The product's dynamic balance, dual-hinge design and soft, magnetic face pad ensure comfort and stability for head shapes. The foldable VIVE Flow goes where you go. VIVE Flow supports peerless graphics with a wide field of view up to 100 degrees, sharp 3.2K resolution, and a fluid 75Hz refresh rate. Built-in premium speakers and noise-cancelling microphone pump out crisp and immersive spatial audio. The wireless Bluetooth earphones create an exclusive immersive space.

VIVE Flow is a VR device accessible anytime and anyplace, with simple, intuitive control through your Android phone. Find diverse VR experiences on VIVEPORT and the content subscription service platform to try out exclusive immersive worlds from health and brain training, to productivity, light games to sitting and relaxing in a cozy café. Video content can also be downloaded through VIVEPORT. Try Hama Video's K-POP The Show, international and local sports games, or Cirque du Soleil's panorama shows, all available via the VIVE Flow anytime, anywhere. You can even enjoy selected content of vivid video and spectacular audio performance from different viewpoints.

Weekend getaways or holiday trips after a busy week of work were impossible during the pandemic. However, with the VIVE Flow and TRIPP, users can now enjoy immersive meditation and relax in a way like never before, travel along the scenic US Route 66 with the MyndVR, do Yoga on the Bali coastline, or be surrounded by chirping birds on a snowy mountain. No matter where you are, you can always stay connected with the nature.





HTC brings a whole new VR experience! The VIVE Flow was selected as the Best Wearable Tech in the 2021 Esquire Gadget Awards. Compared to other VR devices, the light-weight VIVE Flow is lifestyle-centric, making it easier to engage in an immersive experience, and allowing users to fully relax their body, mind and soul.

More energy-saving and carbon-reducing - VIVE Flow

HTC's green product design raised the recycle percentage of VR product materials and created the VIVE Flow which is designed to use a smartphone as the controller to replace internal control chips, reducing the product carbon footprint and power consumption. Within the VIVE Flow, a 5-minute capacity battery is built in while connecting to a power bank is normally the main power source. For example, a 10,000 mAh capacity power bank can power the device for five hours. The innovative industrial design of the product saves time and manpower as there are fewer parts to assemble, reducing carbon emissions and the impact on the environment.

Reduced number of parts and the percentage in making one VIVE Flow compared to previous VIVE Focus.

Quiescent current reduced by **92%**

Standby power reduced by **90%**

Peak power reduced by **50%**

Power consumption reduced by **25%**

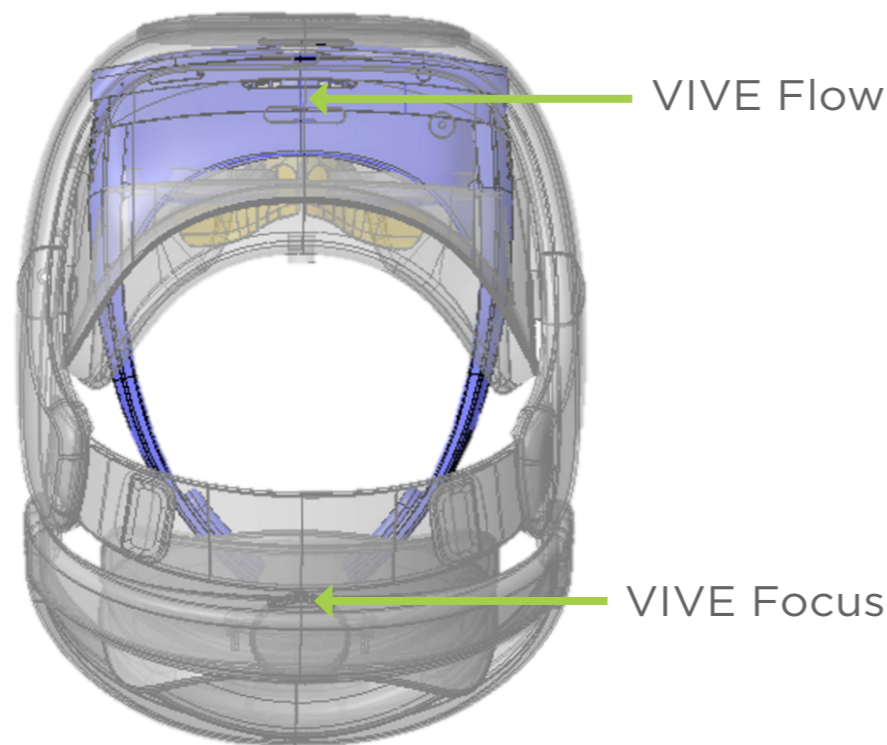
Battery capacity reduced by **90%**

Battery weight reduced by **85%**

Product weight reduced by **73%**

Product volume reduced by **82%**

(Data compared to VIVE Focus)



Reduction

Type of parts (unit: piece)	VIVE Flow	VIVE Focus	
Plastic parts	9	11	18%
Metal parts and components	7	9	22%
Screws	34	71	52%
PCB/FPC	7	11	36%

Protection of IP Rights

HTC regards R&D and innovation as an essential force needed for the company to remain sustainable and competitive. In particular, the protection of intellectual property rights is a key to maintaining our brand value. The protection we put on our intellectual property rights covers four areas: patents, trademarks, copyright, and trade secrets. Of these, patent protection is particularly valued and is realized at two levels:

Internal

- Positive filing of patent applications to protect the results of our various product R&D and technical innovation.
- Organize regular training courses for R&D personnel to promote the company's intellectual property policy to establish a correct intellectual property concept.
- Encouraging our employees to invent and create.
- Setting up a dedicated unit under the Legal Affairs Division for the protection and dispute resolution of intangible assets such as patents, trademarks, copyrights and business secrets.

External

- Engaging in technical cooperation with leading domestic and foreign research institutions, providing top talents with the opportunity to receive practical training in HTC, thereby fueling our R&D with innovative thinking.
- Mergers and Acquisitions Company to obtain key technologies and patents to speed up research and development.

In terms of patents, HTC has not only actively defended patent lawsuits against patent trolls, as well as filing an infringement lawsuit against HTC in courts in America, China and countries in Europe in order to protect the rights of HTC. In order to strengthen the competitive advantage of products, HTC has also obtained patent authorization from major international companies in order to rule out obstacles of patents.

In terms of trademarks, HTC has actively applied for trademark registration in various countries in order to acquire important trademark rights. HTC has also actively and closely worked with customs and local police agencies in various countries to crack down on counterfeited goods and protect HTC's business reputation. HTC has also actively investigated the situation of HTC's registered trademark abuse in various countries, and actively took legal actions with law enforcement agencies in various countries to protect the company's rights and interests.

Additionally, in terms of copyrights and business secrets, HTC clearly stipulates employees' intellectual property rights in the employment contract and demands employees to comply with HTC's intellectual property related regulations. The Ministry of Justice also collaborated with the Information Center, strictly restricting employees' internal data access authorization, such as software program codes, R&D data, unlisted product business information, etc. In addition, in order to prevent leakage of business secrets, program codes, or confidential information, HTC has also set up relevant regulations for the management and has signed a confidentiality contract with specific persons in order to protect business secrets.

Overview of Patent Performance and Outcome



Besides applying patents aggressively to protect the R&D achievements of the Company, we also examine the portfolio of patents regularly in line with the direction of product R&D. We adjust the portfolio in accordance to the principle of survival of the fittest, so that we can maximize the patenting budget more effectively. Towards the end of 2021, HTC owned 8,381 valid patents belonging to 2,017 patent families. 8,247 patents are derived internally from the Company and 134 patents were purchased externally. The number of inventions relevant to 5G has accumulated to 130 patent families, standing at an irreplaceable position in the development of 5G and patents in Taiwan.

In terms of awards and recognitions, HTC had received multiple awards in the 2020 National Invention and Creation Awards organised by TIPO on a biannual basis. HTC employees, Li-Wei Chen, Yen-Chun Kuo, Hung-Yu Chen, and Meng-Sheng Chiang won the golden prize of creation category with their head-mounted display of patent number D190775. HTC employees, Chang-Hua Wei, Shih-Hsiu Li, and Yu-Chuang Chang won the silver prize of creation category with their head-mounted display of patent number D194927.

Customer Management

HTC's territory covers not only VR devices and smartphones, but partners with worldwide telecommunication providers to launch customized or collaborative products to consumer market.

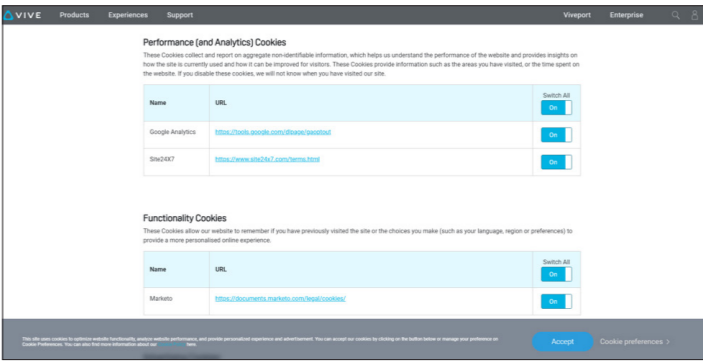
Protection of Customer Confidentiality

HTC makes a promise of “Strict observation of contractual obligations and confidentiality commitment” to all customers. All information we provide to our customers is subject to clear policies and a system of strict internal control. In addition to technical data and hardware and software, information related to patents and other intellectual property rights of customers may be incorporated into our controlling system. We complete confidentiality agreements with all customers and suppliers in advance to maintain the absolute security of all the confidential information belonging to our corporate customers.

The HTC privacy policy is also incorporated in the orientation training of new employees. Every employee is trained in all aspects of maintaining confidentiality when working with customers. Under our solid control mechanism, there was no damage to the rights or interests of any customer caused by a breach of privacy or from lost data in 2021.

HTC introduced the Personal Information Management System (PIMS) in 2018 to protect personal information during the product and internal management processes. HTC pays close attention to privacy protection laws in different countries (such as the EU, USA, Taiwan, China, Japan, Australia, and New Zealand), the relevant guidelines released by different authorities (such as regulations regarding cookies or other similar tools), and verdicts made in courts in other nations (such as verdicts regarding cross-border privacy rules in European courts).

For example, to cope with the California Consumer Privacy Act that was activated on January 1st, 2020, HTC set up several channels for consumers to exercise their rights, depending on their locations. Besides the exclusive email inbox provided for consumer rights (including the right to know, delete, and modify consumer data that HTC possesses), HTC added a customer service line for customers in California. In addition, HTC introduced a users' cookie management center and brought this mechanism to other countries to give the control of cookies or similar tools back to users to protect their privacy.



Customer Satisfaction Management

HTC has established “Customer Satisfaction Management Procedure” to meet the specific needs of all our customers and to respond to customer expectations and requests. A Quarterly Business Review is made to determine customer satisfaction. Each Business Unit proposes corrective action for any nonconforming project and regularly track any action taken to ensure that the customer has been perfectly satisfied.

The HTC customer satisfaction management index, in addition to product quality, delivery, and after-sales service, includes evaluation of corporate sustainability. We have designated a department to regularly collect HTC ESG information for communication and response.

1. Customer Warranty Maintenance Service Flow Chart, Locations, and Performance

Customer Service Center :

HTC established customer service centers in five continents around the globe; EMEA (Europe, the Middle East, and Africa), China, North Asia, South Asia, and South America. We provide multi-language services for communication according to different locations so that the communication barriers between HTC employees and customers is minimized. Where local traffic and internet are impeded due to natural disaster, such as typhoon, as a result of climate change, English service is deployed at all area so that customers may be referred to functional partners for follow up. To cope with firewall settings, Zendesk allows multiple IP addresses even in China.

Scheduled CRM system upgrade in 2022 with the addition of auto-answering robot, instead of life customer representatives, to give answers to consumers, who no longer need to input keywords to search. Subsequent feedbacks collected will be used for the next generation of robot customer representatives.



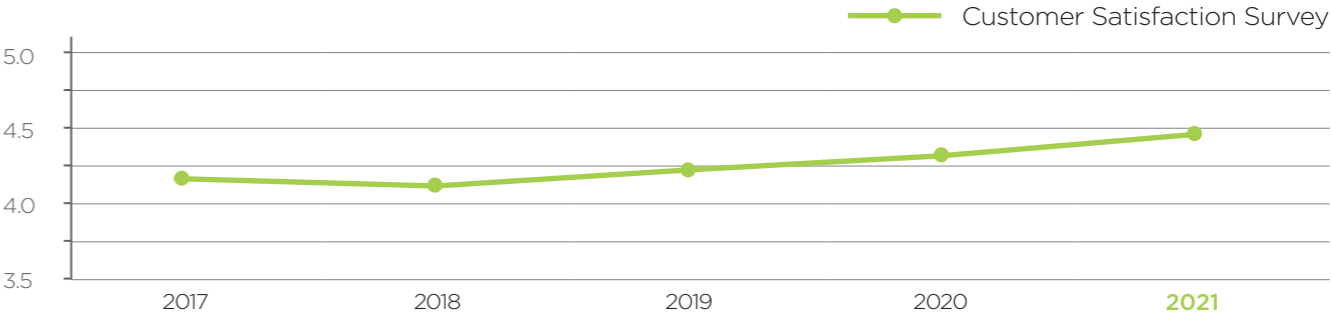
Satisfaction survey after receiving customer service

We invite consumers to participate in our service satisfaction survey after an issue is resolved so that we can understand how satisfied our customers are. Moreover, we take the initiative to contact unsatisfied customers and help them resolve their issues, to put our promise and goal of understanding our clients into action.

Customer Satisfaction Survey

The customer satisfaction survey is used to understand the overall satisfaction level of the consumer experience of those who recently contacted HTC. The internal benchmark of the customer satisfaction management index is above 4.0.

Customer Satisfaction Survey



Note: Calculation Method: The average is calculated by dividing each score with the total number of survey responses.

2. Customer Warranty Maintenance Service Flow Chart

HTC has 79 maintenance offices and 44 collection offices around the globe depending on the country; for example, a pick-up and delivery service is available in Taiwan. The services provided differ based on traffic and different regulations in other countries. For example, the number of days needed for maintenance in different locations vary according to such.

HTC provides a pick-up and delivery service in Taiwan for a more convenient and swift maintenance service; this service took up to 30% of the total number of maintenance services delivered in 2021. As long as consumers contact the customer service teams through available contact channels such as email, chat and phone, the customer service representatives will arrange a pick-up or delivery from or to home, with HTC bearing the shipping expenses bilaterally when in warranty.

There are various and unique procedures and needs depending on specific country. For instance, customers in the USA can replace their products with new ones instead of using the traditional repair model. The replacement model took up to 100% of the total number of repair work done in 2021.

Testimony

On December 13, 2021, HTC located an issue of smartphone as VIVE Flow controller during an email correspondence between customer service center and one of the Spanish customers.

When the user tries to enter virtual office for work through VIVE Flow, a button appeared and fixed on screen as “Set smartphone as controller”. The user stated that it had not happened in previous firmware, and also that if Bluetooth keyboard and mouse could be set up to connect to the device. The customer service team and software project manager provided with technical support, and offered update of firmware to solve the issue. In the last email from the user and after-service survey, the user expressed satisfaction with HTC service team.

Yes, yes, yeah! Now it works. Thank you. Hi,I ran a few tests and it worked beautifully.

Thank you for the attention to this issue. To be frankly, I didnt expect a solution. Even though it's not Christmas, I'd like to put forward a suggestion... It'd be so cool if VIVE SYNC could match mouse and keyboard. And, it'd be great, too, if Miracast could be started from screen, which I am not sure if it could be made possible in the future. Thank you so much for the team and for everything. Wish you and your team a happy new year.

Sustainable Agenda

As a global leader in the innovative design of virtual reality and mobile phones, HTC recognizes that by minimizing the environmental impact of our manufacturing processes, we and our wider consumers, can make a contribution to the well-being of our planet. To this end, HTC has set up a “Sustainable Agenda” from five aspects: “a sustainable environment, design, processes, product, and supplier chains” we have put this concept of environmental sustainability into action, have positive control, and are reducing the impact of our operations on the natural environment.

Note:Energy and climate change related action, please refer “Risk Management” section.



To honor our commitment to our employees' health and safety and the environment, the Occupational Safety Department has been established as a legally compliant, dedicated unit responsible for the organization of occupational health and safety, and the execution of the energy management system. It also supports each site to continue good practice in the area of occupational health and safety management, and implement a strong environmental management system.

Every year, we also formulate an occupational safety and health management plan based on the state of safety and health management. The implementation focuses include: compliance with safety and health regulations; hazard identification to reduce risks; standardization of hazardous chemical labeling and general rules; the promotion of occupational safety and health information; and the establishment of a system to manage contractors. All these measures are aimed at reducing risks.

We have emergency response plans that will be implemented in the event of an emergency caused by human error or natural disasters, such as fire, explosion, typhoon, an accidental leak, mechanical injury, infectious disease, or an earthquake. As identification of the nature of the emergency, taking the necessary measures and examination of standard operating procedures. We hold fire all measures impact on the health and safety of the workers and also try to least damage or company property.

HTC has introduced the ISO 14001 Environment Management System and verified by third-party authorities. To implement and be in accordance with environmental policy, relevant targets are set up and the systematic measure of environment management in the daily management.



HTC Environment Protection, Occupational Safety, Health, and Energy Policy

HTC strives to provide a safe and healthy working atmosphere for all of our employees while adhering to sustainability best practices which protect our environment. HTC follows the guidelines below to achieve sustainable development and to ensure a better quality-working environment for our employees, customers, suppliers and contractors.

1. We regard environment, safety, health, productivity, quality, and effective energy management with equal importance.
2. We regard the safety and health of employees, customers, suppliers, and contractors with equal importance.
3. We require our employees to observe all guideline regarding safety, operating procedures, environmental protection, hygiene, health and energy management.
4. We are committed to preventing foreseeable dangers and loss control.
5. We are committed to ensuring the organization establishes and implement a process for consultation and participation of workers.
6. We follow required laws and regulations.
7. We are committed to give priority to the purchase of green products.
8. We will continue to practice and improve on our environment, safety, health and energy management systems.



Sustainable Environment

HTC cares for our nature. Our efforts speak for not only consumers and customer demands, but more importantly, the sustainable environment that are beautiful and with abundant resources for generations to come. The investment in water improvement and waste management is to make the world greener, and as a model to enable, elevate fellow workers' awareness of ecosystem through different approaches that consistently express the fundamental idea of environmental conservation, allow it to grow downward and upward in everyone's conscience, so that it can be found ubiquitously in people's daily action, living and carrying out subconsciously through successful environmental education.

Resource consumption of recent 2 years

Environmental Indicator	Unit	2020		2021	
		HQ & Plants	Taipei Office	HQ & Plants	Taipei Office
City water consumption	degree/year	63,133	67,778	36,003	45,203
Wastewater	River	HQ & Plants- Dongmen Creek Taipei Office- City dedicated sewer			
Total city water discharge	Metric Tons	78,211	54,222.4	42,019	38,515.2
The amount of rainwater recycled	Metric Tons/year	NA	2,673.68	NA	2,965
Total amount of water recycled/reused	Metric Tons/year	23,741	NA	8,843	NA
The ratio of water recycled/reused to total amount of water consumed	%/year	37.6	3.94	24.56	6.16
Total amount of waste incinerated - Information product	Kg/year		13,944		8,455
Total amount of waste incinerated - General	Kg/year	504,306	0	426,202	0
Total amount of waste reused	Kg/year	0	0	0	0
Total amount of waste incinerated	Kg/year	135,700	48.32	65,550	52,400
Waste disposal expense	NT\$/year	828,240	302,400	619,448	308,700
Environmental management and recycling amount - Information product	NT\$/year		837,591		454,602
Environmental management and recycling amount - General	NT\$/year	454,160	0	461,922	0

Note:
1. The total discharge of sewage in the Taipei office is estimated at 80% of the water consumption.
2. Domestic garbage at Taipei Office consists partly of recycled cartons that are unquantifiable. A recycling company has been commissioned for handling.
3. Waste materials, as put into statistical data, are divided into categories ranging from plastic, paper, scrap iron, scrap aluminum, scrap galvanized iron, waste edge board, scrap computer products, waste wood (pallets), miscellaneous types of plastic, scrap parts, disused desktop computers, disused screens, disused laptops ,kitchen refuse, recycled domestic material and general rubbish.

Green Facility

The factories and offices disclosed in the boundary organization report this year have been established in industrial and commercial areas after environmental consideration and evaluation. The relevant environmental protection has been implemented in compliance with local regulations and internal environmental policies and specifications that have no significant impact on the local ecosystem and animal and plant species.

However, we still encourage all our plants and offices to go on with their efforts to beautify the environment. As for the new buildings, we aim to improve the employee's working environment through the introduction of green building design.

Office Environment with Plants and Green Landscaping

HTC upholds the concept of environmental sustainability and we regularly increase our green space in HQ & Plants and Taipei Office. The HTC outdoors green area now totals 30,700 m² and the Taipei Office building horticulture planning adhered to the concept of environmental protection and open parks. The planting area on the first floor reached 41% of the total base area. According to the topographic planning, large trees totaling 260 were planted, including camphor trees, Liquidambar, Podocarpus, Taxodium distichum, and cherry trees. Additionally, the plan designated eight shrub planting areas and one ecological pool area to plant about 3,200 plants. In HQ & Plants area, there are around 131 tree species native to Taiwan on the grounds, such as Camphor and the Taiwan Golden-rain Tree. Our employees can enjoy the lush green surroundings of their work environment.

Taipei Office planning covers B1 to 17F. In every floor, the indoor foliage was widely planted, totaling 450 pots. Different plants added for different festive holidays in order to enhance different festive atmospheres. In addition, we also planted beautiful green plants, such as the round pepper, the tiger-tail orchid, the lime pothos, the philodendron, etc., in the lobby of H Building and TY3 Building in Taoyuan. The 2021 annual management fees for our green environment maintenance amounts to NT\$ 1.42 million which is used to provide a fresh and green office environment for HTC employees.



HTC's Taipei office, The Golden LEED Certified Green Building

In 2013, HTC's Taipei Office obtained the Green Building Label of the Ministry of the Interior and the LEED Gold certification of the US Green Building Council(USGBC), offering its employees an excellent and comfortable low-carbon and take the responsibility of environmental sustainability. The fully-integrated energy management system was utilized to attain a full real-time management and enhance the efficiency of energy use. In 2021, the carbon emission reduction is 1,666 t-CO₂e, and the cumulative carbon emission reduction has reached 17,814 t-CO₂e.



LEED gold certification Green Building Label

The fully-integrated energy management system is constructed in the Taipei Office, which covers over 7,000 spots of on-site monitoring, total monitored spots amounted to 20,000. The EUI of the Taipei office in 2021 is 164 kWh/m²Yr which is a remarkable achievement.

Green Procurement

Our strategy is to buy environmentally friendly products to substantiate our environmental protection concept of “recyclable, low pollution, and resource-saving”. We express the purchase of environmentally friendly products as a priority in our procurement specifications to firmly integrate the concept into our daily operations.

In 2021, the amount of green procurement reached NT\$ 469 thousand. From 2012 to 2021, the accumulated expenditure for products with green-product stamp was about NT\$ 31.92 million.



Water Resource Management

The water used by the HTC headquarters and the factory is used by employees for office and life, and the production lines are all dry process without generating industrial wastewater which will be no adverse effects to the nearby water bodies.

Sewage Treatment

We invested NT\$ 27,760,000 in building sewage treatment equipment in 2010 and spent NT\$ 1,693,226 on operation and maintenance in 2021.

To substantiate sewage control, we have implemented daily maintenance and inspection in accordance with the “Procedures for Sewage System Operation, Repair, and Maintenance.” We abide by all the laws and regulations and the sewage is tested every six months by an institution authorized by the Environmental Protection Administration. The final test results are published on the Internet and show that the effluent and recycled water are in full compliance with all the standards.

Domestic sewage is discharged into the sewage sewer. Based on the average concentration of effluent BOD and COD from 2016 to 2021, there will be no adverse effects on the nearby water bodies. Since 2017, a self-initiated test of effluent heavy metals has shown ND or lower than the test value. Starting January 2013, the average daily treatment capacity of the sewage treatment plant reached 604 metric tons, sufficient to replace the use of tap water for park landscape irrigation and for toilet water use.

The Amount of Water Discharge and Recycled Water, and the Average Concentration of BOD

Year	Amount of Water Discharge (Metric Tons)	Amount of Recycled Water (Metric Tons)	Average Concentration of BOD(mg/l)	Average Concentration of COD(mg/l)	The Suspended Solids(mg/l)	Test of Effluent Heavy Metals
2019	46,903	26,259	3.38	10.55	<2.5	N.D.
2020	78,211	23,741	5.15	24.28	6.00	N.D.
2021	42,019	8,843	7.9	36.9	7.18	N.D.

Note:
1. Tested items of heavy metals: Cd, Cr, Cr+6, Cu, Zn, Ni.
2. The scope of statistical data is HQ & Plants

Sewage Recycling

The domestic wastewater is discharged into the sewer system and delivered to the wastewater treatment plant. The treated wastewater is discharged into the Dongmen River, which eventually flows into the Nankan River. The green fields and planted areas inside the factories are irrigated with recycled sewage water without increasing the total amount of water consumed. The Taipei building selected water-saving water equipment, using air conditioning condensate and recovered rainwater.

Starting from 2012, HTC setup and implemented water conservation plans. We examine results each year to examine whether or not to adjust the goals. From 2014 to 2021, the cumulative volume of recycled water used for irrigation was 1,141,662 metric tons, which is equivalent to about 457 standard swimming pools (each standard swimming pool is calculated at 2,500 metric tons)

Effectiveness of domestic sewage recycling in 2021

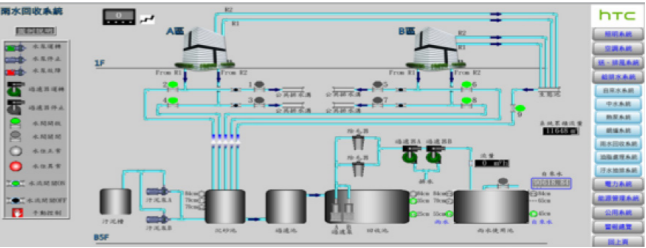
Sewage water output (Metric Tons)	42,019
Recycled water for irrigation (Metric Tons)	8,843
Amount saved (NT\$)	114,959
Actual wastewater recycling rate (%)	21.05

Note: The estimated savings is estimated at NT\$13 per degree of water.

Rainwater Storage and Recycling System

HTC has established a rainwater storage and recycling system to collect rainwater for flushing toilets and watering plants. A total of 2,965 metric tons of rainwater was recycled from the Taipei office Building, effectively saving water resources.

Rainwater monitoring system



Water-saving Sanitation Equipment

When making purchases, HTC prioritizes water-saving features or water conservation marks. We have installed faucets with sensors that dispense less water. By June 2020, a total of 126 old faucets were replaced by those with sensors, saving 70% more water.

Environmental Protection Education and Promotion

HTC continues to promote and enhance environmental protection consciousness and awareness in employees using a diversified interface. Through the new employee educational training and the provided training materials, the idea of environmental protection is promoted within the organization. Moreover, corporate policy posters are displayed on important bulletin boards to deliver continuously the information on environmental sustainability, allowing employees to feel HTC's efforts in environmental protection and give their full support through actions as well as everyday life habits.

Environmental Protection and Safety and Health Education

New employees and on-the-job staff education training in the past 3 years




Course	Hour	Frequency	Responsible Unit	2019		2020		2021	
				Person	Total hours	Person	Total hours	Person	Total hours
Environmental protection and safety and health education training	3	On board	OSH Dept.	-	-	120	360	208	624
Operational equipment hazard notifications	3	After arriving at the department of work	Equipment Dept.	54	162	21	63	0	0
General labor safety and health in-service education training	1	Annual(On-job training)	MFG	1,694	1,694	988	988	1,138	1,138
Hazardous chemical use notice	1	Annual(On-job training)	MFG	779	779	458	458	222	222
Prevent illegal violations of duties	0.5	Annual(On-job training)	MFG	1,583	791.5	973	486.5	494	247

Note:
1. The number of participants in the course “Prevent illegal violations of duties” in performing duties accounted for the total number of employees in Taiwan: 19.79%
2. For the “Operational equipment hazard notifications”, in 2021, since there are no new direct colleagues, the number of people and the total number of training hours is 0.

Sustainable Design

HTC starts from the product life cycle, analyzes the product process in detail, and adopts different measures at various stages through innovative thinking, especially in the product design and development stage, it uses the concept of The Precautionary Principle to carefully select the ones with lower environmental risks. The material confirms that it complies with the internationally Restriction of Hazardous Substances Directive, reduces the environmental impact of products, and develops sustainable products that are more environmentally friendly.

Green Marks Obtained by HTC

Green Mark	Description	Applicable Area
	Verified by a third-party verification company (UL) as meeting North American (US and Canada) energy efficiency requirements.	Power supply units
	Verified by a third-party verification company, through the US Department of Energy (DOE) and the Canadian Department of Natural Resources (NRCan), the energy consumption requirements for battery products	Smartphones, virtual reality(VR) device, including Accessories with rechargeable batteries, etc.
	Working with Call2Recycle (RBRC) to properly recycle used batteries in North America.	Batteries

HTC proactively seeks to reduce the use of environmentally harmful substances, through a design concept that can increase the recycling rate, increase resource reuse, and reduce its negative impact on the environment. At present, HTC's actual practice of sustainable design of products mainly focuses on the three major directions of improving energy efficiency, product recyclability design and hazardous substance management to enhance the green competitiveness of products.

Enhancement of Energy Efficiency

We concentrate on energy saving from the early design and research and R&D phase. All power supply devices used for HTC products must comply with the relevant international energy consumption specifications: Energy Star (U.S.), California Energy Commission (U.S.), Energy-related Products Energy-related Products and are approved with energy efficiency verification by third-party verification companies, and the energy efficiency has reached the highest level of Level VI requirements(standby power less than 0.1W), and the currently used chargers are lower than 0.04W, which has greatly exceeded the standard requirements.



Type	Product	Energy Efficiency	Standby energy consumption (115V)
CK18W02	Smartphone (Desire 21 Pro 5G)	Level VI	<=0.019W
TC NE5W	VR (VIVE Tracker 3.0, VIVE Focus 3, VIVE pro 2)	Level VI	<= 0.02W
TC NE18W		Level VI	<= 0.04W
TC NE30W		Level VI	<= 0.03W

For the energy consumption during battery charging, we follow the regulations of the US Department of Energy (DOE) and Natural Resources Canada (NRCan) as standards to try our best to improve the efficiency of charging and reduce the loss of energy consumption when the battery keeps fully charged to minimize the overall energy consumption. All VIVE Focus series fully follow regulations. The new VIVE Focus 3 launched in 2021 has a higher battery capacity and charging efficiency to reduce energy consumption. The power management technology featured in the new VIVE Tracker 3.0 improves use time by 75% while minimizing energy consumption and power loss during charging.

VIVE Focus Series

		
Product	VIVE Focus Plus	VIVE Focus 3
Year	2019	2021
24-hour energy consumption power (Wh)	29.923	44.79
Represented value of UEC (kWh/yr)	4.172	1.08
Regulatory limits (kWh/yr)	4.844	1.858

VIVE Tracker Series

		
Year	VIVE Tracker	VIVE Tracker 3.0
Product	2018	2021
24-hour energy consumption power (Wh)	9.835	7.38
Represented value of UEC (kWh/yr)	2.023	1.029
Regulatory limits (kWh/yr)	3.359	3.352

Note: The unit of energy consumption (Represented value of UEC) is tested and calculated according to the regulations of the US Department of Energy. It represents the additional energy consumption in addition to the power obtained by the battery during the charging process. The lower the number represents the charging process; there is Better power conversion efficiency and lower standby power

Energy efficiency regulations for battery charging products by the US Department of Energy(DOE) and Natural Resources Canada(NRCan).

The US Department of Energy (DOE) issued the energy efficiency regulations for battery charging (BC) products in 2016, which was implemented in June 2018. All BC products sold in the US market must comply with the DOE regulations and be registered. Natural Resources Canada (NRCan) enforced the same regulations in June 2019.

Prior to this, the California Energy Commission (CEC) began implementing energy efficiency regulations for battery charging systems in February 2013. These requirements cover almost all electronic products that use rechargeable batteries, including mobile phones and notebook computers. Nevertheless, the DOE regulation focuses on the unit energy consumption (UEC), that is, the amount of electricity consumed during the charging process must not exceed the limit.

The new Desire 21 pro 5G phone product still features a design with a high recycle rate. Although the new version is slightly heavier than previously models, the recycle percentage remains the same. In fact, it's recyclability is even better than before, tested and validated by an independent body. In relation to legal compliance, the product received a 7.2/10 green label in the most recent Repairability Index for France 2021, where HTC smartphones scored high in the ratings of five criteria: manufacturing documentation, disassembly, availability of spare parts, price of spare parts, and repairs. The product has a longer life span and a highly rated repair service.



VIVE Tracker Series



2018 VIVE Tracker
Weight 90.2 g
Recycling rate 75.3%



2021 VIVE Tracker 3.0
Weight 72.6 g
Recycling rate 87.2%

VIVE HMD- VIVE Pro Series



2018 VIVE Pro
Weight 755.5 g
Recycling rate 75.2%



2021 VIVE Pro 2
Weight 815.3 g
Recycling rate 75.5%

Smartphone- Desire Series



2020 Desire 20 Pro
Weight 137.7 g
Recycling rate 89.5%



2021 Desire 21 Pro 5G
Weight 143.9 g
Recycling rate 90.0%

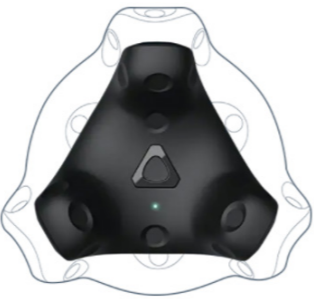
Note: 3R includes Reuse, Recycling and Recovery ratios, which are defined in the EU WEEE Directive (2012/19/EU).

Product Recyclability Design

HTC takes waste deduction and resource reuse into consideration from the first stages of product R&D. We evaluate the product design of recycling thoroughly through product breakdown and material simulation, and estimate the material composition and relative recycling rate of products. The third-party authorities verify the material recycling rate by disassembling and analyzing the products. And the recycling rate of all our products, including VR and smartphones, is largely exceeding to the standard of the product category set by the EU WEEE regulations (55%). In the future, as a principle, we will continue to design our new products in the direction of decreasing the weight and increasing the recycling rate.

The VIVE Tracker 3.0, the new generation of the HTC VR series, is another innovation. Compared to the previous version, the product has an improved size, weight, and 3R percentage, allowing an even better recycle rate when the product enters the recycle system after use, promoting the circular economy.

Compared to the previous version, the new VIVE Pro 2 VR headset has improved specification and features, and is made with more recyclable materials, which though add weight to the headset, have a higher recycle percentage rate. Equipped with the VIVE Tracker 3.0 and facial expression detection kits, the environmentally-friendly VIVE Pro 2.0 has extensive applications and a long product life cycle.



- 33% Smaller size
- 20% Lighter weight
- 15% Increase recycling rate



Phone and Battery Recycling

To properly fulfill their responsibilities as a manufacturer, HTC, which is 100% in line with EU WEEE requirements, has also promoted the US and Canadian related electronic product recycling program. To reduce the undue disposal or handling of old mobile phones and the impact of this upon the environment.

- 1. HTC began operating its own mail back device recycling program from 2020. Customers can contact HTC’s customer care team and request a free mailing label to send their phone, tablet, or VR headset to our ISO 14001 certified recycling partner for proper disposal. For more details, see 「<https://www.htc.com/us/recycling/>」
- 2. HTC also participates in the industrial management program Call2Recycle that is currently implemented in the United States. The program provides for the collection and recycling of batteries, including cell phone lithium-ion batteries, as well as the recycling of cell phones in Canada. We pay a fee to Call2Recycle for every mobile sold in the United States and Canada. The COVID-19 pandemic and stay home orders impacted Call2Recycle program, the project recycled 3.67 million kilograms of batteries in the United States and Canada in 2021, an increase of 3.2% compared to 2020. For more details, see <http://www.call2recycle.org/>



- 3. HTC participates in state-run e-waste programs in 20+ states in the US, for responsible recycling of its Nexus-9 tablet computers. Due to successful lobbying by the cell phone industry, only three states (New Jersey, West Virginia, and Maryland) require cell phones to be recycled under their laws. All the other states’ laws cover computers, televisions, and various other electronic devices. A few states have begun including VR headsets (with internal processor) in their definitions of Computer or Video Game Console. Thus far, we have submitted registrations in New York, Illinois, and Maine with VR hardware included. We are keeping an eye on other states as regulations continue to evolve and more and more states consider adding video gaming consoles to their programs.

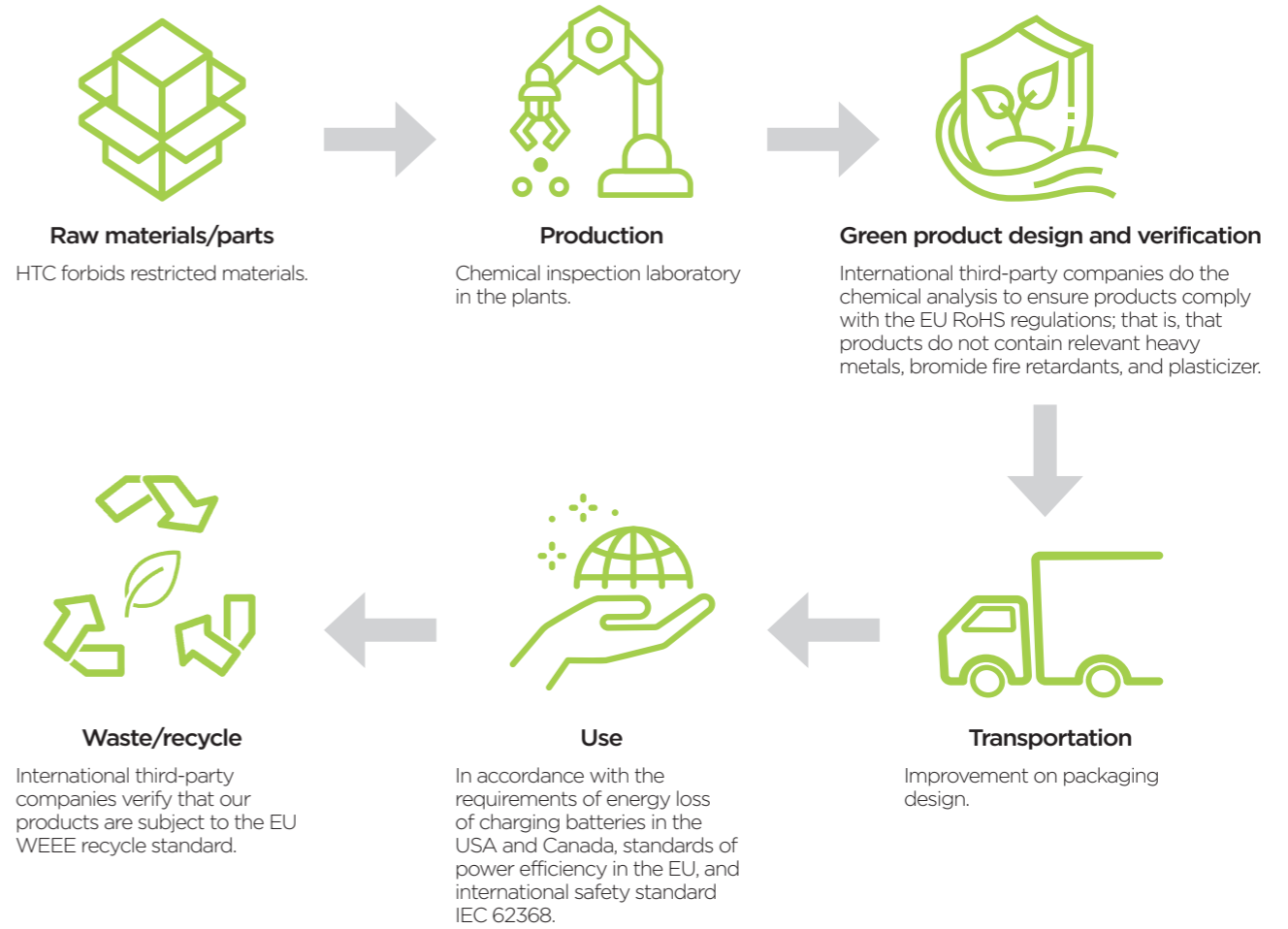
Each state has a different setup for ensuring end-of-life electronics are recycled responsibly. The states use various mechanisms for determining how much manufacturers must recycle each year – many states determine a company’s annual obligation of pounds of e-scrap to collect based on its market share. Some states simply bill manufacturers for the recycling of returned electronics on a per-pound basis. Other states allow HTC to simply operate a mail back program, and pay an annual registration fee, with no target of pounds to collect. For example, in Washington state, HTC pays fees based on our market share for tablet computers, with local governments operating collection locations throughout the state. Washington’s Dept. of Ecology registers recyclers to manage Washington’s e-scrap, and ensures these recyclers are using responsible practices. Over 200,000,000 kilograms of e-scrap have been recycled from Washington residences since the program began in 2009. For more details, see <https://ecology.wa.gov/Waste-Toxics/Reducing-recycling-waste/Our-recycling-programs/Electronics-E-Cycle>

Hazardous Substance Management

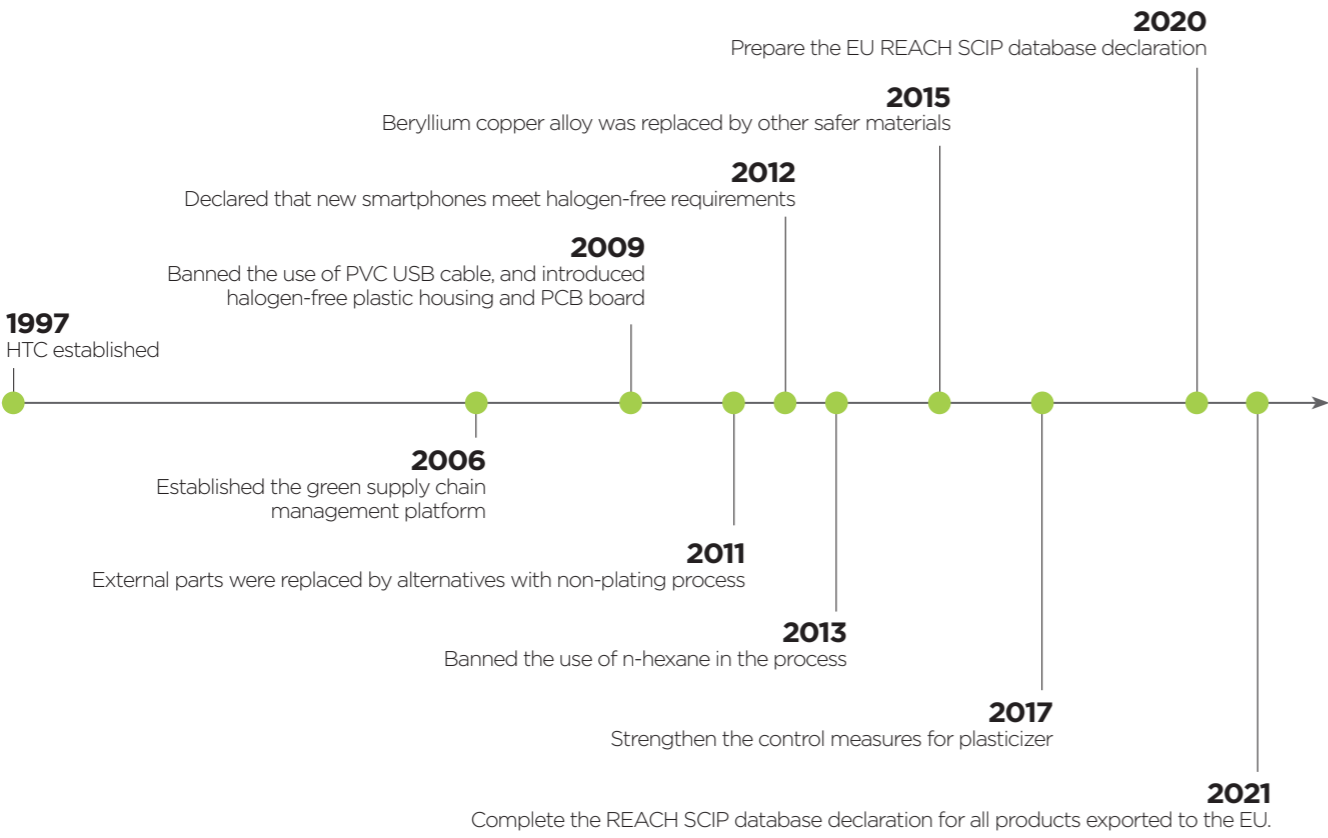
During the initial product design stage, HTC considers the impact of the production process on the environment and whether it is harmful to users. Therefore, all the used parts, modules, and materials are compliant with the HTC’s specifications of hazardous substance management list. The list covers not only the ten items restricted by the Restriction of the use of Certain Hazardous Substances Directives, RoHS, but also those flagged by international environment protection regulations and international customers. For instance, we ensure to enforce the ban of PVC, halogen-free of brominated flame retardant, and pollution-free gas, and waste that contaminates the environment and ecosystem is not produced during the production process. We uphold the goal of being pollution-free, environmentally friendly, and sustainable in operation. We also request that our upstream and downstream suppliers to work together to comply with relevant regulations, to ensure that our consumers are free from hazardous substances.

Even though virtual head-mounted displays are not categorized by China RoHS, the new 2021 VIVE Flow voluntarily submitted China’s RoHS certification and passed RoHS hazardous substances tests in China. All VIVE Flow parts are HTC toxic-free, and the finished product complies with regional regulations on hazardous substance control around the world, making the VIVE Flow a toxic-free, human- and environmentally-friendly product.

Description of the HTC product lifecycle and its different stages



HTC Hazardous Substance Control schedule



EU RoHS-Restriction of the Use of Hazardous Substances

RoHS is the abbreviation of the Restriction of the use of certain Hazardous Substances in electrical and electronic equipment. Currently, the major Directives include 2011/65/EU and EU 2015/863.

In the Directives, Pb, Cd, Hg, Cr6+, PBBs, PBDEs, and four newly added plasticizers, DEHP, BBP, DBP, and DIBP are all restricted. HTC had already published the latest HTC Toxic Substance Control List R7 edition in 2018. The content includes ten restricted substances outlined by RoHS, and it enforces suppliers to provide test reports as necessary documentation for parts approval procedures. In the future, HTC will continue to pay attention to new entries of legal regulations to ensure our Toxic Substance Control List is updated in line with international standards.

EU WEEE

WEEE is the abbreviation of Waste Electrical & Electronic Equipment. The major directive numbers include 2002/96/EC and 2012/19/EU. In the Directives, electronics manufacturers in the European Union (EU) shall bear the expenses of scrap recycling, processing, and reuse. Products sold in the market shall have corresponding labels. Electrical and electronics equipment shall meet the objectives of reuse, recycling, and recovery (3R).

At the design stage, HTC chooses materials that are easy to recycle and reuse. Besides marking products in the EU market with recycle labels, products are also verified by third-party companies to ensure that they are in accordance with the 3R recycle rate. As a result, we can reduce the number of final-stage electronics scraps to decrease contamination of the environment whilst enhancing the use of natural resources.

EU REACH

REACH (Registration, Evaluation, and Authorization of Chemicals) are regulations governing chemical product registration, evaluation, authorization and limitation. In 2020, 209 substances of very high concern (SVHC) have been announced, and it is expected to be enforced on January 5th, 2021 that products/parts that contain 0.1% SVHC to pass the SCIP (Substances of Concern In articles as such or in complex Products) database for more information. This measure prompts the use of alternative substances to replace hazardous chemicals to further enhance a safer circular economy system.

HTC requests that our suppliers provide the latest data related to SVHC, and encourages them to reduce the use of such chemical substances. On the other hand, all products exported to the EU have completed the SCIP database declaration in 2021.

On the other hand, all products exported to the EU have completed the SCIP database declaration in 2021.

On July 6th 2005, the European Parliament confirmed a new framework of directives to set mandatory ecological requirements for energy-using products. On July 22nd in the same year, the new energy-using product Ecodesign Directive (2005/32/EC) was announced. The Ecodesign Directive EuP was replaced with the new Energy-Related Products directive (ErP) 2009/125/EC. Among them, the new version of the external power supply regulation (EU 2019/1782) has been enforced on April 1, 2020.

HTC's AC adapters have been upgraded to the latest ErP standard in accordance with the regulations of the new directive governing efficiency requirements for external power supplies. Compulsory new labels are introduced and energy performance technical documents are required. The new AC adapters will fully comply with the new directive in the future.

EAC RoHS

Beginning on March 1st 2020, RoHS certification will be mandatory for electronics and radio-electronic products that are placed on the market in the Eurasian Economic Union. Products must conform to the Technical Regulation (EAEU TR 037/2016) – Restriction of Hazardous Substances (EAC RoHS).

Based on the EU RoHS testing foundation, products of HTC sold in Europe and Asia must submit documents complying with RoHS to ensure they are in accordance with the local requirements for certifications and EAC RoHS.

Repairability Index for France

Since January 1 2021, France has implemented a Repairability Index on packaging, labels or the website of five categories of electronic devices: washing machines, lawnmowers, televisions, laptops and smartphones. The index assesses five criteria: use and repair description of the product by the manufacturer, disassembly difficulty of the product, spare parts availability on the market, price difference between spare parts and finished products, and maintenance and upgradability after purchase. The rating ranks from 1 to 10, of which 10 is the best repairability of a product.

HTC smartphones for the French market underwent repairability labeling in 2021, showing consumers a range of information on recyclability and repairability. The product was granted a 7.2 green label.

Active in Compliance with Standards

All HTC mobile phones are verified by international public certification companies, such as SGS, TUV, and ITS. Chemical analysis is carried out to ensure compliance with the EU environmental directives. In addition, a brand new international product safety standard IEC62368, entered into effect on December 20th 2020. This new standard aims at mandating manufacturers to build a safer environment for product design on the basis of known hazards. HTC has updated to the latest version of IEC62368 for all products in the market with CB certificates provided.



TEST REPORT
IEC 62368-1
Audio/video, information and communication technology equipment
Part 1: Safety requirements

Sustainable Manufacturing Process

VR devices produced by HTC assist users in consuming less energy and produce a lower carbon footprint through green product design that aligns with people's new approach to life, work, learning and travel. We work to revamp process management system of potential consumption of energy and resources during the production process that reduces energy consumption and implements waste control through management improvement mechanisms with the input of the Operation Control Center (OCC).

Hazardous Waste Management

HTC’s main manufacturing business is the assembly of virtual reality devices, we process and dispose of waste according to our self-regulated “Process for Removal and Handling Business Waste” and practice good resources recycling to ensure cleanliness of the working environment and reduce environmental impact.

Regarding management measures, besides entrusting legal disposal authorities to properly dispose of the waste in accordance with the government policy, we also follow disposal trucks to check and confirm their cleaning status on site from time to time. Regarding plants, we inspect waste storage and temporary storage zones through inspection checklist regularly, and request corrections for non-compliance within a limited time. We also establish environmental safety and health self-assessment form and perform audits, to accomplish effective management and evaluation mechanism. In the event of environmental concerns, HTC can be reached via the information on the company's website to ensure that we respond and handle it promptly.

Measures	Methods
Set up recycling bins and commission manual sorting of domestic waste.	Set up recycling bins and encourage and propagandize staff to sort domestic waste. The employees recycled 426.202 kg of domestic waste in 2021.
Used batteries, light tubes and information technology objects must be recycled.	We have recycling stations for used batteries and light tubes available to the employees

In the process of virtual reality device assembly /manufacturing, HTC inevitably generates general business waste and small amounts of harmful business waste. HTC upholds and implements proper disposal of waste, commissioning legal waste removal and processing companies and choosing the best handling approach based on the nature of waste.



HTC Waste Statistics

Type	Recovery Operations	Offsite Weight (Outsourcing) (Unit: Metric tons)			Remark
		2019	2020	2021	
Non-hazardous waste	Preparation for reuse	0	0	0	
	Recycling	958.273	518.25	405.645	Including Tray plate, foam, miscellaneous plastic, waste wood pallets, Computer peripherals (host, screen, laptop, electronic waste)
	Other: Incineration	170.51	100.64	65.55	Domestic garbage
	Other: Landfilling	0	35.06	0	Waste Bakelite
	Other: Recycling	146.343	57.513	29.012	Kitchen leftover
Hazardous waste	Preparation for reuse	0	0	0	
	Recycling -E-0217	28.585	13.752	7.606	Scrapped electronic parts and components, leftover scrap and defective goods.
	Recycling -E-0221	12.11	1.347	0.00001	Scrapped metal containing PCBs and scrapped powder
	Recycling -E-0222	0.458	0.123	0.055	Scrapped PCBs containing parts and components
	Chemical treatment -C0110	1.785	0	0.215	C0110- Harmful waste liquid containing copper The chemical treatment shall be conducted once every two years for the treatment according to "Methods and Facilities Standards for the Storage, Clearance and Disposal of Industrial Waste".
	Chemical treatment -C0301	2.78	2.17	0.31	C0301- Harmful waste liquid The chemical treatment shall be conducted once every two years for the treatment according to "Methods and Facilities Standards for the Storage, Clearance and Disposal of Industrial Waste".

Note:

1. The computer host and screen are estimated based on the weight information obtained from the official website.

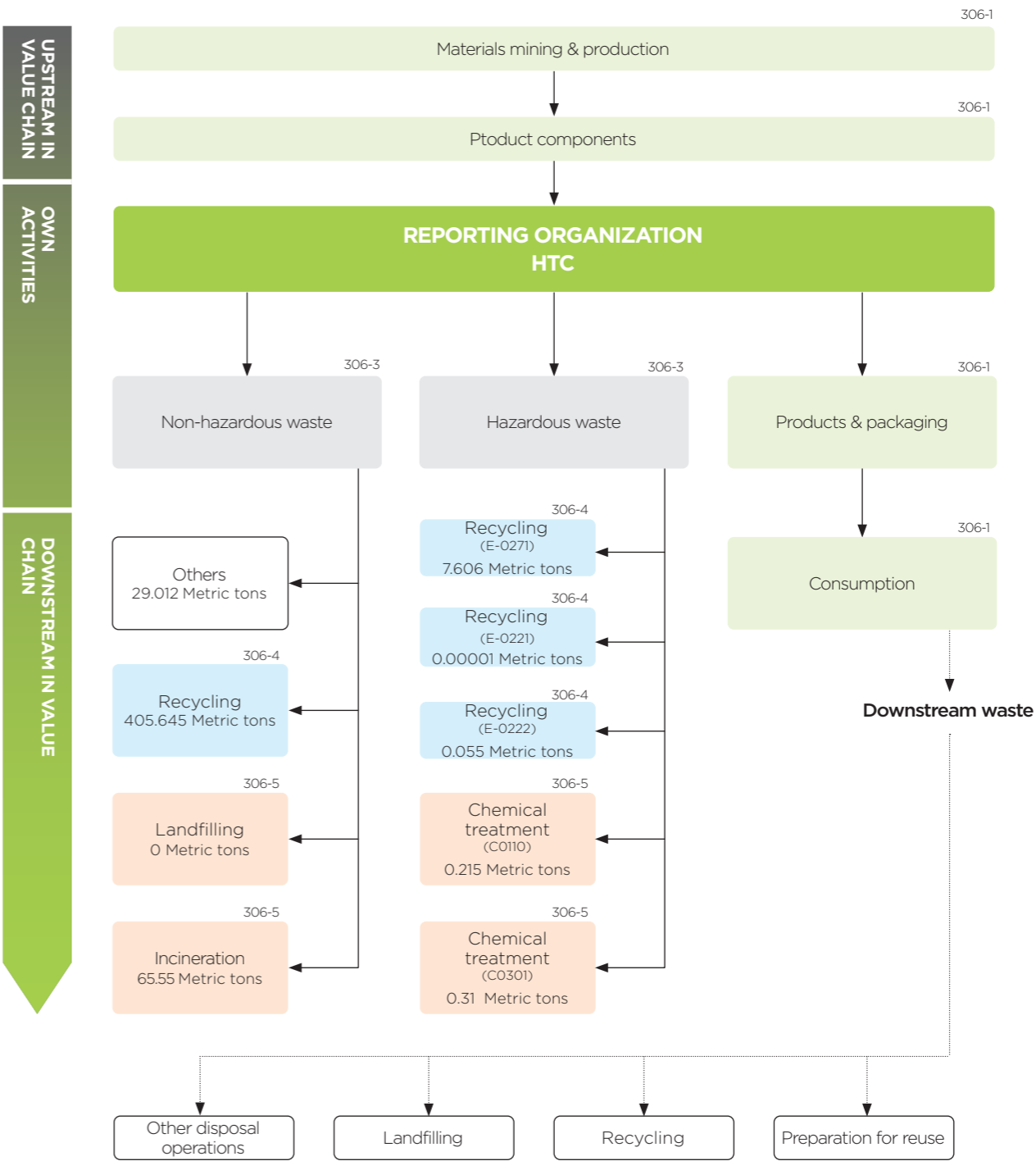
2. Preparation for reuse: Checking, cleaning, or repairing operations, by which products or components of products that have become waste are prepared to be put to use for the same purpose for which they were conceived.

3. Recycling: Reprocessing of products or components of products that have become waste, to make new materials.

4. The method of estimating the weight of food waste: It is used as a feed additive by legal livestock farms, and it is calculated as 189 kg per barrel.



Flow chart of activities for significant waste-related impacts in 2021



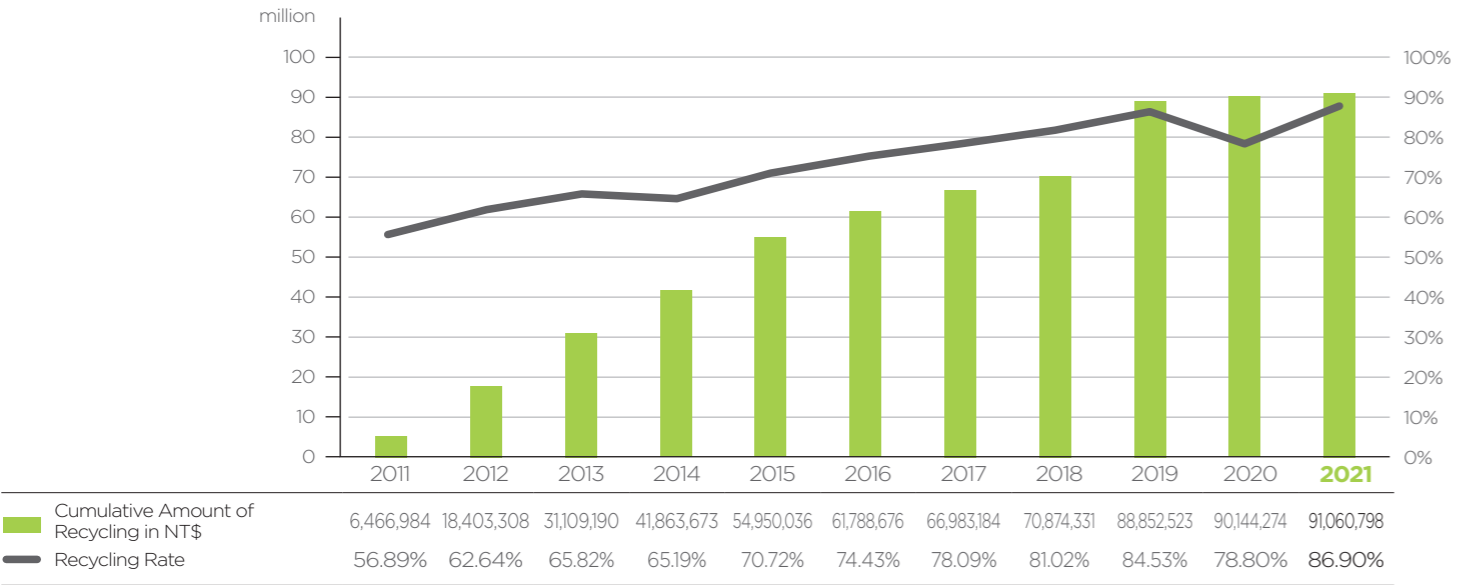
Waste Reduction, Recycling and Reuse

HTC waste reduction strategy involves the reduction of the generation of waste from the source by means of sorting and advocacy. The reuse of waste is also a priority and is essential for an increase in resource recycling efficiency.

We have been taking steps to handle the treatment of waste materials according to type. As an example, we commission contractors to collect and recycle waste trays. In addition, a number of other licensed contractors are employed to recycle other material and much of the waste is purified and turned into industrial raw material. Other waste goes through physical classification which increases reusability. For example, the source control strategy is adopted when the recyclable plates and sponges can be recycled to the production line for reuse. The material that is not recyclable goes to a final destination. We also publish the condition of temporarily stored waste material on the Internet. In 2021, the total amount of non-hazardous waste recycled is about 434.657 metric tons, accounting for about 86.9% of the total waste.

From 2011 to 2021, a series of measures such as sorting and recycling, the money earned or saved by recycling waste rose year by year to reach NT\$916,524 in 2021. The recycling rate of non-hazardous waste increased from 56.89% in 2011 to 86.9%. By the end of 2021, and the accumulated recycling income reached NT\$91,060,798 in 2021.

Waste Recycling Effect and Rate



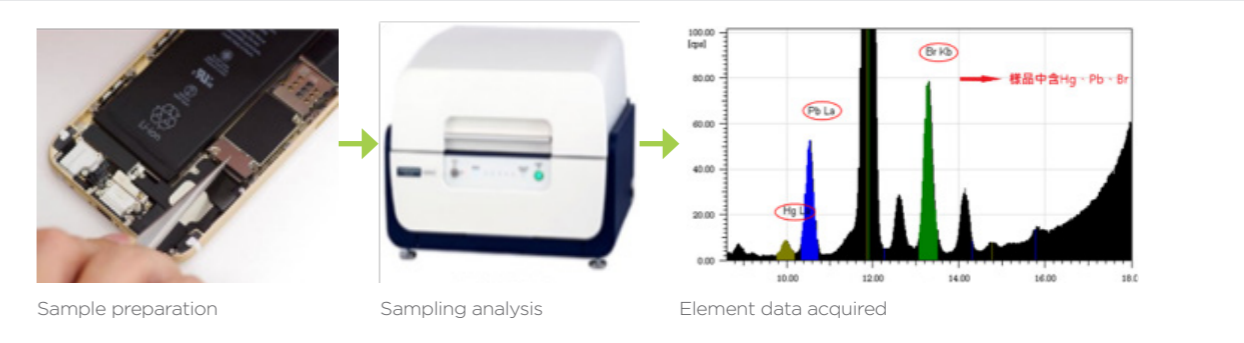
Hazardous Substances and Chemical Control

HTC Hazardous Substance Management Policy

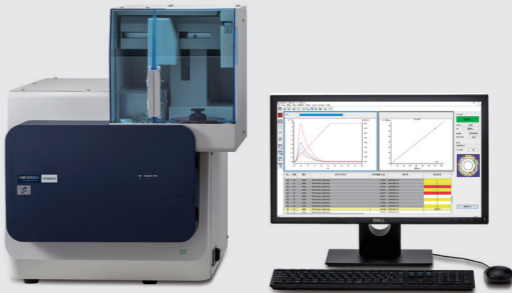
HTC analyzes the international environmental protection regulations and complying with the environmental protection requirements of international customers, with reference to the relevant international technical standards, and then establishing the IP-00000106-01 Toxic Substance Control List, and holding suppliers meeting regularly to work with parts suppliers together seeking for the use of non-toxic materials under the Company's hazardous substance control policy with green supply chain management, so that the procurement of raw materials, that is, using the principle of the source management to conduct strict control of hazardous substances. In the product development stage, the R&D department will deliver the relevant parts materials to the ISO 17025 qualified laboratories, such as SGS, TUV, to ensure that the materials used in the product conform to the international environmental protection specifications.

In terms of production management, factories regularly conduct hazardous substance tests on materials according to the "Incoming Toxic Substance Control Work Instructions". This is done to ensure that these materials comply with the RoHS 2.0 requirements, are all non-toxic, and are harmless green products.

X-ray fluorescence analyzer testing heavy metals and halogen elements



TD-GC/MS is used to check plasticizer



HTC understands that in the green competition between corporations around the world, the active management of harmful substances and chemicals is the only way to ensure the reliability of the manufacturing process and product compliance with the standards of the different countries and customers. In so doing, we reduce the legal risks that our products might suffer. We completely banned four chemical substances, including n-hexane, n-heptane, benzene, and toluene. According to customer requirements, international standards, and domestic regulations, we restricted the use of 527 chemical substances such as hydrazine and dichlorobromomethane. Besides, we take the following measures to control the condition of chemicals used during the manufacturing of components and parts. These include:

1. Specially-assigned employees make an inventory of the chemicals in the plant on a regular basis. They also have to inspect the chemicals and ascertain their condition. Including:
 - Use types, quantities and the storage status of the chemicals (includes storage container management)

- Whether the chemical's label of the using unit is complete.
- Whether the information about the chemicals is complete, such as the safety data sheet (SDS, Safety Data Sheets)
- Personnel are required to wear basic safety protective gears when using the chemicals.

2. Compressed gas fire extinguishers should contain safe eco-friendly agents: Replace CO2 fire extinguishers with safe halogen compound fire extinguishers.
3. Emergency lights should be powered by eco-friendly batteries: Replace lead-acid batteries with nickel-cadmium batteries. If there is any scrapped nickel-cadmium battery, it will be delivered to a qualified Class E waste treatment plant for disposal.
4. Set up regulations for the management of chemical agents for cooling water towers: Choose cleaning solutions with safety certification.
5. Make sure that suppliers and contractors properly manage the chemicals they sell: The chemical management that suppliers enforce covers aspects ranging from environmental protection, safety and health, to corporate social responsibility. This must include the investigation and auditing of supplier internal management systems and an assessment of the risk levels.

Green Production Process and Smart Factories

A Combination of Human and Material Resources

Our Taoyuan plant provides stable job opportunities, salaries and benefits, as well as an excellent job environment and opportunities for growth and learning for locals. We comply with the relevant regulations of labor law, create good interactions with communities, and promote local economic development. We combine human resources and systems automation to increase efficiency, whilst simultaneously decreasing human capital loss.

Production Line	Manpower saving ratio (Test function)
PCB Plant	80%
System Plant VR production line	60%
System Plant SP production line	68%

Automation

HTC introduced test automation procedures on the product line. We use robotic arms to test different functionalities using the appropriate jigs and equipment to replace traditional repetitive human operation. By doing so, not only do we elevate test efficiency, save testing manpower, and operate 24 hours, but we also lower the margin for human errors in operations or the wrong judgment of testing results. We also introduced the “one out of ten” random test at the end of plates to enhance testing efficiency.



Information system process optimization

The process of receiving company products is adjusted to lead to electronic sign-off for material requisitions, and the concept of proper storage of company assets shall be strengthened. All products of the receiving company shall be in accordance with the standard process, and must be registered by the custodian for safekeeping. The custodian shall apply for the return or disposal of products after use. If this is not done, the custodian must bear the responsibility of storage or reparation of those products. In order to reduce manual upload errors and improve accuracy, each system process has been combined and officially launched. This can speed up the production process and reduce the waste of manpower.

Control Center

The control center shows instant testing statuses and defective conditions of various products and testing stations. It also shows specific equipment environment calibration displays and warning notifications. We continue to expand functions, such as equipment traceability, maintenance records, and instructions.

In addition to the existing instant testing statuses and defects of various products and testing stations in 2020, the OCC installed a big screen in 2021 for easier reference, replaced hourly productivity manual records with online instant graphics and charts, and operates a new statistics report output feature to greatly reduce data processing time.

Tasks in 2022 include continuous improvement of the OCC functions, the addition of real-time equipment maintenance and repairs, instant alarms for repetitive testing of issues for engineers to gauge the issues right away and begins repairs as needed to minimize downtime.

Production Line Combination And Energy Saving Plan

We centralize the SMT scheduling and production with double production lines. We saved a total amount of NT\$4,080,410 on nitrogen and electricity in 2021. HTC also developed relevant production and testing equipment that can effectively share and recycle jigs and accessories at the same time. As a result, parts can be recycled with zero waste.



Aluminum extrusion and recycled materials dismantled from old project stations are re-assembled as new ones.

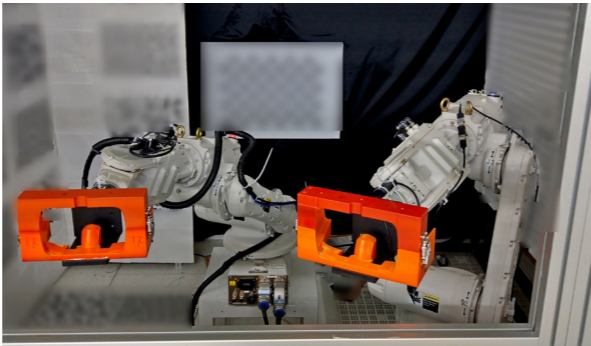


CCD camera modules dismantled from old jigs are applied 100% on new project stations, and are re-designed as new equipment.

Renovation Project: Test Station for the Cooperation of Dual-arm Manipulators

To reduce the transportation of products between test stations, use less space, and promote efficiency, HTC built a new test station using computers, robot manipulators and other objects and materials from old product test stations. In the new station, dual-arm manipulators cooperate to perform different tests, such as an IMU (inertial measurement unit) non-defective unit test and 6DOF tests.

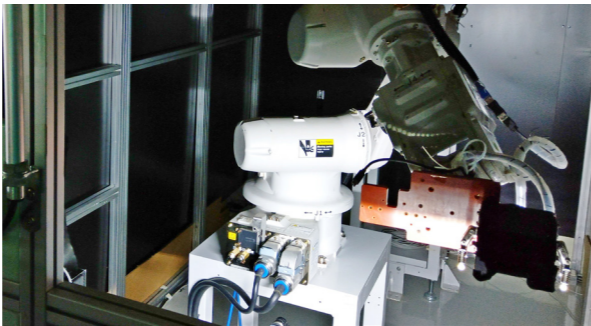
The renovation was successfully certified on March 30, 2021, and will begin its work at the VIVE Focus Plus IMU+6DoF test station



VIVE Focus plus dual-arm test environment

Adoption of 8-CCD at the VIVE Wrist Tracker IR-LED test station

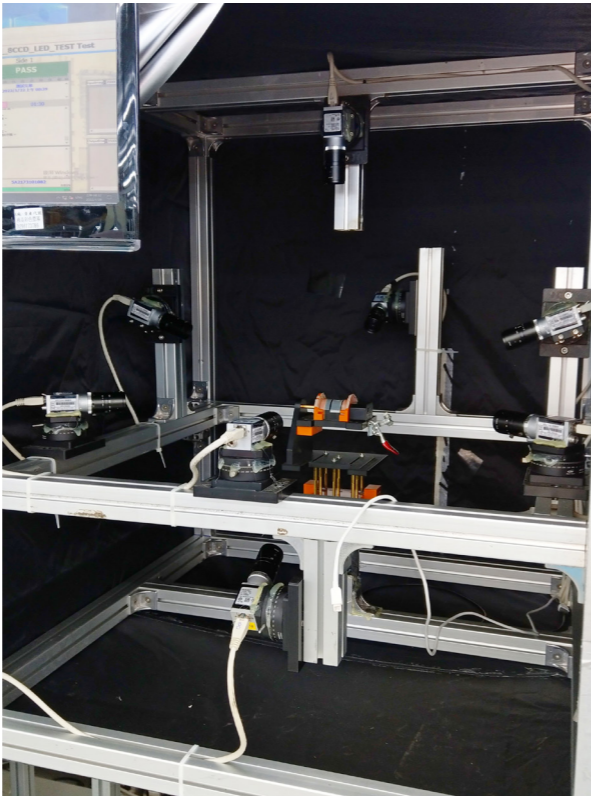
It took 250 seconds to complete a test on the Focus 3 Controller's LED with a manipulator to rotate the DUT, and a single CCD camera to take pictures from six angles. Now with CCD, and aluminum extrusion material and cloth from old product test stations, it takes only 100 seconds for a DUT of the VIVE Wrist Tracker's LED to be tested while eight CCD cameras capture a fixed DUT from eight angles in one shot, saving nearly 150 seconds. This setting commenced operations on January 14, 2021.



Manipulator test setting in the dark room for the Focus 3 Controller's LED



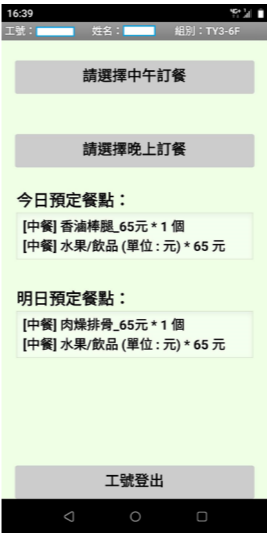
Exterior of 8-CCD test equipment for the VIVE Wrist Tracker



Exterior of 8-CCD test equipment for the VIVE Wrist Tracker

Meal pre-order system for MFG center

To reduce food waste, on May 18, 2021, we began to use an Android meal ordering app and Excel VBA program to assist Restaurant TY3 6F in making the precise number of meals required and facilitate an efficient meal ordering process for employees in the Manufacturing Center.



Android meal ordering app

	A	B	C	D
1	今日訂餐表單名稱		清空資料	更新今日訂餐資料
2	1月25日(二) 中午訂餐調查		<input checked="" type="radio"/> 中餐 <input type="radio"/> 晚餐	VER : 1.1.3
3				20220125
4	今日訂餐組別	今日用餐人數	今日訂餐人數	水果總金額
5	TY3-6F	553	531	13735
6				
7	[中餐] 加值快餐 (數量)	[中餐] 快餐 (數量)	[中餐] 素食 (數量)	[中餐] 水果 (單位 : 元)
8	98	179	16	13735
9				
10	[晚餐] 加值快餐 (數量)	[晚餐] 快餐 (數量)	[晚餐] 素食 (數量)	[晚餐] 水果 (單位 : 元)
11	0	0	0	0

Excel VBA program summing up the orders of the day of the MFG Center

Material Recycling And Reuse

NT\$ 1,140,924 saved in 2021 from recycled of aluminum plates, solder paste, solder spatter and steel plates, and reuse of materials in the M/B process, FPC process and Synthetic Stone Carrier.

Improvement of Production and Enhancement of Yield Rate

Through the overall improvement of the production, quality, personnel educational training, raw material quality control, jig improvement, production automation and testing, and precision testing, etc., we increased the life and lifecycle of products, and decreased electronic waste that damages the environment. In addition, we increased the production efficiency through trial production line adjustments.

		2020	2021	Trend
Annual Basic Return rate	VIVE	0.36%	0.24%	↓
	Smartphone &IOT	4.66%	2.71%	↓

Energy and Paper Saving Measures

Paperless routine report report/ SOP/ testing specs with OQC were introduced. Around 15,000 pieces of A4 paper (70kg) were saved annually. In 2021, we have adjusted the testing frequency according to material quality risks so we can reduce the time taken to use equipment and instruments. Annually, we can save up to 30% of electricity (about 1,200 degrees), 30% aluminum plate consumption, and extend the lifespan of X-Ray light pipes by 35%.

Production line optimization and merging of process units of high similarity. The merger between the warehouse and packaging line in 2021 not only reduced manpower costs in the warehouse but also conserved NT\$ 376,857 worth of electricity.

Sustainable Product

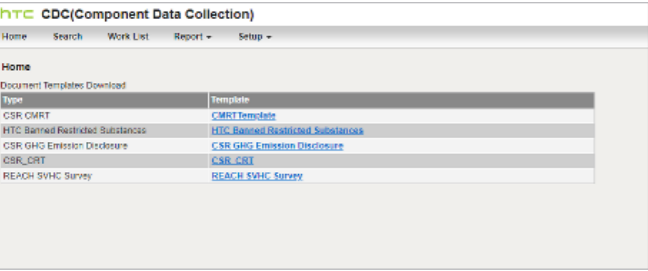
The Green Supply Chain Management System

HTC has setup the Green Supply Chain Management platform since 2006 to assist R&D engineers to select green materials from the product database that comply with both International regulations and customer requirements. Green materials are used from the start of design to significantly enhance the reliability and related validation process and schedule of green products.

Since 2018, the CDC (Component Data Collection) subsystem has been added to the Supplier Portal System to address the issues required by the Supplier Code of Conduct, such as conflict minerals, banned and restricted substances, and greenhouse gases Emissions, etc., set the annual supplier targets, tracked and summarized through the system.

The survey of new suppliers shall comply with the HSF scoring standard. As for the existing suppliers, the HSF performance evaluation was added to the Supplier Performance Management System since 2016. Improvements are reviewed and checked via the implementation of the quarterly supplier meeting.

Joint effort with supply chain members in increasing our ESG performance in the 2022 supplier inclusion and performance rating.



Taking circular economy as the direction for development

In order to achieve the goal of sustainable development, the thinking of circular economy is adopted to design and manufacture HTC products. We think about how to use the limited resources of the earth cautiously so that maximum efficiency can be generated and the effectiveness can be maintained within the industrial system to achieve sustainable operation. The following are our practices:

- Maximal use of single plastic material helps make recycling easier. Exclusion of materials made with hazardous chemical substances and lightweight products are the future product design.
- Extended product lifecycle; use of modular designs for hardware upgradability and for changing spare parts.
- Product energy-saving design.
- Use recycled materials for manufacturing and packaging.
- Reduce the environmental impact of the manufacturing process, use recycled water and renewable energy.

Carbon Footprint and Lifecycle Assessment Related Planning and Reporting Memorabilia

HTC has been conducting product environmental impact investigation and analysis in accordance with life cycle assessment methods since 2010. The annual action plans are set out below:

1. In 2010, we participated in the Product Environmental Information Disclosure Program of the Industrial Development Bureau MOEA and completed the Environmental Protection Declaration (EPD) with 19 suppliers.
2. In 2011, we participated in the Low Carbon Product Design Program of the Industrial Development Bureau MOEA, and completed carbon footprint analysis and low carbon design counseling with 15 major suppliers.
3. In 2013, we cooperated with 11 suppliers to complete the ISO/TS14067 product carbon footprint inspection.
4. In 2014, our main action plan is to establish carbon reduction targets and action programs by providing the major suppliers with detailed life cycle investigation data analyses.
5. In 2015, cooperated with 8 suppliers, fulfilled two products carbon footprint inspection.
6. In 2016, water footprint inspection and third-party verification have been accomplished.
7. Starting from 2016, the supplier GHG autonomous inventory was initiated. Suppliers are required to submit GHG inventory data in the first half of each year. The response rate in 2021 reached 100%.
8. In 2018/2019, HTC join a CDP supply chain program member. In the first year, major suppliers were invited to participate in the CDP Carbon Disclosure Questionnaire and the annual response rate reached 48%. In 2019, invited more major suppliers to participate in the survey and the annual response rate reached 61%.
9. In 2022, we plan to carry out product carbon footprint certification for the VR product - VIVE Flow to grasp the carbon content of the product.

Environmentally friendly with sustainable packaging

The packaging material used for HTC smartphones is subject to product safety and appearance requirements. We take into account the impact of packaging material on the environment. We uphold the promise of being environmentally friendly and sustainable. Thus, we make efforts to reduce product packaging. Our considerations include:

1. Reduction of the amount of material used.
2. The use of biodegradable raw material.
3. Printing with environmentally friendly ink (soy ink).
4. The facilitation of shipment.

All the packaging materials for HTC products are compliable with the EC directive on packaging (EU 94/62/EC) and the US requirement on packaging (Model Toxics in Packaging Legislation of USA). The printing ink used on the packaging material is low-volatility ink or soy ink certified by the American Soybean Association. By utilizing recyclable packaging materials and lightweight design, we minimize the environment impact with our product packaging design.

History of HTC “Sustainable Packaging”

Weight

Has been reduced, helps to reduce CO₂ emission resulting from transportation.

Transportation

One pallet can carry more packs and help reduce freight

2021 Smartphone Packaging Material Analysis

Material	Weight (g)	Recycling Weight (g)	Recycling Rate (%)
Chipboard	89	71.2	80
calendered paper	20	0	0
Anti-scratch film	1	0	0
Black cards	43	36.55	85
corrugated fiberboard	477	357.75	75
PP material	1.32	1,188	90
Sum	631.32	466.68	73.9


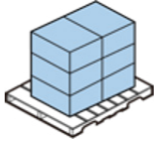

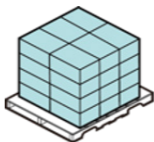

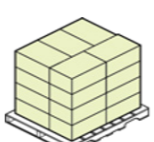

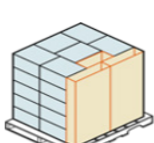

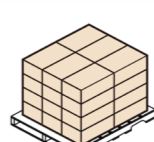

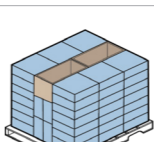
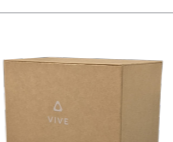
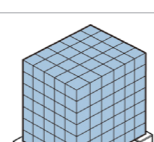
2021 VR Packaging Material Analysis-VIVE FOCUS 3

Material	Weight (g)	Recycling Weight (g)	Recycling Rate (%)
White cards	508.3	0	0
E flute	281.2	281.2	100
Others (Such as calendered paper,PET membrane of plastic bags.etc.)	25	0	0
Sum	814	281.2	35

2021 VR Packaging Material Analysis-VIVE FLOW

Material	Weight (g)	Recycling Weight (g)	Recycling Rate (%)
120g Kraft paper	24.2	3.6-7.3	15-30
400g Kraft paper	29.3	0	0
Chipboard	122.3	122.3	100
F flute	5	5	100
White Cards	27.9	0	0
PS Tray	23.8	0	0
PE bag	3.5	0	0
Sum	236	125.9-129.6	53-55

The material of VR packaging- Utilize recyclable packaging materials and lightweight design

	Dimensions	Weight(g)	The number of pallets	ECO Features
2015 Rigid Box	 574x420x212mm	3,000	 6pcs	<ul style="list-style-type: none"> Printed with two colors and reduce the ink use.
2016 Pizza Box	 415x295x181mm	1,800	 24pcs	<ul style="list-style-type: none"> Volume reduced by 55%. Weight loss by 40%. Printed with two colors and reduce the ink use.
2017 Pizza Box	 532x344x185mm	2,250	 20pcs	<ul style="list-style-type: none"> Reduce printing with ink. Share to reduce the generation of new packaging materials.
2018 Pizza Box	 418x338x188mm	1,200	 30pcs	<ul style="list-style-type: none"> Reduce printing with ink. Extremely simplified packaging design.
2019 / 2020 Pizza Box	 520x302x182mm	1,570	 24pcs	<ul style="list-style-type: none"> Reduce inner packaging with plastic. Use higher recycled materials on the outer box.
2021 Pizza Box (FOCUS 3)	 375x338x126.5mm	820	 54pcs	<ul style="list-style-type: none"> Use higher recycled materials on the outer box. Use of corrugated board that is lighter yet sturdier. Best pallet pattern to reduce carbon footprint.
2021 Rigid Box (VIVE Flow)	 184x91x123mm	240	 420pcs	<ul style="list-style-type: none"> Monotone color print for a minimalist, sophisticated design. Optimized space allocation, light and compact outer design to change perceptions of a heavy VIVE series.

Sustainable Supply Chain

Suppliers are a vital factor for the continued success of HTC, we were founded in Taiwan and are a Taiwanese company whose operations and procurement drives the development of the related sectors. Besides key components, we try to purchase local raw materials and related equipment. The amount of local raw materials purchased accounted for 62.88%. While demanding high-quality services and products, we also use high ethical and environmental standards to manage our supply chain.

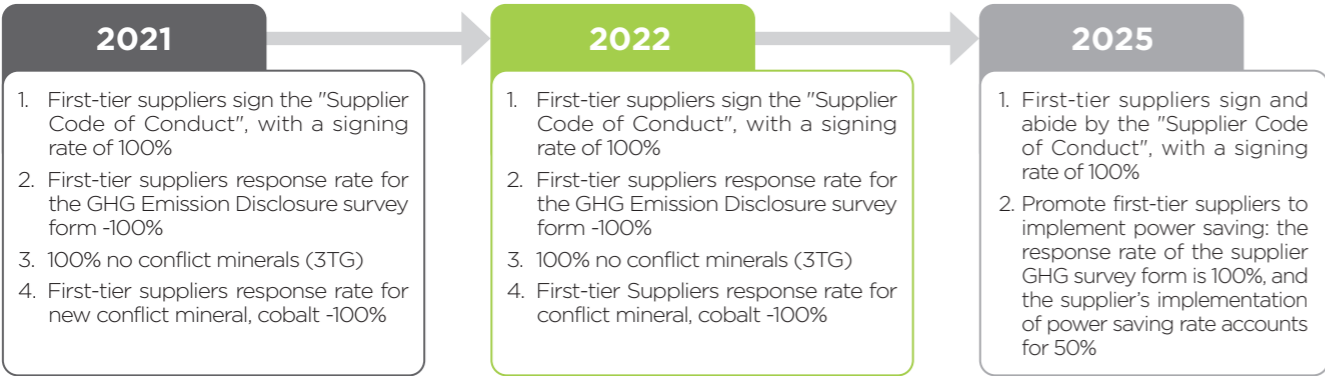
HTC follow the Responsible Business Alliance Code of Conduct and formulated an “HTC Supplier Code of Conduct”, which aims to protect the environment with our supply chain partners, safeguard the human rights of our workers, their ethics, safety and health, and extend this social responsibility to the supply chain system. And organize irregular supplier meetings every year to promote relevant topics.

HTC Supplier Code of Conduct HTC

The HTC Supplier Code of Conduct details the responsibilities and regulations that have to be followed by all suppliers doing business with HTC. In addition, HTC also conducts a regular assessment of the implementation of the Code as the basis for our further selection of business partners. At the end of 2021, there were a total of 106 suppliers signed the Supplier Code of Conduct, with the rate of signing reached 100%.

The provisions about labor issues, health and safety, and ethics were framed with reference to Responsible Business Alliance Code of Conduct and the related documents issued by the United Nations Universal Declaration of Human Rights. For more information about the “HTC Supplier Code of Conduct,” please visit www.esg.htc.com

Goals for Supplier Management



The HTC Supplier ESG Assessment and Audit

In addition to implementing corporate social responsibility of our own brand, HTC also delivers the concept and requirements of ESG to the supply chain. We established the responsible unit in 2010 and then initiated investigations of those suppliers who had implemented ESG. This was not only to verify their compliance of the HTC Supplier Code of Conduct, but also to provide supplier consulting and coaching functions to build and enhance ESG concepts and actions.

A Quick Look at the HTC Supply Chain Management

Definition of HTC Critical Supplier	Owing to differences of industry characteristics and supplier category, HTC identifies critical supplier and major audit for reference by following two principles: 1. Suppliers' annual amount of transaction representing more than 10% of total purchase. 2. According to the components which vary based on technology, markets and purchase annually, ESG Office and sourcing departments define critical suppliers of current year based on different situations every year.	
Management Mechanism	Self-assessment Survey	<ul style="list-style-type: none">● All candidate suppliers are required to fill in the Self-assessment. Since 2016, the weight of ESG-related questions in the Self-assessment survey for new suppliers was increased. During each quarterly supplier review meeting, the ESG-related performance of major suppliers will be check and the results will act as the reference for the supplier screening process.● For new suppliers, the CSR self-assessment questionnaire must be filled and returned. The content of the questionnaire is designed based on the five major aspects of HTC's Supplier Code of Conduct: labor, environment, health and safety, ethics and management system. Supporting information is provided for inspection.
	On-site Audit	<ul style="list-style-type: none">● "Supply Chain CSR Compliance Audit" has been implemented since 2011, based on initial risk determination (including geographic, location, products, news, etc.)● In 2017, added new audit item for the RoHS and REACH directives, hazardous substances subject to control are required to be audited in the manufacturing process.● In 2021, a total of 106 suppliers will conduct risk assessments, and 6 high-risk suppliers will be selected for on-site audits. Due to the COVID-19 epidemic, the implementation will be postponed to 2022Q1-Q2. As of the end of March, on-site audits of 4 suppliers have been completed.
On-site Audit Results (Total of 69 Noncompliance Items in 2021)	Labor Rights	17 cases, mainly about wages and benefits and overtime issue.
	Health and Safety	33 cases, mainly on insufficient occupational safety measures in the operating environment.
	Environment	14 cases, mainly about Inadequate hazardous waste management measures.
	Ethics	5 cases, mainly for the failing of establishing management procedures for employees to accept inappropriate payments and gifts
	Treatment and Responses	In response to the above findings, besides requesting the suppliers to respond with improvement measures, HTC also provided management system and implementation experience to suppliers for reference and put them in the priority list for on-site audit in next year in order to prevent similar incidents from happening.



Responsible Procurement of Minerals

HTC supports the global boycott of conflict minerals and states in procurement contracts, the Supplier Code of Conduct, Provisions of Purchase Orders and the Supplier Social Responsibility Audit the issues of conflict minerals and endorses the Conflict-Free Smelter Program, committing to the use of non-conflict minerals and not to primary minerals originating from Congo or other nearby conflict countries in Central Africa.

Based on the Conflict Minerals Reporting Template, HTC has set up KPIs, tracking the progress of sign-back to effectively manage the supply chain and reduce the risk of breaching contracts. We completed the development of products using conflict-free minerals in 2016. All minerals used in HTC products from the end of 2017 are CFSI/ RMI qualified smelters. In response to international trends, HTC began to investigate the sources of "cobalt" metal mines of all suppliers since 2020, and the response rate of the CMRT and Cobalt in 2021 reached 100%, and will continue to be updated every year in the future.

The intended use of conflict minerals



Point of use:
Contact in the circuit boards
Intended use:
As circuit board contacts to ensure proper connection.



Point of use:
Soldering in the circuit boards
Intended use:
Solder to mount circuit board electronic components.



Point of use:
Tungsten Alloy used in Vibrator
Intended use:
Tungsten alloy used in the phone vibration motor.

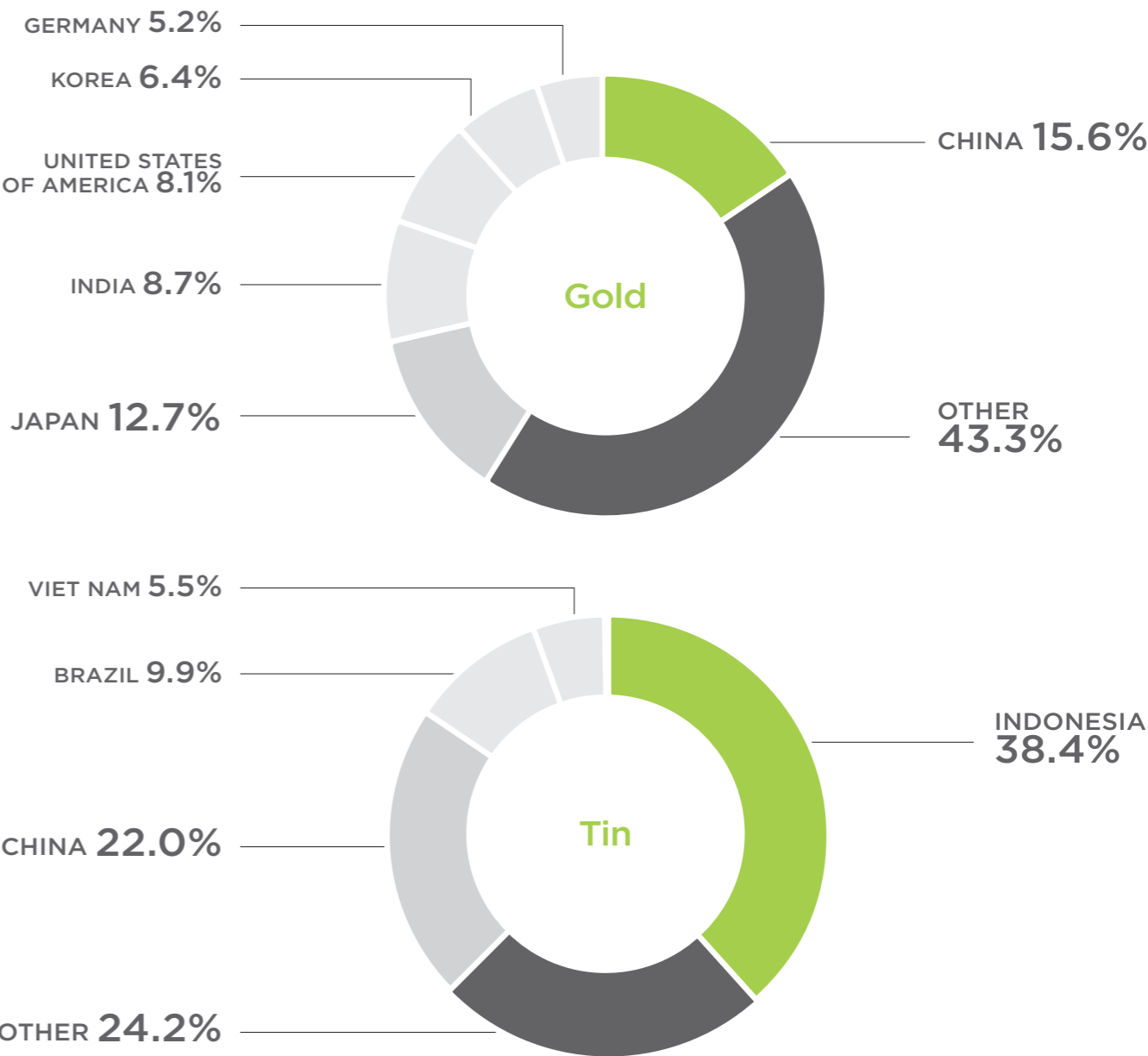


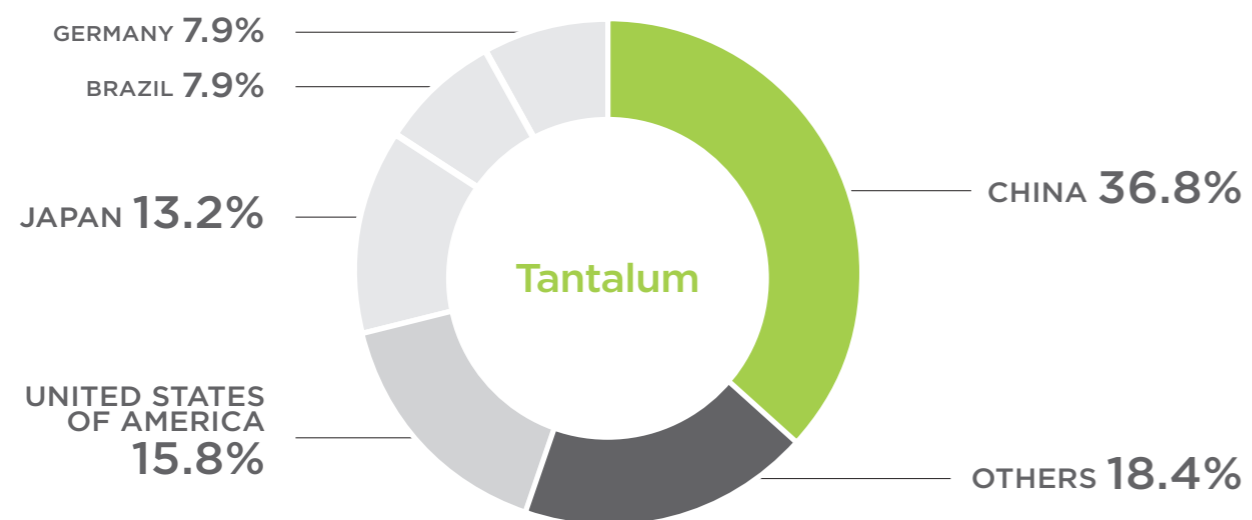
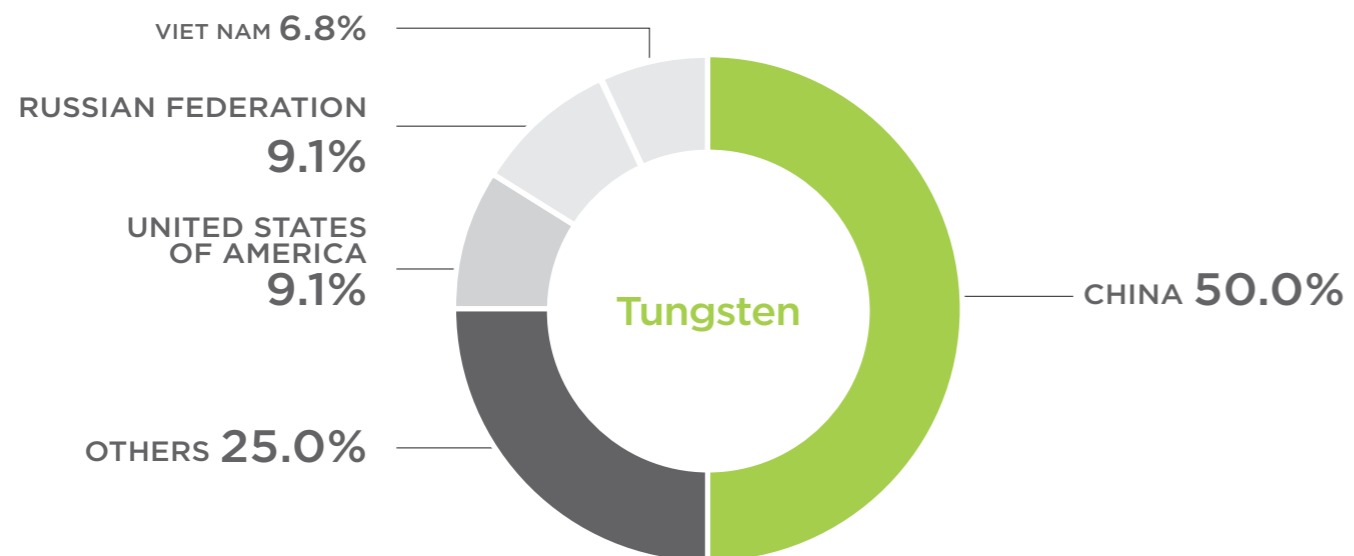
Point of use:
Tantalum-Capacitor
Intended use:
An element used in tantalum capacitors.



Point of use:
Used on lithium batteries
Intended use:
As electrode material for lithium battery

Distribution map of countries where smelters mainly use minerals





Note:

In the smelter country display graph, the others category is countries with a percentage value of less than 5%. The countries of conflict mineral smelters in this category are as follows:

1. Smelter countries of Gold include: Russian Federation, Switzerland, United Arab Emirates, Italy, Brazil, Canada, Kazakhstan, South Africa, Turkey, Belgium, Colombia, Mexico, Taiwan, Uzbekistan, Uganda, Zimbabwe, Andorra, Australia, Austria, Chile, Czechia, Indonesia, Kyrgyzstan, Lithuania, Malaysia, Mauritania, Netherlands, New Zealand, Norway, France, Ghana, Philippines, Poland, Saudi Arabia, Singapore, Spain, Sudan, Sweden, Thailand
2. Smelter countries of Tantalum include: Estonia, India, Kazakhstan, Mexico, North Macedonia, Russian Federation, and Thailand.
3. Smelter countries of Tin include: United States Of America, Bolivia, Japan, Malaysia, Spain, Thailand, Belgium, India, Myanmar, Peru, Philippines, Poland, Russian Federation, Rwanda, Taiwan
4. Smelter countries of Tungsten include: Germany, Japan, Korea, Austria, Brazil, Philippines, and Taiwan.



Friendly Workplace _____



Staff management

Human Rights and a High Standard of Professional Ethics

HTC is an international corporation, and follow the Responsible Business Alliance Code of Conduct, we attach great importance to the human rights of labor, and the principle of equality and anti-discrimination is our core concept for multicultural employees. We provide equal and fair employment opportunities for employees. There is no race, gender, age, physical and mental disabilities, religion, ethnicity, or any other form of discrimination protected by relevant laws.

HTC is committed to the highest standard of social care, environmental protection, and ethical integrity. We fully respect human rights and workplace rights. We have zero tolerance of any form of abusive labor conditions. HTC requires all suppliers to maintain the same standard of corporate responsibility and announces the “Modern Slavery Act Transparency Statement”. We collaborate with suppliers to abide by the latest statement to embody justice and human rights.

No Child Labor

HTC strictly prohibits the use of child labor in our own manufacturing facilities as well as those of our manufacturing suppliers. We mandate proof of age for employment to ensure we meet all local labor laws and the requirements of the jurisdictions where we operate. Even student workers need to be 16 years old.

HTC Code of Conduct

We place great importance on employee integrity and uphold high ethical standards. The company has established the “HTC Code of Conduct” as the prime directive that directs all our employees in the performance of their work. Every person in our employment, in any of our branches and subsidiaries, no matter their position, level and location, must comply with these ethical standards. In countries where HTC has a manufacturing presence, this Code is higher than any local regulations unless a provision is inconsistent with a legal order issued by the local government. In any case of conflict with the laws in force in places where HTC operates, the local HTC HR team shall submit the context of the laws at issue to HTC HQ for review. Except for a case such as the above, any violation of the “HTC Code of Conduct” can lead to serious disciplinary action, including the termination of employment.

To ensure that the “HTC Code of Conduct” is fully implemented, we conducted the external third-party compliance verification for the implementation of the “HTC Code of Conduct” in 2018. The verification was passed and relevant certificates were obtained. We will continue to improve and practice the Code of Conduct in the future.

New employees undergo an orientation training session on the same day they report for duty. They learn about the HTC corporate policy, the Employees Code of Conduct, ESH policy and ESG, and also including anti-corruption, sexual harassment and human right issues such as Prevent illegal violations of duties courses. An e-learning program for new employees is also provided that explains the HTC corporate principles using exemplary cases.

Overview of Human Resource Structure

HTC recruits promising talent from all around the world. At the end of 2021, HTC global employee workforce totaled 2,178. Of these, 27.59% were foreign supervisors, accounting for the total number of global executives above manager level; foreign supervisors and professionals accounted for 17.55% of the total number of global executives and professionals, and 26.24% of the supervisors were women.

HTC’s turnover rate of direct workers in 2020 was 8.31%*, with the statistical frontier encompassing the Taiwan region (including students involved in industry-university cooperation programs, interns, and foreign workers). The indirect workers turnover rate was 22.92%, with the statistical frontier covering the world.

*Note: Turnover rate= the number of employees leaving the company/ the total average number of employees per year. The figure does not include employees who were involuntary resigned employee.

2021 HTC Human Resource Structure Overview

		Male		Female		Total	
		Person	%	Person	%	Person	%
Employee Job Type	Manufacturing employees	169	7.76	346	15.89	515	23.65
	General employees	294	13.50	198	9.09	492	22.59
	Middle supervisor	784	36.00	332	15.24	1,116	51.24
	Senior supervisor	43	1.97	12	0.55	55	2.53
Employment Type	Full-time employees	1,270	58.31	874	40.13	2,144	98.44
	Dispatch employees	0	0.00	0	0.00	0	0.00
	Part-time employees	20	0.92	14	0.64	34	1.56
Employment Contracts	Employees under indefinite contract	1,265	58.08	878	40.31	2,143	98.39
	Temporary Employees under fixed-term contracts	25	1.15	10	0.46	35	1.61
Employees with physical or mental disabilities		5	0.39	5	0.56	10	0.46
Employee numbers	Global Employee	1,290	59.23	888	40.77	2,178	100

Note:
1. Manufacturing employees: Leader, Foremen, Operators, Technicians.
2. General employees: Engineers, Specialist, Leader, Foremen.
3. Middle supervisor: Director, Managers, Assistant Manager, Supervisor and Special Assistant.
4. Senior supervisor: CEO, CMO, CFO and other executive positions above Vice GM.
5. The dispatch personnel worked as supportive assistants. No dispatch personnel in 2021
6. Regular contracts include 35 staff

The Global Distribution of HTC Personnel

2021 HTC employee position distribution by age

Male										
Age	Manufacturing Employee		General Employee		Middle Supervisor		Senior Supervisor		Total	
	Person	%	Person	%	Person	%	Person	%	Person	%
≤29	22	1.01	157	7.21	19	0.87	0	0.00	198	9.09
30-50	136	6.24	135	6.20	697	32.00	28	1.29	996	45.73
≥51	11	0.51	2	0.09	68	3.12	15	0.69	96	4.41
Total	169	7.76	294	13.50	784	36.00	43	1.97	1,290	59.23
Female										
Age	Manufacturing Employee		General Employee		Middle Supervisor		Senior Supervisor		Total	
	Person	%	Person	%	Person	%	Person	%	Person	%
≤29	17	0.78	89	4.09	15	0.69	0	0.00	121	5.56
30-50	260	11.94	105	4.82	300	13.77	6	0.28	671	30.81
≥51	69	3.17	4	0.18	17	0.78	6	0.28	96	4.41
Total	346	15.89	198	9.09	332	15.24	12	0.55	888	40.78

Note: The calculation method of the proportion is the number of persons in this category / the total number of employees at the end of the period

HTC’s total employees by job title in the past 3 years

Year		Manufacturing Employee		General Employee		Middle Supervisor		Senior Supervisor		Total	
		Person	%	Person	%	Person	%	Person	%	Person	%
2019	Male	359	9.19	707	18.10	1,180	30.22	58	1.49	2,304	59.00
	Female	709	18.16	432	11.06	444	11.37	16	0.41	1,601	41.00
	Total	1,068	27.35	1,139	29.17	1,624	41.59	74	1.90	3,905	100.00
2020	Male	209	8.02	401	15.39	901	34.59	46	1.77	1,557	59.77
	Female	417	16.01	256	9.83	362	13.90	13	0.50	1,048	40.23
	Total	626	24.03	657	25.22	1,263	48.48	59	2.26	2,605	100.00
2021	Male	169	7.76	294	13.50	784	36.00	43	1.97	1,290	59.23
	Female	346	15.89	198	9.09	332	15.24	12	0.55	888	40.77
	Total	515	23.65	492	22.59	1,116	51.24	55	2.53	2,178	100.00

Note:
1. Manufacturing employees—Leader, Foremen, Operators, Technicians.
2. General employees—Engineers, Specialist, Leader, Foremen.
3. Middle supervisor: Director, Managers, Assistant Manager, Supervisor and Special Assistant.
4. Senior supervisor: CEO, CMO, CFO and other executive positions above Vice GM.

By Citizenship

Year	Domestic Employees				Foreign Employees			
	Male		Female		Male		Female	
	Person	%	Person	%	Person	%	Person	%
2019	1,856	47.5%	1,285	32.9%	448	11.5%	316	8.1%
2020	1,312	50.4%	888	34.1%	245	9.4%	160	6.1%
2021	1,097	50.4%	756	34.7%	193	8.8%	132	6.1%

By area

Year	APAC		America		EMEA		Total
	Person	%	Person	%	Person	%	
2019	3,603	92.3	196	5.0	106	2.7	3,905
2020	2,418	92.8	103	4.0	84	3.2	2,605
2021	2,005	92.1	94	4.3	79	3.6	2,178

2021 HTC New Recruits of Employees Worldwide Statistics

Age	APAC				America				EMEA			
	Male		Female		Male		Female		Male		Female	
	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%
≤29	71	3.54	59	2.94	1	1.06	1	1.06	3	3.80	3	3.80
30- 50	76	3.79	46	2.29	17	18.09	6	6.38	3	3.80	5	6.33
≥51	2	0.10	0	0	1	1.06	0	0	0	0.00	0	0
Sum	149	7.43	105	5.24	19	20.21	7	7.45	6	7.59	8	10.13
Total by Region	254				26				14			
New Recruits of Employees %	12.67				27.66				17.72			

Note:
1. Percentage of new hires by each age range = number of new employees in each category / total number of employees in each region
2. Total number of employees by region at the end of the period: 2,005 in APAC; 94 in the America; 79 in EMEA

2021 HTC Turnover of Employees Worldwide Statistics

Age	APAC				America				EMEA			
	Male		Female		Male		Female		Male		Female	
	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%
≤29	128	6.38	74	3.69	0	0.00	0	0.00	1	1.27	4	5.06
30- 50	281	14.01	217	10.82	22	23.40	8	8.51	12	15.19	4	5.06
≥51	18	0.90	15	0.75	5	5.32	0	0.00	2	2.53	0	0.00
Sum	427	21.30	306	15.26	27	28.72	8	8.51	15	18.99	8	10.13
Total by Region	733				35				23			
Turnover of Employees %	36.56				37.23				29.11			

Note:
1. Percentage of turnover by age = number of retired employees in each category / total number of employees in each region
2. Total number of employees by region at the end of the period: 2,005 in APAC; 94 in the America; 79 in EMEA

Talent Attraction and Retention

HTC is aware that the power of innovation comes from its employees, and therefore we encourage employees to explore the unknown and bring innovative design into daily work. HTC has built a workplace that is diverse, challenging, dynamic and positive. With an open, inclusive attitude, we give colleagues sufficient authority and space to develop and grow so we can attract the best talent from around the world.

Attracting Talent – Frontline Supervisors are the Best Brand Ambassadors

While most businesses tend to focus on environmental protection and social welfare when executing ESG goals, HTC is committed to cultivating talent as a corporate responsibility priority. In this changing era when talent poaching challenges the entire industry, HTC believes that front-line supervisors are the best brand ambassadors. We adhere to our most important corporate value – communication and influence, which are key to the continuous investment and development of forward-looking technology.

In 2021 we had several supervisor starters and organized a front-line partner recruiter to share their thoughts on cultivating talent, helping managerial staff design questions to include in the HTC competence requirements. By extended questioning skills and avoiding blind spots and misunderstandings, supervisors can learn how to recruit the best people for roles. A recently launched course received positive feedback of 4.7/5.

The partner recruiter also checks on supervisor’s interview skills by conducting joint interviews, and gives individual feedback to help them improve their talent screening abilities. After all, the decisive factor of corporate competence relies on talent. In addition, people of diverse backgrounds and expertise are the formula for creative ideas and the power to drive innovation, shaping the charm of our Company and fulfilling our mission: “Let’s Bring People Together”.

Youth Empowerment Around the Globe

Our employment policy looks at potential talent around the globe and recruits regional elites in AR/VR, 5G, blockchain and AI fields. Recruitment information goes on our website and social media, as well recruiting talent on campuses, forums and in technology seminars, where students engage and interact with HTC. Online interviews with video calls enable us to interview people from around the world and enlist a wider talent pool.

Moreover, we have fixed vacancies for internships every year that connect student knowledge and techniques with industrial practice, boosting students' learning as they familiarize themselves with our corporate culture and build a foundation for their future careers. Through academic partnerships, HTC explores and cultivates talent at an early stage to offer immediate career opportunities after completing their education.

Diverse Recruitment Approaches to Put the Spotlight on Brand Value

Combining products with technology trends in recent years, HTC provides careers that are meaningful and worth developing, excellent employee benefits, and a valuable work-life balance. We promote these themes on Facebook, LinkedIn and YouTube to bring people's attention to the benefit of working with us and to help build our brand image to reach our maximum recruitment potential.

Remote Interviews and On-boarding

The global industry took a great hit in 2020 due to Covid-19. The post-pandemic era propelled forward the digital transformation, driving technology manpower needs. Taiwan entered a level 3 alert in May 2021, so recruitment work came to a stop for many corporations. We took the opportunity to interview candidates remotely using video call software and continued to fill roles while offering the employment market decent job vacancies.

Our groundbreaking online on-boarding system allowed recruits to sign and submit all paperwork with one click from the comfort of their own homes, deliver notebooks with same-day delivery so they were prepared to commence orientation and training with all the Company information needed. The system greatly increased application numbers and even went viral, demonstrating our awareness of best practice during unprecedented times.



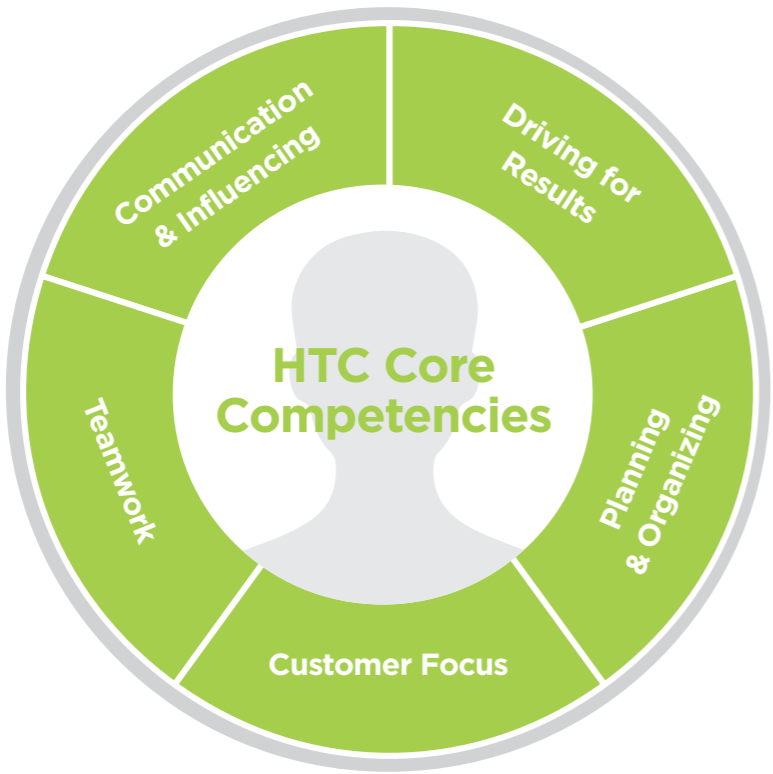
Talent Cultivation and Development

As HTC advances and pursues profit, it also values individual growth, and therefore has built a fine environment and culture for advanced studies. We connect industrial needs and career development and encourage employees to strengthen their professional knowledge. Talent development comprises one of our key management indicators and we expect reciprocity between employees and the Company.



Five Core Competencies

To empower HTC employees with sufficient professional knowledge and allow them to engage in different challenges and stay ahead of the industry, we developed a learning roadmap based on five core competencies. The roadmap incorporates internal and external training, and a diverse learning platform, comprising an employee cultivation program that boosts learning results.



Talent is HTC's greatest asset, and the key to outstanding innovation and sustainable operations. Our comprehensive talent development system aligns with the Company's business development strategy, outlines key learning points for each level and a corresponding training course, expanding manpower assets and bolstering competitiveness. In addition, knowledge-sharing and practice in the workplace also further develops professional know-how, driving employee learning and improvement.



Diversified Learning Channel, Providing a Comprehensive Learning Environment

- The design of the internal training courses is centered on the five core occupational functions and the learning effect is substantiated through a series of diversified channels.
- There are physical and online courses for learning skills and drills.
- Hold the creative thinking forums, inviting experts from various fields around the world to share industry trends and future technology blueprints.
- Library (physical and online magazines) and online learning platforms and other tools to encourage employees to learn independently



- All orientation and new employee training are finished within one month, during which new hires receive a weekly newsletter introducing them to HTC's culture, Company vision, and products of different business groups. Various resources are available to support employees and help them work on their professional development.
- Newly hired executives receive a customized one-on-one orientation program to onboard them quickly.

Cultivating Key Leaders

HTC proactively promotes company culture in the face of rapid changes in the global industry and new patterns of global enterprise competition and cooperation. HTC quickly adapts to a constantly changing environment and cultivates management talent with an international vision, expecting their excellent managers to become present and future drivers who will continuously lead HTC towards steady growth and development in times of hardship and challenge.

In order to cultivate key leadership teams, the company has tailored a series of leadership courses for leaders at different levels, and strengthened the three functional aspects of company leadership management:

- Leading People
- Leading Change
- Strategic Thinking & Decision Making

Meticulous talent cultivation and development system

BU and Function head VP and above
LEAD Program
(Learn 、Engage 、Accelerate 、Develop)

An executive cultivation program designed for key talent to take over critical operational positions in the future. Inspires executives to deepen their learning and increases awareness of a people-leading, corporate-leading, and self-leading mindset through the Global Leadership Summit, operation training and study groups.

Director and AVP
HILL Program

A series of extensive in-depth courses scheduled to begin in 2022 to train the future talent cohort to take over important roles. Program planning began in the second half of 2021 and emphasizes three key capabilities of mid-level supervisors: professional operations and management, a pioneering and innovative mindset, and people-leading and influencing.

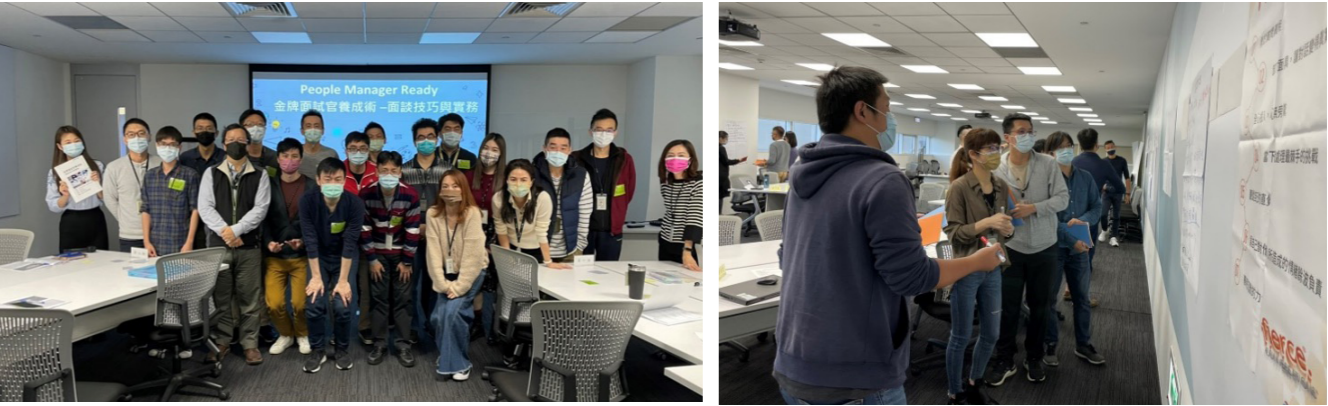
Manager level
PMR Program
(People Manager Ready)

Quarterly topics from Problem Analysis and Solutions to Labor Relations, Leading, Communication, Interview and Talent Selection enable quick adaptation of management tasks, interpersonal skills, and group communication techniques for first-time supervisors. There were nearly a hundred newly on-boarded supervisors in attendance in training sessions in 2021. The series received positive feedback of 4.7/5 overall.

Individual Contributor
Highly Effective People



LEAD Program



PMR Program

Training and Performance Integration

Along we grow the organization, we reaffirm our resolution to accelerate innovation and share with all our employees a mutual sense of common goals; the core of HTC's performance management system. Through performance management, employees set targets against their tasks, and mark standards for their performance. There are also several indicators to support employees in focusing and planning their tasks throughout the year.

HTC's performance management system aligns with the training and development structure. Employees can stay on track and know at which level they are performing by checking their individual performance targets set at the beginning of a year, clarifying areas that require improvement or training, and reviewing their tasks and targets with their immediate supervisor at the beginning of the 3rd quarter. They can also recalibrate key work points and arrange their work schedule accordingly. At year-end, employees conduct self-assessments on their progress, and then have an in-depth discussion with their supervisor about their performance targets and key improvement points for the following year. The 2021 overall employee performance development audit scored almost 100%.

The Performance Development Program was updated at the end of 2021. Feedback from cross-unit supervisors and colleagues was incorporated, giving a general assessment of employee work and team achievements as well as employee yearly targets, self-assessment and current performance records. This serves as the core tool for connecting employee development, salary design and training programs.

Thinker Forum

The Thinker Forum is a way through which employees stay in the know about novel knowledge and diverse applications. In 2020, the Forum invited Dr. Yuan Tseh Lee to discuss Global Warming and Sustainability in Taiwan, and what we should know from the global shift and energy transition in Taiwan. In January 2022, the Forum went online with Peter Pu, who spoke about the 2022 Latest Global Risk Trends – Sustainability Challenges and Opportunities with the Development of Technology, exposing employees to substantial learning and trends for the next 25 years of HTC.

English Leadership Resource and External Training Subsidy

As an international brand, in order to encourage employees to continue learning and providing themes needed for work so that employees can improve their English proficiency. All courses are guided by professional foreign teachers and the topics of discussion are based on situations that may be encountered in the workplace. Topics of the courses that have offered include: business email, business negotiation, customer complaint handling, business meetings, etc., allowing employees to make full use of the weekly gathering at noon to strengthen their English communication skill and apply it in the workplace!

In addition, HTC encourages employees to continue to absorb professional knowledge and to match their study program to their work to ensure growth. Also encourages employees to improve their professional knowledge via schools or other academic institutions, and apply the acquired knowledge to their work. The cost of the external training can be reimbursed at the end of the training upon application (reimbursement is based on the actual expenses). The subsidy provided for external training in 2021 was about 2.23 million.

e-Library

The HTC library closed in 2021 due to the pandemic to minimize the risk of infection from close contact, but continued providing e-journals so that content and information could still be accessed by employees, promoting good reading habits and continuous learning. By the end of 2021, the number of users of the e-journal service had reached 2,131.

Training Result

The 2021 average training time of HTC employees was 11.42 hours, down by 35.52% compared to 2020 as a result of the suspension of the majority of in-person courses due to the pandemic.

HTC Taiwan Employees Training Hours in the Past 3 Years

	Course (Hours)	Average Training Hours
2019	73,249	22.71
2020	39,054	17.71
2021	21,269	11.42

Note: Total number of training hours of the year/total number of Taiwan employees of the year end of period = average number of training hours per person of the year

Employees Training Hours and Sex Ratios at Taiwan All Levels in 2021

Level/ Gender	Total Training (Hour)		Average Training (Hour)	
	Male	Female	Male	Female
Manufacturing employees	4,968.7	11,003.4	30.11	32.17
General employees	1,269.8	1,024.5	4.79	6.03
Middle supervisor	1,927.2	866.6	3.02	3.63
Senior supervisor	185.0	24.0	5.61	2.67

Note: Total number of training hours of the year/total number of Taiwan employees of the year end of period = average number of training hours per person of the year

Salary and Benefits

HTC appreciates each and every worker. We show our gratitude through a generous compensation package, proper benefits and sharing profits. The remuneration package adheres to regional labor laws, and does not discriminate based on gender, race, nationality, age, religion and party affiliation. The Performance Development Program, market standards, and future development are referred to when salary adjustments are considered. Incentives are provided to match pay with organizational performance. The Company drives innovation by retaining and inspiring its talent.

Competitive Compensation

Our pay system is well organized and focused on building a workplace of exceptional and diverse talent. Every year we take an international salary survey to update market standards, offering a basic pay superior to the average. The current average basic pay of HTC employees is higher than the median of the internal salary survey, of which the basic pay of employees of many units exceeds the average of the high salary end of the market.

Proper pay adjustment improves talent retention. The adjustment assessment considers individual yearly performance and market salary predictions. Key employees of critical product technologies receive a retention bonus and long-term incentives spanning 1-3 years. Non-managerial positions are also entitled to stock warrants, so that employees have a deeper interest between team performance and Company economic growth, and are motivated to reach their full potential and contribute to teamwork.

Mean and median of full-time employees in non-supervisory positions

Item	2019	2020	2021	2021 v.s. 2020
Full-time employees	3,447	2,481	1,786	72%
Average salary (NT\$)	1,097,000	1,125,000	1,175,000	104%
Median salary (NT\$)	790,000	886,000	949,000	107%

Note: This data is audited by accountants.

2021 HTC Regular Earnings Ratio for Men and Women in Taiwan

New Recruits Basic Pay / Taiwan Minimum Wage Rate	
Five-day workweek scheme	1.00
Monthly rotating shift scheme	1.04

Note:

- Regular earnings include a base salary with additional benefits.
- The 2021 Taiwan minimum wage is NT\$24,000.

HTC Average Compensation Ratio for Men and Women in Taiwan

Category	Average Compensation Ratio (Men: Women)			
	General Employees	Manufacturing Employees	Mid-Level Management	High- Level Management
2019	1.01:1	1.16:1	1.24:1	1.31:1
2020	1.01:1	1.15:1	1.17:1	1.06:1
2021	1:1	1.24:1	1.24:1	1.26:1

Note:
1. The average base salary includes regular earnings and non-regular earnings. For example, an overtime premium.
2. Calculations are based on the monthly salary of employees in service in December 2021.

HTC Employee Salary and Benefit Increase Ratio in the Past 3 Years

Item	2019	2020	2021	2021 vs. 2020
Total employee salary and benefits expenses (NT\$)	4,201,438,000	3,485,698,000	2,518,708,000	-28%

Note: Total employee salary and benefits (proprietary financial statements)

Diversified Employee Welfare

Group Insurance

HTC and the Welfare Committee buy group insurance for employees, so that an employee who is hospitalized for sickness, injury, or who dies, can still provide some security and protection for their families. In light of the severity of the pandemic in Taiwan, HTC provided pandemic insurance to all employees in 2021 to double employee security and safety.

Staff Emergency Relief

In the event an employee falls ill, gets injured, becomes disabled or dies as a result of a job-related hazard, HTC provides compensation according to the Labor Insurance Act or other applicable regulations. HTC may offset the expense if the compensation for the same accident is made by the Company, and expresses sympathy through group insurance proceeds.

Education Scholarships for Children

The HTC Employee Welfare Committee provides scholarships for the children of employees from elementary school to college. Those who meet the application criteria can apply: NT\$800 for elementary school students, NT\$1,600 for junior high school students, NT\$2,000 for high school and vocational education students, including first, second and third year college students; and NT\$3,000 for college students in their fourth and fifth year. A total of 342 person applied for child education scholarship for the first semester of 2021, while 309 person applied for the second semester.

Meal subsidy program

Generally, employees receive NT\$130 for the whole day on weekdays, and the maximum subsidy for lunch and dinner on holidays is NT\$100. Clock-in employees and manufacturing employees go to work during normal attendance hours, with subsidies ranging from NT\$35 to 50 depending on the shift schedule, and provide daily afternoon tea.

Transportation Vehicles

HTC offers the shuttle bus service as the safe alternative for our employees to commuting to work and promote the idea of car-pooling and carbon reduction. Employees can conveniently keep track of a shuttle thanks to GPS at shuttle stops. Following a questionnaire on the Company internal website and at shuttle stops, the service is improved through user feedback. The Company also delivers documents between sites using the shuttle service to save waiting time.

Travel subsidy

The HTC travel subsidy increases according to seniority to acknowledge long-term contribution, and to encourage social activities and relaxation through travel.

Based on seniority, 2021 travel subsidy details as below:	
On Board before 2015/12/31	9,100
On Board between 2016/1/1 to 2017/12/31	6,800
On Board between 2018/1/1 to 2019/12/31	5,900
On Board between 2020/1/1 to 2020/12/31	3,000
On Board after 2021/1/1	None

A Five Star Gym

In order to encourage and promote the sports atmosphere and allow employees to develop good exercise habits, HTC has set up a fully equipped professional fitness space in office buildings, Various modern fitness equipment including free weight training equipment and weight training mat floor. HTC has commissioned professional fitness management consulting firms and professional suppliers to manage the gym and to provide full-time services. Six coaches with an emergency card or sports injury protection license are on shifts at site to provide onsite fitness instruction, fitness curriculum planning, and advice about the prevention of sports injuries. This provides employees with the best health consulting services and the environment, and the establishment of positive sports safety and healthcare. The gym was used 14,664 times in 2021.

In addition, the gym's courses are planned and arranged on various health topics and activities, such as two-month aerobic courses throughout the year to provide a diverse curriculum for employees. There are Yoga, Pilates, flywheel, core muscle group TRX, Body Combat, and muscle sculpture courses available. Employees can participate through an easy-to-use online registration. In addition, employees have access to the elevated sports space on the 17th floor of the Taipei office to play indoor basketball and badminton by simply registering. However, in 2020-2021, the pandemic measures impacted the gym. The number of users had to be controlled, and every other fitness machine was switched off to prevent close contact between people when exercising. Antibacterial sanitizer and pure water wipes were available at all equipment for users to wipe down the equipment both before and after use. Trash cans with sensors were available to throw away used wipes without touching the surface of the trash can. Reminders were posted on site about social distancing in the gym to enjoy a safe, healthy workout. In 2021 the gym remained open to encourage good workout habits but training sessions were reduced to avoid crowd infections.

Activity Clubs of HTC

The Badminton Club, Child Support Club, The Way, and Basketball Club, are just a few of the different clubs available so everyone can fit in some socializing after work, enjoy life and find a balance. Through club activities employees also have the opportunity to meet and interact with other people from different units, creating a healthy, broad network of people.

Encouragement for Senior Employees

HTC respects the long-term effort of our employees, and acknowledges their hard work with longevity bonuses and a thank you card at 5, 10, 15 and 20 years of continuous service. In 2021, a video was recorded interviewing senior colleagues to appreciate everyone's service. HTC also has an internal replacement system to provide the necessary assistance to staff needing to be transferred, or to those making application for transfer, or who are seeking job enrichment or a change of career.

Retirement Benefits

Since day one, HTC's pension plan has been in place in compliance with the regulations. 2% of annual salary paid was set aside from November 1999 for the pension fund. Since 2004, 8% of annual salary paid was handed over to the Labor Pension Reserve Supervision Committee to deposit and make payments from a dedicated account. On July 1, 2005, the New Labor Pension Scheme became effective, and HTC started setting aside part of the salary of employees who chose the new scheme for their pension fund. After careful calculations and consideration and approval by the competent authority, the 8% appropriation of old scheme was revised to 2% for those who remained on the old scheme. In May, 2021, the accumulated funds appropriated reached the legal standard, and hence HTC applied to the authority to suspend appropriation. The request for a one-year suspension was approved.

Creating a Happy Workplace

A Working Environment Incorporating Brand Spirit

HTC regards the creativity that stems from brainstorming as one of our most valuable assets. To promote interpersonal communication, the R&D headquarters in Taipei is configured with many staff areas that allow our people to interact and talk, this includes interlacing sky bridges between the buildings that link departments together and interaction rooms that project from the floors like transparent boxes. We hope that these interaction-oriented spaces will encourage and promote cross-department synergism and cooperation, supporting the free extension of creativity.

We believe sharing is the best way to interact, so at the Taipei office we have designated a space for the HTC Gallery – a venue for art to support local young artists in demonstrating their creativity and work. The Gallery is open to community school groups and the public, serving as a hotspot for community interaction between HTC and society.



HTC Gallery

Due to Covid-19, some of the exhibition and opening ceremonies in 2021 were cancelled. However, HTC still aspires to enrich employees' lives with imagination and creativity, bringing new waves of art, culture and innovation to the workplace.

The exhibition in February 2021 included a cross-territory collaboration. Land in the Microscope is a collection co-created by artists Chit Yeung and Jyun-Han Lu. The traditional ink painting of the former and acrylic and mixed media of the latter inspired a series of work that contains both extremes, showcasing beautiful mountain views and the texture of the earth of Taiwan.

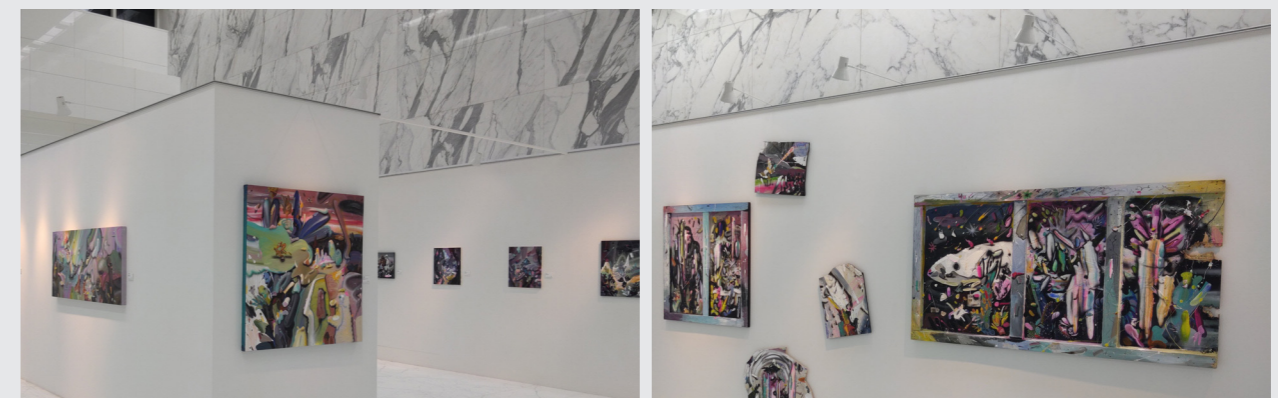
In November, the Gallery resumed in-person operations. Award-winning young talent Yu-Kai Chen showed us “reborn” pieces of art from a new perspective through collecting, disassembling, and pounding. Much like Taiwan and HTC now, we all need strength to rise from this severe environment.

Despite the Gallery being put on hold for most of 2021, artwork was still displayed on the myHTC website, allowing colleagues to appreciate art even when working remotely by enjoying virtual visits and the benefits art provides beyond space restriction.

Land in the Microscope, joint exhibition by Chit Yeung and Jyun-Han Lu, 2021



Reborn, solo exhibition by Yu-Kai Chen, 2021



2021 Online HTC Town Hall

Considering the pandemic, HTC's End-of-the-Year Appreciation Banquet of 2020 was adjusted to an online assembly in January 2021. During the 2021 online HTC Town Hall, the chairman shared the Company's vision and future, as well as awarding 20 senior employees. Additionally, the Company and chairman hosted a global lucky draw after the online HTC Town Hall in order to thank all the employees for their contributions during the year. The spirit of the Chinese tradition and lucky draw was expanded to share with all our international staff. Besides the top four cash prizes in live stream, there were several different ones, including the chairman's hike, and 300 HTC 5G smartphones in the lucky draw. Each department arranged its own Appreciation Banquet while following preventive measures to reduce crowds.

Employee activities in 2021

Mother's Day	Mother's Day 2011 was celebrated by gifting hand cream to each employee, a makeup course, and an online 'Moment of Happiness' photo show, so everyone could experience some heartwarming moments from colleagues during the stressful pandemic.
Father's Day	The "Much like Daddy" online photo vote provided our colleagues with the chance to work with their child(ren) and take a picture together at home. Some went through old photos in the process, making this day an unforgettable one.
Moon Festival	A three-day festive celebration with lots of fun prizes for winners and a quiz was arranged to celebrate the Moon Festival. 1,954 people attended the event, and got to know more about the Company history and its products and services through games and activities. More pages of the Company's history have been filled in by employees so everyone has contributed to HTC's story.
Year-end Gathering	With restrictions slightly eased at the end of the year, Chairperson Wang personally paid for 1,100 tickets to three PLG games, inviting employees to watch matches with their families at Xinzhuang Sports and Recreation Park. It was a relaxing and comfortable 218 m2 space for everyone who attended to enjoy. The December "Match of Taipei and New Taipei" game was joined by actors of TVBS' Youngsters On Fire. The charity received strong support from HTC colleagues.

Valuing Female Employees

HTC emphasizes the professional value of our female employees, and makes adjustments and improvements to care for the needs of women during pregnancy and parenting to achieve true corporate gender equity. Care for female employees includes:

- A female free cancer-screening program is part of the annual health check. This includes the choice of a Pap smear, a breast ultrasound exam, or a mammogram.
- Consideration for the physiological needs of female workers, providing a comfortable environment for rest, the loan of free hot pads, menstrual pain assessment, health knowledge and education, physician consultation or referrals and so on.
- Car/scooter parking spaces near the parking lot entrance/exit for pregnant women.
- Seven breastfeeding rooms in the offices in Taiwan, each equipped with ultraviolet milk bottle boxes, a microcomputer water boiler, comfortable couch, refrigerator to store breast milk, and relaxing music. These facilities were used 7,818 times in 2021.
- The Mother Health Protection Plan kicked off in 2016 and covers pregnant women, mothers within the first year of giving birth, and mothers who are breastfeeding. The Plan made an inventory, underwent risk identification, and offers individual medical consultations, work adjustments and a reinstatement program following pregnancy.



Accessible parking spaces for pregnant women and people with a disability.



Work-life Balance Support

In addition, in order to encourage and support employees to raise the next generation with confidence, HTC has a perfect application system for parental leave to protect employees' work rights so that parents can take care of their newborns with ease.

Employees applying for Family care leave

Year	Male	Female	Total
2019	42	103	145
2020	26	54	80
2021	15	31	46

Employees Applying for Unpaid Parental Leave and Resuming Duty after Leave in 2021

	Male	Female	Total
The Number of Qualified for UPL for Raising Children in 2021	149	110	259
The Number of Person Actual Applied UPL in 2021	2	9	11
UPL Application Rate in 2021	1.34%	8.18%	4.25%
The Number of Reinstatement-to-be in 2021	3	32	35
The Number of Application for Reinstatement in 2021	2	26	28
Reinstatement Rate in 2021	66.67%	81.25%	80.00%
The number of application for reinstatement in 2020	4	34	38
The Number of Retention Over 1 Year After Reinstatement in 2020	4	8	12
Retention Rate in 2021	100%	23.53%	31.58%

Note:

1. The "number of qualified for UPL for raising children in 2021" was based on the number of employees who had taken maternity or paternity leave within 3 years (2019-2021)
2. The "UPL Application Rate in 2021" = The Number of Person Actual Applied UPL in 2021 / Number of Qualified for UPL for Raising Children in 2021 × 100%
3. The "Reinstatement Rate in 2021" = Number of employees reinstated in 2021 / Number of employees that should have been reinstated in 2021 × 100%
4. The "Retention Rate in 2021" = Number of employees who had worked one year consecutively after being reinstated in 2020 / Number of employees reinstated in 2020 × 100%

Listening to the Voice of the Employee

HTC employs nearly 2,000 people around the world. The establishment of a sound means of communication between management and employees is vital to the growth of a company. Therefore, HTC pays great attention to internal communication with employees to build mutual trust and create a harmonious atmosphere within the company.

HTC convenes labor-management meetings every quarter and at least four meetings are held every year. Seven representatives are elected by employees for the meetings while seven others are designated by the company. The minutes of these meeting are referred to in the resulting follow-ups, which include any necessary corrective action. Before the meeting, we will discuss the previous unclosed case and the newly added issues this time. In addition to inviting the relevant authority and responsibility unit directors to participate, all responses to proposals and the follow-up progress of these meetings are published on the HTC Intranet website for review by all the employees. According to internal HTC statistics, the issues most frequently discussed in the labor-management meetings are "the working environment", "employee benefits" and "catering management".

Employees have the right to voice their concerns, and to protect such right, HTC has a fair employee grievance procedure, under which there is a direct line, grievance box, email, and sexual harassment box for employees to express concerns. Regular labor meeting and employee opinion surveys are also used as an important reference to improve practices.

HTC recognizes the importance of employment relations, and conducts immediate, legal labor negotiations when disputes occur. Material changes to operations are managed in line with the Labor Act. In 2021, there were three violations of the Labor Act, amounting to NT\$408,000 in penalties. The fines have been paid, and the management team continues to improve communication with employees and reinforce relevant management campaigns.

Note: HTC's labor union was established in 2015, but until the end of 2021, no collective agreement has so far been made.

Effective Advisory and Assistance Channel

The Employee Care Room in every manufacturing site allows our employees to take a break from the work pressure. We also partnered with the EAP (Employee Assistance Program) team to provide consultation service for our employees. In 2021, the feedback from employees and consultation received were mainly related to work practice, leadership and communication style of supervisors, salary, benefits and work hours, and sexual harassment at workplace.

Advisory and Assistance Channels

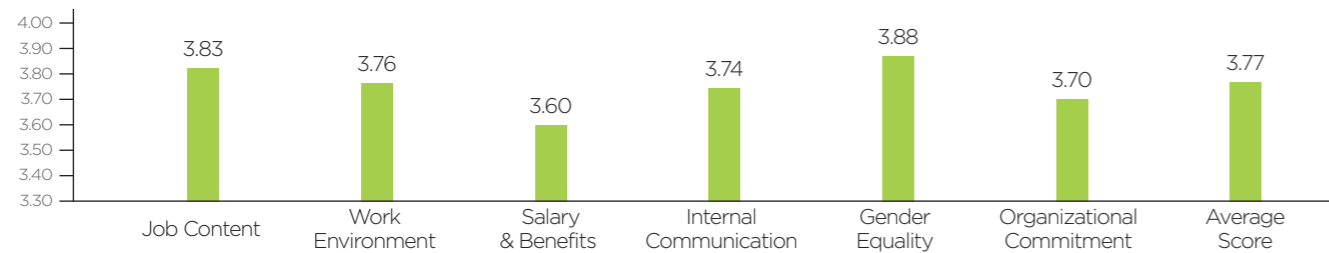
- Manufacturing employees: dial extension 38585.
- General employees: dial extension 28585.
- Employee Help hotline E-mail: HelpMe_8585@htc.com

Employee Satisfaction Survey

HTC is aware that employee satisfaction is an indirect indicator of work performance and turnover rate, and therefore sends employee satisfaction surveys every year so we can understand how employees feel working with HTC. The survey helps us make progress and improvements. The 2021 survey covered six areas: job content, the work environment, pay and benefits, internal communications, gender equality and company recognition.

Of all 474 manufacturing staff, the survey sampled 96 people, and retrieved 96.88% of the questionnaires. The target scores were 3.7/5, and actual result was 3.77, higher than the annual target. In the survey, “Proper job content that meets expectations”, “A gender equality compliant workplace”, and “Proper work environment and communication” scored higher than the others. As the lower end, organizational identification and pay and benefits scored less, and these aspects will be assessed following analysis, and improvement actions passed to senior management for review and incorporation into decisions so the workplace is improved.

The manufacturing employee’s questionnaire survey conducted in 2021



Occupational Health and Safety

Food Safety - Hearty and Healthy Meals at HTC

HTC works with food providers and dietitians on a food menu for employees that prioritizes seasonal local ingredients and CAS, TQF, ISO and HACCP certified food. We use only Ractopamine-free pork. A variety of healthy drinks and teas to help boost health and nutrition are also offered. Our restaurant uses reusable, recyclable tableware. Employees can enjoy a discount when they bring their own reusable cup for drinks.

Food Safety and Health Management

We safeguard food safety and employee health through a thorough checklist, and keep records of food safety related control, and audits.



HTC Employee Restaurant Food Safety and Health Management

Drinking Water Quality Control

HTC has set up a comprehensive water fountain inspection plan to ensure the standard of purity of drinking water. Regular maintenance, water sample testing, and records disclosure are done according to the Drinking Water Management Act. A professional company carries out the maintenance and care of the drinking fountains and testing of water purity is carried out by an environmental testing agency that is authorized by the EPA to take regular samples and perform the tests every 3 months. The results of the water quality tests are published and the records are also posted in a prominent position close to the drinking fountains. The total bacteria count of drinking water and E. coli colonies have passed the test in 2021.

Environmental Sanitation Agents

We do regular inspections for any stagnant water around plant sites to prevent vector-borne diseases such as dengue fever. Quarterly vector control by certified companies further limits the number of vector gnats, ensuring a clean, hygienic environment for employees and the local community.

Environmental Expenditures

Year	2019	2020	2021
Environmental expenses (NT\$ Thousand)	41,792	34,752	30,112

Valuing Employee Health

HTC promotes various health programs with the four main directions of "Health Management", "Health Promotion", "Occupational Health" and "Employee Assistance Program (EAP)" to help employees achieve a balance between work and life. Maintaining physical and mental health and ensuring the health of every employee.

Health Enhancement Scheme for HTC Employees

Health Management	Health center for managing and planning affairs related to employee health.
	General and outpatient rehabilitation services.
	Health exam and management for staffs.
	Management/tracking for abnormal HE results, Special care and case follow-up management.
Health Promotion	Comfortable breastfeeding rooms, Smoking cessation promotion, Weight-loss Classes, Topic seminars, Blood donation activity.
	Influenza vaccination, Cancer screening, Infectious disease control and treatment.
	Aerobics
	CPR & AED course design.
Occupational Health	Establishment and maintenance of HE Database for Special-Operation Staff.
	First-aid training, Prevention and treatment of occupational injuries and illness, Workers return to work management.
Employee Assistance Program	Mental consultations, Special counseling.
	EAP promotion activities and leaflets for new employees, Annual EAP promotion course.

Health Management

Following the provisions of the Occupational Health and Safety Act and Labor Health Protection Rules, the HTC Health Center arranges health improvement events, health checks and management of diagnoses to support every worker's health. We particularly focus on improving hazards and the risk of overwork-related illnesses, CTD (Cumulative Trauma Disorders), and Maternal Health.

Regular visits by doctors of the CGH, Linkou, provide services to address health inquiries, conduct health checks, and promote good health management for our employees. HTC's Taoyuan Health Center had 603 visits in 2021, while the one in Xindian had 3,419.

Annual Health Check Subsidies and abnormal tracking

HTC provides health check subsidies to its employees in Taiwan according to job title and grade. The dependents of the employees also have access to health checks at any of the HTC contracted medical institutions. In 2021, HTC spent NT\$3,413,200 on subsidized health checks for employees in Taiwan. There were 848 benefited employees. 523 employees qualified for a biannual health check this year, of which 403 underwent the examination; a 77.06% completion rate. All 445 qualified manufacturing employees (100%) took advantage of the consultation. No over-work related injury was reported in 2021.

After completing a health check, the employee clinic conducts management classification according to the results of the health check. If employees are classified as abnormal in terms of their health, they will be dispatched for individual counseling depending on the severity of their health concerns. Alternatively, they will be given relevant health management and health education. Through constant care and follow-ups, we manage to control the recovery period of employees. Health checks and follow-ups of employees with anomalous health concerns would be carried out continuously. Therefore, employees can receive extensive health care through the health checks and follow-ups from the Company.

HTC General Health Check Rules in 2021

	Manufacturing employees	General employees
Regulations	Article 20 and 46 of the “Occupational Safety and Health Act” (OSHA) and Articles 13-15 of the “Labor Health Protection Regulations “	
Way	The health center will contact the hospital to offer health check service	Staff can have a health check in numerous hospitals cooperated with HTC.
Frequency	Once every two years after arrival	With one-year seniority and once every two years
% of people with abnormal health check	11.6%	9.4%
Top 3 abnormal items	Triglycerides, Low hemoglobin, High cholesterol	Low-Density Cholestero, High cholesterol, Abnormal liver function
Follow-up	Based on health diagnosis and hierarchical management, it provides consulting services, health education, etc., to help employees manage health-related matters.	

Health Promotion

Employees in the technology industry are prone to overlooking health management than in other high-pressure workplaces. To mitigate this, HTC provides healthcare consultations and two educational courses. In 2021 these courses covered how to prevent musculoskeletal disorders, the pains and discomfort due to improper at-home office settings, and disease prevention rules during the pandemic to mitigate the risk of isolation and quarantine.

The Health Center abides by strict principles and requires employees who overlap with the central authority's declared routes to take a rapid test before appearing at the Center to minimize the risk of infection, and seek medical assistance when developing cold-like symptoms. Employees may only enter the work area when they test negative for Covid-19 as confirmed by a hospital.

Occupational Health

Specific Health Check

In 2021, the work environment at the HTC Taoyuan Plant was carefully tested and monitored. Special health hazardous operations, such as those involving ionizing radiation, dust and MDI, must receive a thorough health sweep. In addition, according to the regulation that “Employers Shall Provide Certain Health Examinations to Its Employees who do Long-Term Night Work” issued by the Ministry of Labor on January 5, 2018, employees who are engaged in night work were provided with specific health examinations with a completion rate of 100%. The 12 employees qualified for the second-level management and the 12 employees with abnormal results from night work health examination were asked to visit to the health center individually, and health consultation service was offered by doctors, providing them personal health guidance and strengthening their disease and health related knowledge. The follow-up environmental inspection and cause review were completed to continue monitoring the health of our employees.

2021 HTC Specific Health Check Implementation

	No. of people requiring a Specific Health Check	Inspection completion rate
Employees engaged in special health hazardous operations	18	100%
Employees engaged in Long-Term Night Work	19	

2021 HTC Specific Health Check Results

Employees under Grade 1 Control: all categories normal, or no abnormal results as declared by a physician	6 people	Continue with regular examinations
Employees under Grade 2 Control: part or all categories declared abnormal and not related to work	12 people	Arrange a professional consultation with a physician according to Labor Health Protection Rules so employees receive specific health instructions and reinforced their health education.

Emerging Health Issues

HTC’s health center and human resources division planed the Protection Program in four themes, which was implemented gradually since 2016.

Topic	Organizer
Abnormal Workload-triggered Disorders	Health Center
Maternal Health Protection Plan	
Preventing and Managing Musculoskeletal Health	
Execution Infringement Prevention	HR division

Abnormal Workload-triggered Disorders prevention

HTC follows the laws and regulations for substantial measures of health and safety and disease preventive practice. Employees with abnormal physical health results are encouraged to speak with a physician to receive specific information related to their health. They may change their work or make adjustments to their working hours. This is usually the recommended approach. Of the 29 employees identified with high-risk health issues, none were due to an abnormal work-related injury following the physician's consult in 2021.

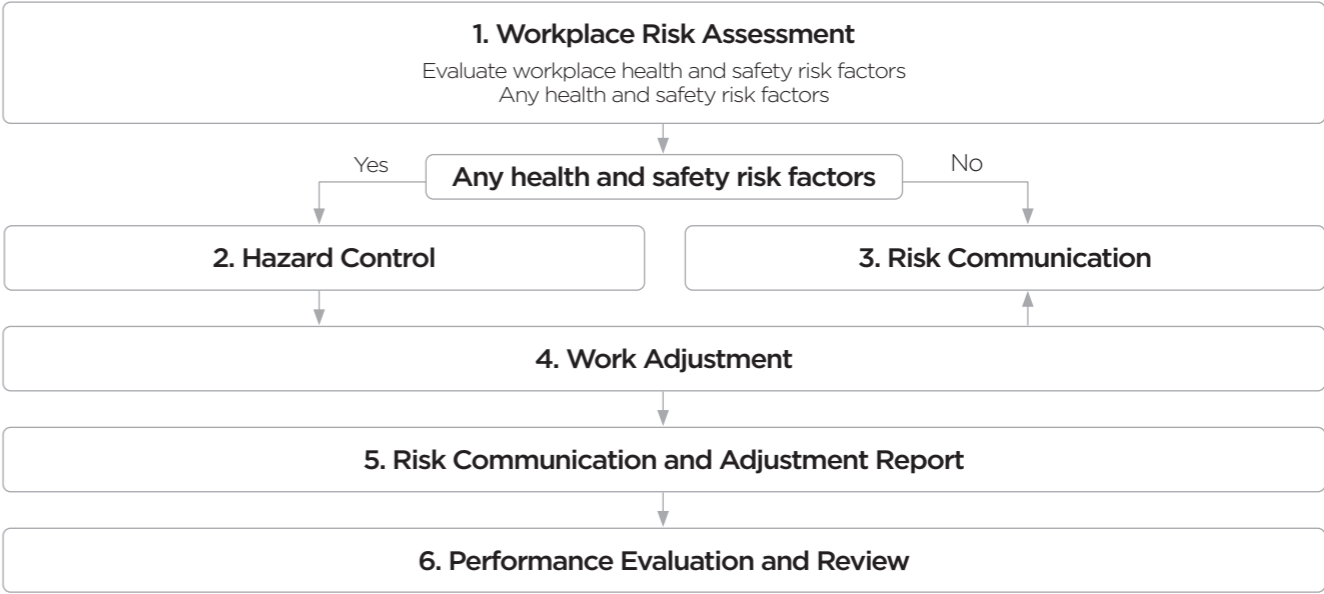
Preventive measures against health-endangering heavy workloads

Identify and assess	Identify and assess the high-risk group via the analysis of health check
Health management	Health education and counseling service will be arranged for employees with physical abnormalities and a change of eork or the adjustment of working hours is also recommended.
Set up preventive plan	Make preventive measures against health-endangering heavy workloads
Effectiveness assessment	Assess the effectiveness of plan and make improvement plan

Maternal Health Protection Plan

When health and safety related factors cause adverse effects on employees who are pregnant or breastfeeding, we make adjustments to ensure maternal health is covered. HTC has since June 2016 launched the Motherhood Health Protection Program, which includes all female employees one year after childbirth or breastfeeding women as protected subjects. In accordance with the Program, the list survey, risk identification, individual medical consultations, work assignment and work/ return to work, and other procedures were carried out. By the end of 2021, 11 employees completed the risk classification and protective measures, indicating the considerably safe work enjoyment and contents.

Female worker maternal health risk assessment and its processes are as follows:



Preventing and Managing Musculoskeletal Health

HTC Ergonomics Hazard Prevention is a precaution based on the provision of the Occupational Safety and Health Act 6.2.1 to prevent musculoskeletal disorders induced by repetitive operations and related work. We undertake the following procedures: provide a survey to manufacturing employees during the annual physical exam, email the survey to general employees every other year to monitor musculoskeletal symptoms, assess the pains experienced by employees, give instructions to improve work postures, and adjust the work environment accordingly. In 2021, there were 1,988 employees (from all Taiwan sites) who participated in the survey, and those who experienced abnormal pains will be re-evaluated after consulting a physician and work adjustments made accordingly.

自覺式肌肉骨骼症狀調查表

基本資料調查日期: / /

部門	職稱	員工編號	姓名	性別
				<input type="checkbox"/> 男 <input type="checkbox"/> 女

1. 您的工作頻率?
☐很少 ☐中等

2. 您在過去約 1 年內，身體是否有長達 3 星期以上的疲勞、痠痛、發麻、刺痛等症狀，或顯著活動能力限制?
☐否 ☐是 (若是，請填此調查表；若是，請繼續填寫下列表格。)

3. 下表的身體部位痠痛，不適或影響活動之情形持續多久時間?
☐1 個月 ☐2 個月 ☐3 個月 ☐半年 ☐1 年 ☐2 年 ☐3 年以上

4. 症狀調查：請參照下表說明給分標準，以經過不適與影響活動判斷，將適當欄位打勾

部位	1	2	3	4	5
頸					
肩					
上臂					
前臂/手腕					
手/手指					
腰部/下背部					
大腿					
膝					
小腿/腳					
腳					

5. 若有造成嚴重度的「3」的部份，需立即醫治評估症狀之嚴重程度，此處填寫醫師建議加為治療或調整工作環境、調整時間等：
6. 其他症狀、補充說明：

Musculoskeletal Symptoms Survey

Employee Assistance Program (EAP)

HTC has been working with the Hsinchu Lifeline Association since February 2009 to provide employees with psychological counseling and guidance with respect to working career, relationships, family and parenting, gender sentiments, mental illness, and physical and mental stress. Each year, employees can enjoy unlimited telephone consultations and 6 free face-to-face consultation services, which are paid in full by the company. The analysis and recommendation on employee consultation topics are reported regularly to the Occupational Safety and Health Committee. In 2021, a total of 905 employees used the telephone consultation services.

As COVID-19 pandemic remains volatile and to minimize work stress and restore work performance we pay attention to employees' health and provide EAP services for those who are affected on work level and in their personal life to help employees balance their physical and mental health, and boost production and competence. Starting from 2022, there will be an online employee consultation service applicable to those working from home, and those who are isolating or quarantining at home. The EAP is extended to offer assistance to employees on issues which may affect work performance, helping workers get their lives and work back on track and stay healthy despite the pandemic.

Employee Assistance Program (EAP)

	2019	2020	2021
Number of Telephone Counseling (Free)	532	690	796
Number of Interviews	129	116	109
Hours of Interviews	132	124	118
Invested expense (NT\$)	549,600	674,625	623,700

Occupational Safety and Health Committee

The Occupational Safety and Health Committee has 13 members and regular meetings are held every quarter. Among them, there are 6 labor representatives, which accounted for 1/3 of the total number, 1 healthcare professional, 2 labor safety related engineer technician and 4 department managers, supervisors and directors.

All our facility management systems comply with the ISO45001 Occupational Health and Safety Management. The scope of system management includes all operations and contractors within the factory area. We have published the "ESH Management Manual" and "Safety and Health Rules" on our Intranet website for employees to consult at any time. New hires undergo comprehensive occupational health and safety training before entering our worksites to ensure worker safety. Every year we set up an occupational health and safety management plan that covers health and safety regulation compliance, hazard identification to reduce risk, standardization of hazardous chemical labeling and general rules, disseminate safety & health information, and implementing contractor management.

We also provide training to cover negligence, emergencies and natural disasters, such as a fire, explosion, typhoon, accidental leakage, mechanical injury, infectious diseases and earthquakes, so employees understand what to do in an emergency. We also provide training on contingency plans, emergency identification, emergency response, post-event review and feedback of procedures, including drills and evacuation practice to safeguard our personnel and mitigate the impact on Company operations.



Regularly organize fire drills and exercise evacuation status



Professional Security Service Team

At HTC, the mission of security guards is not only to maintain security, but also to uphold a service-oriented work attitude. With regard to the handling of and responses to all matters, they need to maintain HTC's assets and equipment as if they were family property, while all employees and visiting VIPs and manufacturers should be seen as relatives and friends in order to demonstrate that it is a trustworthy and professional security service team.

The salary of security guards must not be deducted for any cause other than their due labor insurance and National Health Insurance (family members included). For labor insurance and National Health Insurance, employees should be insured according to the salary level. In addition, according to the provisions of Article 8-2 Security Service Contract, pre-employment education training, three-day symposiums (36 hours), and Party A hazard notification course must be completed before being allowed to be stationed. The professional skills training course content includes security guard duty principles and special response methods, such as the pregnant women screening procedure requiring pregnant women's label to be checked while refraining from contacting or holding a security bar during the inspection.

Due to the pandemic, the 2021 trainings were rescheduled to the beginning of 2022. All security supervisors completed a one-hour training on the SOP of their job duties and on-duty conversation manners. A daily 15-minute pre-work briefing was given before going on duty to review recent deficiencies.

Positively Preventing Occupational Accidents

HTC has identified the prevention of occupational accidents as a top priority of facility management. By following the "Occupational Accident Prevention and Self-Inspection Plan", we prevent occupational accidents and perform self-inspection to achieve our zero-accident goal.

Our work covered seven aspects: "Management of Safety and Health", "Education and Training for Safety and Health", "Standard Operating Procedures and Job Safety Analysis", "Inspections for Safety and Health", "Emergency Response", "Health Management and Enhancing" and "Safety and Health Campaign" for the comprehensive prevention of occupational accidents.

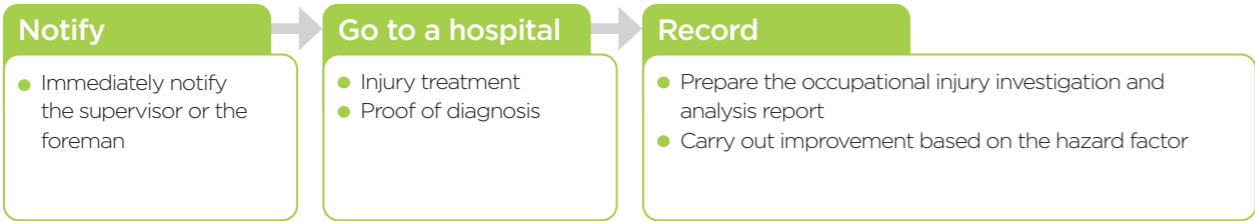
The 2021 hazard identification is Class 2, Class 3 and Class 4, which are medium to high risk. The types of injuries with higher severity are falling, electric shock, fire, coil clamp and confined-space operations. The current control methods include implementing checkpoints before/during/after operations, education and training, and promotion.

In the event of an occupational injury, our notification procedure is as follows

● **Traffic accidents outside the factory area**



● **Accidents in the factory area**



Aspect	Measure
Management of Safety and Health	If there is any change in the organization or addition of new business units, this has to be reported to the authorities concerned. Such information ranges from hazard statistics, hazard investigation analysis, meetings convened by the company occupational safety and health committee, preventive inspections, and the management of the entry of contractors into plants.
Education and Training for Safety and Health	Provide occupational safety and health-related courses on a regular basis.
Standard Operating Procedures and Job Safety Analysis	Set up rules and procedures for operation, maintenance, and work safety. Amend rules for workplace safety and health, general knowledge of dangerous materials, and the assessment of risk.
Inspections for Safety and Health	All kinds of working environments, cars, equipment, facilities, and fire safety systems should undergo regular inspection. The items to be checked include organic solvents in working environments, ionizing radiation exposure, and infrared detection.
Emergency Response	Implement an emergency response plan for the year and launch emergency response drills.
Health Management and Enhancing	Purchase medical consumables and provide health checks or checks for special health problems specific to both new employees and those already on the job. Track and manage those with unusual results.
Safety and Health Campaign	We have done everything legally required in response to all government regulations. We also participate in all kinds of relevant meetings and publish promotional posters, comics, and slogans. We constantly update information and communicate with employees over workplace safety. All these efforts are aimed at improving work efficiency.

2021 Full-time Environmental Safety and Health Personnel Training

License type	Person	Hour	Total
Health and Safety Education and Training For Class-1 Managers of Occupational Health and Safety – Preliminary Training	2	42	84
Scaffolds assembly works supervisor retraining	1	6	6
Scaffolds assembly works supervisor training	1	18	18
Hypoxia operations Supervisor training	1	18	18
Organic solvent operation manager retraining	7	3	21
Radiation workers receive continuous training and retraining	12	3	36
Supervisors in charge of roofing operations are retrained regularly	1	3	3
Stacker operator (>1 ton) retraining	1	3	3

Comprehensive Emergency Rescue Measures

- A 24-hour emergency rescue Hot Line has been set up as part of a fully comprehensive emergency notification system.
- Sufficient rescue personnel have been lawfully designated and emergency rescue personnel training courses are held annually.
- 16 Automated External Defibrillators (AED) are available at specific places within the company.
- Emergency evacuation drills are carried out periodically.
- Since 2010, CPR seminars are held regularly each year

Contractor Management

HTC attaches great importance to the safety of contractors. Each year, according to the status of contractor safety and health management, a complete occupational safety and health management plan is drawn up to prevent and prevent occupational disasters. During the operation of the contractor, project officer will be at the site. If there is an accident, the project officer can call 831919 to ask the medical staff to perform treatment at the site or take the injured contractor to HTC employee clinic for treatment. As long as the injury is due to work, whether it is small or severe, the notification must be completed and recorded.

In the case of severe injury, an accident investigation will be conducted to examine and analyze the cause of the incident, and correction or improvement is required for the site. In addition, HTC has passed the ISO45001:2018 version of the Occupational Health and Safety Management System. Newly recruited construction workers receive safety and health education before they start on their jobs. They are given all necessary information about the working environment and the relevant safety regulations. They all know the location of fire-fighting facilities and how to use it.

Measure of Contractor Construction Management

- The provision of site safety induction sessions at construction sites.
- Verifying the information about construction workers and vendors.
- Monitoring high-risk operations.
- Personnel access control.
- Ensuring construction site safety.
- Conducting safety and health management for new facility construction.
- Obtaining the required insurance for contractor employees.

Contractors Health and Safety Audit

- Incorporating requirements for safety & health management in the written agreements with all contractors according to the applicable regulations to clearly define contractor obligation and responsibility, and evaluate all the risks in the working environment including that from dangerous machines, so as to have proactive control and eliminate potential hazards.
- Formulating a system for on-site patrols and inspections according to the applicable regulations and contractual requirements about labor safety & health. On-site inspections and audits are conducted on a regular/irregular basis., working precaution, records of the safety & health education of the workers, and all safety requirements to be met before, during and after the use of machines, tools and equipment.

2021 Occupational injury in Taiwan

The main types of occupational injuries in HTC plant and for contractors include falling over, clamping, colliding, cutting, etc. Among them, clamping is an occupational hazard that causes serious occupational injury. When occupational hazards occur, machines and equipment must be shut down, first-level troubleshooting is conducted, and employees are reminded to be aware of machines still in operation. In the future, we shall continue our work safety precaution campaign, provide training, and add visible precautions in the workplace to mitigate occupational safety risks.

The main types of occupational injuries in HTC plant and for contractors include falling over, clamping, colliding, cutting, etc. Among them, clamping is an occupational hazard that causes serious occupational injury. When occupational injuries occur, should shut down machines immediately and perform simple remediation. Operators should be advised to pay attention to the conditions of the machine/equipment to minimize the risk.

These related measures have been effectively carried out at HTC. In 2021, most occupational injuries were the result of colliding, with 3 cases in the HQ & Plants and zero case in the Taipei Office. There were 3 injury cases that occurred within the HQ & Plants and there was no accidents in the Taipei Office. Falls are the most frequently reported colliding (2 cases), with 5 days of labor lost. In 2021, the average employee injury frequency rate (FR) of HTC employees was 1.02 person-times/million man-hours for the HQ & Plants, and 0 for the Taipei Office. The average injury severity rate (SR) of HTC employees was 4.07 days/per million hours for the HQ & Plants, and 0 for the Taipei Office.

HTC does not engage in any heavy polluting or environmental hazardous work so there were no occupational diseases in 2021 due to the work nature or workplace conditions.

2021 Main types and statistics of occupational injuries (unit: person)

Death		Injury resulting in disability			
		Clamping	Falling over	Colliding	Cutting
Staff	0	0	0	2	1
Non-staff worker	0	0	0	0	0

HTC Description of Occupational Injury Types and Improvement Falls, electric shocks, fire, clamping and confined work space

Type of injury that resulted in disability	Description	Improvement
Collision	During production, a labeling machine got jammed. The head of the equipment returned to position when the machine was shut down. A member of staff was hit on the right shoulder.	1. Interconnection of switches 2. Post notices on machines 3. Education and reminders.
Collision	A man pulled a tube material cart back to the work area by himself. The cart was on a slope when the wheel shaft connected to the cart's upright column broke and collapsed, crushing his right knee and ankle.	1. Fix the metal plate that sticks out on slopes. 2. Thorough maintenance and repair of the wheels of carts. 3. Education and reminders
Cuts and scratches	When flattening empty boxes, an employee cut their left index finger with a utility knife when removing scotch tape from the box.	1. Reminders when working with utility knives.

Recordable injuries and the severity of injuries that resulted in disability of HTC and non-HTC workers in the past three years

Year	Object	Total working Hours (Unit: Hours)	Recordable Occupational Injury Count	Recordable Occupational Injury Rate	Severity Occupational Injury Count	Severity Occupational Injury Rate
2019	Staff	4,387,255.30	14	3.19	0	0
	Non-staff worker	Untraceable	0	0	0	0
2020	Staff	2,416,264.25	5	1.24	0	0
	Non-staff worker	Untraceable	0	0	0	0
2021	Staff	1,966,666.85	3	1.53	0	0
	Non-staff worker	132,927	0	0	0	0

Note:
1. Employee working hours are calculated as the sum of working hours of a year = no. of employees by the end of every month x monthly working days x daily working hours (subject to employee type)
2. Working hours of non-HTC workers: provided by contractors and punch cards of short-term workers
3. Days away from work: days unable to work (rest days): includes occupational disaster rest days and excludes sick leave and menstrual leave.
4. Recordable injury rate: (recordable cases x 1,000,000) / total working hours
5. The Disability Severity Rate is the frequency of severe injuries per Million Hours Worked(exclude death) = Disability Severity Injuries x1,000,000/Total Hours Worked; severe occupational injury refers to a disability caused by an occupational injury or injury that continues to affect the employee for longer than six months.
6. 1,000,000 work hours rate indicates the occupational injuries of every 500 full time workers in one year, based on 2,000 working hours per full time worker.
7. 0 deaths caused by occupational injuries in HTC/non-HTC workers in 2021.

Disability injury frequency and Disability Severity Rate of HTC and non-HTC workers in the past three years

Year	Object	Total working Hours (Unit: Hours)	Injuries that resulted in disability	Days away from work due to injury that resulted in disability	FR	SR	FSI
2019	Staff	4,387,255.30	14	20	3.19	4.56	0.004
	Non-staff worker	Untraceable	0	0	0	0	0
2020	Staff	2,416,264.25	5	117	1.24	48.42	0.06
	Non-staff worker	Untraceable	0	0	0	0	0
2021	Staff	1,966,666.85	2	8	1.02	4.07	0.06
	Non-staff worker	132,927	0	0	0	0	0
Target			-	-	0.3	1.8	-

Note:
1. Occupational accidents, as any diseases, injuries, disabilities, or deaths of workers caused by buildings, machinery, equipment, raw material, material, chemical, gas, vapor, dust or other at the place of duty, or as a result of work activities, or due to other occupational causes, should be included in the calculation of the disability injury rate/ Disability Severity Rate. Injuries caused by personal factors, such an injury during the commute to work, is not included in occupational disaster statistics.
2. Working hours of non-HTC workers: provided by contractors and punch cards of short-term workers
3. Working hours of non-HTC workers: provided by contractors and punch cards of short-term workers
4. Days away from work: days unable to work (rest days): includes occupational disaster rest days and excludes sick leave and menstrual leave
5. FR(Disabling Injury Frequency Rate): (Injury Frequency Rate per Million Hours Worked) = Incidence of Lost-Time Injuryx1,000,000/total hours worked
6. SR(Disabling Injury Severity Rate): (Lost Day Injury Frequency Rate per Million Hours Worked) =Days Lost for Lost-Time Injuryx1,000,000/Total Hours Worked
7. Frequency-Severity Indicator (FSI)=(FR x SR) ÷ 1,000
8. 1,000,000 work hours rate indicates the occupational injuries of every 500 full time workers in one year, based on 2,000 working hours per full time worker.

Social Investment and Contribution

HTC has long been committed to the social care and public welfare, and supports and sponsors the "HTC Education Foundation" and the "HTC Social Welfare and Charity Foundation." HTC advocates humanitarianism and we have developed our company character culture at a local level. While we continue to pursue business growth and technical innovation, we care very much about disadvantaged families, and give their children opportunities to receive the education. This is a distinctive corporate culture of which HTC is rightfully proud.

In the meanwhile, HTC also utilizes the industry characteristics and helps society create more opportunities through R&D and innovation. We are committed to inventing novel products, not only to achieve the Sustainable Development Goals (SDGs) issued by the UN in 2015, but also to meet various needs of society and implement social care to actively practice Corporate Sustainability.



HTC Foundation

The HTC Foundation focuses on promoting character education by working to help children and youngsters develop good character by supporting both schools and teachers. We place great importance upon building up moral character and culture for communities and towns in cooperation with local government, care for disadvantaged families, providing their children with opportunities to receive education, and raising funds for environmental and ecological preservation.

We engage in public interest activities to espouse humanitarianism and contribute to a peaceful and harmonious society. The Foundation plays an important part in community engagement and social services to instill the core values of integrity, honesty, care, love, positive thinking, and respect for natural resources. The HTC Foundation invested NT\$ 22.61 million on education in 2021, while HTC Social Welfare and Charity Foundation spent NT\$ 38 million on charity business.



Vision

Everyone has a good personality. People respect and support each other. Let us make the planet lovely together.

Mission

Our mission is to instill core values of integrity, honesty, care, love, positive thinking, and respect for natural resources by untiring efforts to educate.

Objectives

- 1.To encourage the development of good campus culture by influential education projects and the continuous and systematic encouragement of teachers, parents, and students.
- 2.To encourage the development of good urban character culture by influential education projects and urging local communities to work towards this end.
- 3.Care for disadvantaged families and the provision of educational opportunities for young people to give them the knowledge and character that allow them to become contributive members of the society.

Character Statement

- 1.To actively and enthusiastically influence others with honesty and good character in both personal and professional life and to set a good example with our own conduct.
- 2.To protect the environment and to develop a cultural and aesthetic disposition through readings.
- 3.To be a world citizen, to make reasonable efforts to help the poor and the disadvantaged in the world, and to encourage people to respect and support one another.

We hope through these actions, people can jointly internalize the core values of integrity, honesty, love, mutual respect, caring for one another, and positive thinking.



Many Blessings Courses

The HTC Education Foundation is committed to the development of character education for young people. It hopes to shape character through joint efforts by schools, parents, and society. Following the principle of “lighting a candle rather than cursing the darkness,” the foundation has established the “Many Blessings Course” for junior and senior high school students. These free courses each last for five weeks. They include three hours of training and activity per week. In 2021, a total of 7 classes of four schools will be implemented, and a total of 215 students will be benefited. The students get the energy to move forward and make changes inspired by their instructors and volunteers, They are encouraged to become leaders who can actively serve the public and use their own power to change the world.

Character Town

HTC foundation not only launches character education in schools but also signs “Character Town” with various towns in Taiwan. Character Learning Course is launched every month with a way of character and setting a good example with our own conduct. Group discussion and experience sharing with different themes and related to work will be arranged timely. Participants include township police station public hospital fire department land office & household registration office-affiliated institutes. Parts of institutes turn into membership in the character association. Leaders in the institutes encourage good deed via communication and integration of thoughts, which becomes the internal operating mechanism.

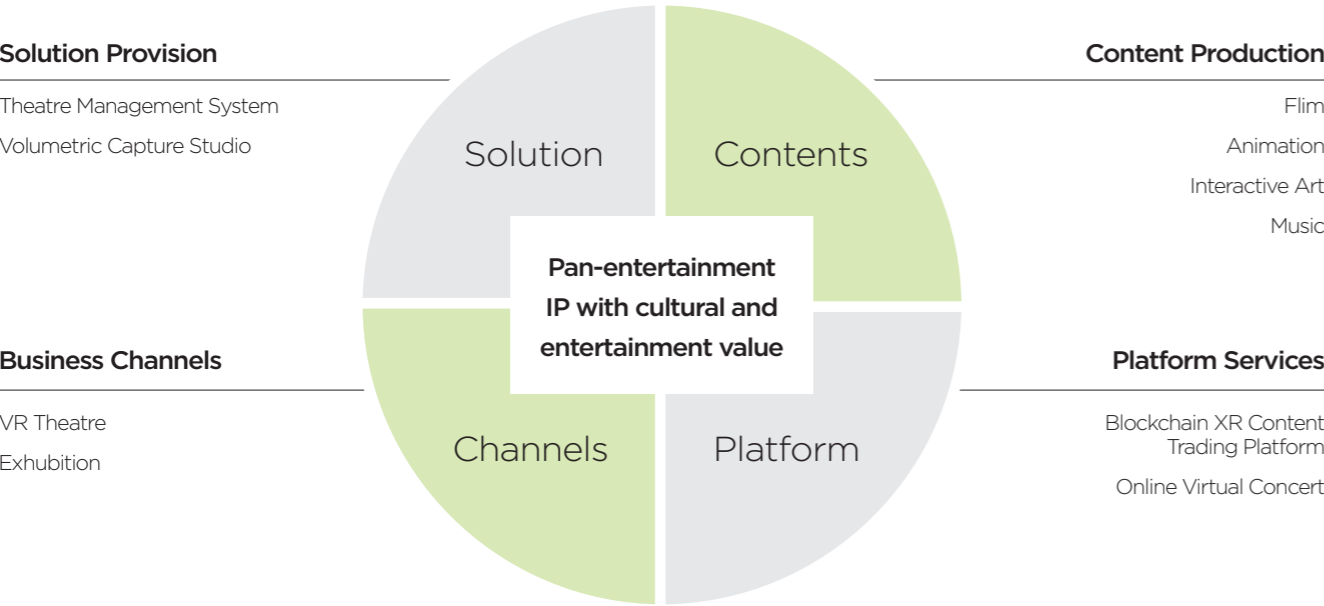
"Character First" course emphasizes the concept definition and operational definition with the core value of nurturing the leader and team work. Besides, it is believed that people can lead in different kinds of situation. The main goal of these courses is to nurture groups of the cadre of basic level equipped with ethics and integrity.

VIVE ORIGINALS

VIVE ORIGINALS

VIVE ORIGINALS VISION

Create an entertaining experience with cultural values in the virtual world



HTC VIVE ORIGINALS is a content brand owned by HTC VIVE. It is devoted to original IP development and original content production. It also engages in the distribution and exploration of VR in film, art, animation, music, cultural collections, as well as the cultural creativity and entertainment industries.

To provide an extended variety of VR solutions, VIVE ORIGINALS is also actively building a cross-domain team to create content and VR technical specifications standardization. Moreover, it aims to create a content production SOP. Profit comes from various channels, such as licensing for public broadcasting, organizing exhibitions, and trading for art collections with cross-domain content. We also actively strive for government collaborations to garner film and television investments. Additionally, we want to expand the scale of content and build up a VIVE Reality ecosystem by content clustering to fulfill the ultimate goal of enriching people's cultural life through new technologies and creativity.

2021 marks the start of metaverse, and VIVE ORIGINALS built the first BEATDAY music platform of metaverse. With the combination of volumetric capture, blockchain and XR, BEATDAY opens the gate to a new business pattern of the novel music industry. Create your character on the platform and begin your show or concert, attend events or take on missions, interact with friends, buy items and enjoy a new music experience, all with “BEATDAY”- the music metaverse.

The vision of VIVE ORIGINALS is to create an entertaining experience with cultural values in the virtual world. To deepen the connection between the virtual and real world, VR technology can be applied in culture and art collections, as well as video and audio recordings through our four pillars of development. The four pillars are content production, business channels, solution provision, and platform services.

Content Production	HTC VIVE ORIGINALS is a content brand owned by HTC VIVE. It is committed to original IP development and original content production. It also engages in the distribution and exploration of VR in film, art, animation, music, cultural collections, as well as the cultural creativity and entertainment industries. In 2021, VIVE ORIGINALS launched the AR Pop-up Story Book and the new original IP interactive product.
Platform Services	HTC VIVE ORIGINALS expects to create new cultural experience through technology, balancing interactivity and degrees of freedom in this immersive entertaining time. To bring development into the Taiwan Metaverse and VR entertainment industry, VIVE ORIGINALS created BEATDAY, the first global music Metaverse brand bringing a new entertainment experience to the world. VIVE ORIGINALS not only builds a cross-platform virtual entertaining mode dedicated to the music industry, but also using blockchain and concert-exclusive NFT technology BEATDAY has broken into the Metaverse. Other than Ethereum, we have upcoming projects that support PoS (Proof of Stake) and PoSA (Proof of Stake Authority), blockchains that consume much less energy, building platforms that also contribute to a sustainable environment.
Solution Provision	Cross-platform multi-content to construct a new Metaverse world: people can access the virtual world on PCs, smartphones, tablets and VR and experience BEATDAY music in the Metaverse without fuss, helping users discover more about immersive entertainment and build their interests. Holography for reality simulations: BEATDAY holographic content is created using the most advanced volumetric capture technology to combine movement, CG animation and real time engine, making perfect records of the performer's facial expression and body movements, giving the audience the best immersive, reality simulating performance and blurring the line between virtuality and reality.
Business Channels	We want to expand the scale of content to include various channels such as licensing for public broadcasting, organizing exhibitions, art collection and trading, and technology application with the government, to make a profit and provide industry value. We also aim to provide cross-domain opportunities and build a VIVE Reality ecosystem through virtual technologies and creativity.

New & Original IP Content: VR Interactive Artwork by Fang-Yi Sheu

The VR creation chronicled her pursuit of artistic achievement. With the use of volumetric capture, Sheu walks users through her path toward ambition, accompanied by her account of words and body movement. Users are encouraged to talk to their own body, their own being; let down shackles and allow the wounds one picked up along the journey to heal, and finally embrace future in a purer, better self.

Sheu became aware of the close connection between body and mind after years of world-traveling performance, and believed that “every body is capable of making happiness”. In 2012, the well-known dancer began her project Body for Joy, and brought the concept with her into cities and villages, sharing how people can move their body to set free physically and mentally; the project was embodied two years later, as a dance class in the project’s name. Today, the approach takes the form of virtual reality, where VR users relax their limbs and torso under the guidance of a master, creating wonderful sights and audio effects to gain healing energy from beautiful VR creations.



New original IP content: Frame-by-frame animation with VR technology, The Sick Rose



In 2021, VIVE ORIGINALS launches the world’s first animation work - The Sick Rose, a combination of VR technology and stop-motion puppets. With the creativity of thinking out the box, integrating traditional craftsmanship and macro photography technology, the animation film presents the audience with a new look into the traditional stop-motion animation which stuns the world.

Not only was the animation selected for the “VIRTUAL REALITY IMMERSIVE STORY PROJECTS” in the 77th VENICE GAP - FINANCING MARKET SELECTION 2020, it was also shortlisted for major international film festivals in 2021. The VIVE ORIGINALS continue to perform well at international film festivals and let the world see how strong Taiwan’s VR technology is.

- 78th Venice Film Festival: Venice VR Expanded
- 2021 Raindance Film Festival: Raindance Immersive
- 50th Festival du Nouveau Cinéma: EXPLORE
- 2021 Red Sea International Film Festival: RED SEA: IMMERSIVE
- 2022 SXSW: XR Experience Spotlight

After the VR puppet animation The Sick Rose was debuted in a physical exhibition in Taiwan in November 2021, we’ll be launching the Sick Rose AR stereo audiobook in 2022 with both the AR and VR versions from the SXSW Film Festival XR Competition. With this, we aim to continue increasing the popularity of The Sick Rose at international film festivals.

The “Sick Rose” AR Stereo audiobook is based on the Kneading Puppet Stop-motion VR animation's soundtrack. This audiobook is a new product with cross-border and multi-forms; by combining puzzles, picture audiobook, games, AR technology and APP, this product cleverly integrates art and humanistic education with a touch of technology. With the entry of the AR 3D audiobook Sick Rose into the retail channel, we expect it to provide the audience with the opportunity to experience both an AR Stereo audiobook and a VR animation work at the same time while reading this original story about Taiwan's traditional craftsmanship which echoes with the global situation in a diverse way.



An illustration of The Sick Rose AR Stereo audiobook with pictures and jigsaw puzzles

The 2021 TCCF Taiwan Creative Content Fest



The Sick Rose on display, TCCF Future Content Theme

The 2021 Taiwan Creative Content Fest (TCCF) is a national exhibition where the TAICCA gathers cultural content from all industries with the goal of igniting cultural-based creativity and national brands that advocate Taiwanese culture.



Setting of The Sick Rose, TCCF Future Content Theme



Physical Scene of The Sick Rose, TCCF Future Content Theme

In The Sick Rose, a sick child journeyed to hospital to find her mother. What she encountered on the way is somewhat related to our experience of the pandemic. The frame-by-frame animation was processed in VR panorama, with 35 ball-jointed characters to perform a never-before immersive doll animation. The film portrayed not only the exquisiteness of Taiwanese dexterity, but also the temperature of novel technology.

Brand value maker BEATDAY launches to reform the entertainment experience

● BEATDAY, the Metaverse of Music: Set free your live concert and go on a wild entertainment journey

Immersive technology and the Metaverse are on the up, and technology companies are building their own Metaverse for entertainment and financial systems. The pandemic has also spurred the need for live concerts to get revamped and there opens the gate for the VR world with its high degree of freedom and interactivity while ensuring social distancing.

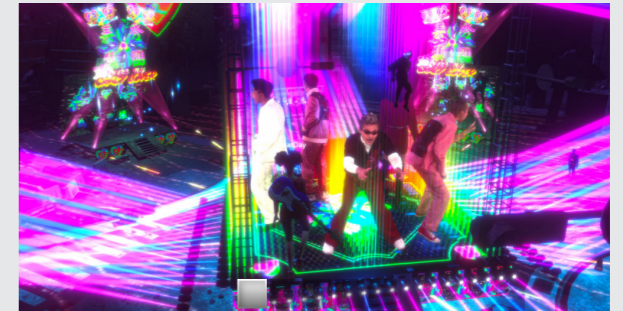


BEATDAY LOGO

VIVE ORIGINALS created the world's first Metaverse music brand BEATDAY, and expects to change the way culture affects us through novel technology. BEATDAY enhances the entertainment experience, and is driving the development of the VR entertainment industry in Taiwan. Moreover, VIVE ORIGINALS further elevated BEATDAY to the Metaverse through blockchain technology, releasing concert NFTs and all phenomenal, rich experiences in the Metaverse. Other than Ethereum, we have upcoming projects that support PoS (Proof of Stake) and PoSA (Proof of Stake Authority) blockchains that consume much less energy, building sustainable platforms for the digital arts.

● 2021 BEATDAY Exclusive Holographic Test Concert

Fans enjoyed free entry to nine Metaverse holographic concerts held in 2021 by BEATDAY, the Bisiugroup Amazing Show and THE RAPPERS, a Taiwanese talent show.

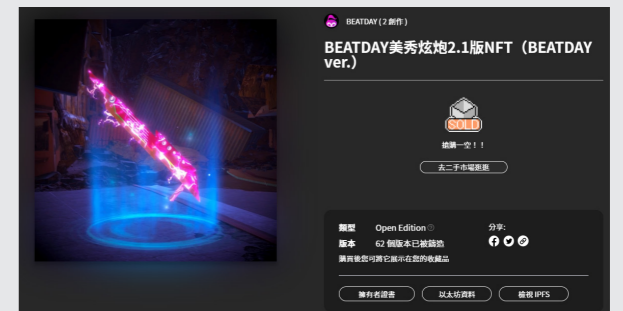


BEATDAY Bisiugroup Amazing Test Concert

Bisiugroup Amazing Show's holographic concert is a combination of volumetric capture, blockchain and XR and comprises three scenes – Cyber Shimenting, Dead Corp Zone, and Imaginary Number Site, each with their own songs and exclusive items and moves for fans to enjoy in the virtual world. At THE RAPPER holographic concert, BEATDAY created a Hip Hop Avenue and dedicated items, allowing the audience to experience a Hip Hop festival from home.

Other than concerts, Live Party was online during the event for singers and fans to look for hidden treasures and explore the scenes, discovering the power of virtual equipment while immersing themselves in the intersection between virtuality and reality.

Bisiugroup Amazing Show launched a limited NFT package on the eve of the BEATDAY concert. The package contains Bisiugroup Amazing Show virtual dolls, best for the digital collection, and the exclusive SUPER POWER 2.1, which can be used freely during the holographic test concert.



NFT SUPER POWER 2.1

With a presence of nearly 20,000 people, the test concert went green, mitigated the risk of spreading infection during the pandemic, and reduced energy consumption and carbon emissions that ordinarily would have been associated with a physical event.

Volumetric Capture Application – Enhanced BEATDAY Metaverse Music Platform Virtual Experience



4D Views studio performs 360 degree capture of all directions, allowing the perfect embedding of reality in virtual surroundings.

As the production center for XR creative content, VIVE ORIGINALS studies and experiments with the most advanced Volumetric Capture studio for cross-territorial development, devoting countless effort, time and funds to generating content, elevating the immersive process and digital content production at all aspects to drive a pan-entertainment industry.

VIVE ORIGINALS engineered a virtual, diverse holographic platform for BEATDAY’s concert for those with a passion for music and games. Before the concert begins, performers pre-record their show in the volumetric studio, then add in virtual content to complete a playable, holographic stage. From there, the audience can join in and move around in the concert space through own characters.

In future applications, 360-degree photos, CG animation, motion capture, instant engine and other tools and techniques will be incorporated in the production of videos, educational content, games and motion-sensing interactivities to discover a multitude of possibilities. High performance computing and 5G transmissions are key to a multi-sensorial experience, linking virtuality and reality on a deeper level.

VIVE Arts

VIVE Arts sees it our mission to tie art with state-of-art technology, remove geographical restrictions so that art reaches every corner of the globe, and is appreciated in brand new channels. The ever-advancing technology has enabled the realization of an immersive virtual gallery, joining the effort of countless top artists, more than 50 museums and cultural bodies, including London's Tate Museum, the V&A Museum, Musée du Louvre, Musée de l'Orangerie, Musée d'Orsay, the Museum of Natural Science in the US, the National Palace Museum of Taipei, the ArtScience Museum of Singapore, and Venice Biennale, among others.

Digital innovation makes creation accessible to most people, and alters the way art influences us while we are also able to preserve and view history. In 2021, our breakthrough and innovation on various media channels are furthered with technology through the efforts of Marina Abramović, Anish Kapoor, Laurie Anderson, Hsin-Chien Huang, Dominique Gonzalez Foerster and Kuo-Chien Tsai.

Our new trading platform dedicated to artwork launched in 2021, providing the world with a digital-creativity collaboration platform that features physical displays and online marketing. This well-constructed ecosystem is a new approach to the exchange, exhibition and sale of artwork by artists and art-culture agencies. On December 17, we worked with the Mucha Foundation for the first sale and included a NFT of Alphonse Mucha's Art Nouveau collection in response to the physical display of his works in Taipei – Timeless Mucha-Mucha to Manga: The Magic of Lines. Each month during the exhibition there was an additional NFT of his paintings and an auction at the end. Other than Ethereum, we have upcoming projects that support PoS (Proof of Stake) and PoSA (Proof of Stake Authority), blockchains that consume much less energy, building sustainable platforms for digital arts.

VIVE Arts continues to evolve and work with the world's top museums, cultural bodies and artists to make art enjoyable and culture from something new, displaying HTC's capacity and influence to the world with emerging technologies to connect people on international level.

London V&A Museum VR Experience - Alice: Curiouser and Curiouser

In celebration of the London V&A Museum's 2021 show Alice: Curiouser and Curiouser, VIVE Arts and V&A made a VR preview of Curious Alice on VIVEPORT and Steam in 2020.

Kristjana S. Williams built the scenes for Curious Alice based on the original work, where participants help the White Rabbit when searching for gloves, cracking down on the Caterpillar's puzzles, and dropping by the Queen of Hearts' croquet garden, while going through all world-renowned sites and scenes of Alice in Wonderland. V&A and VIVE Arts took advantage of some most advanced technologies and created an extraordinary dreamland for those far away from the physical show, exploring infinite possibilities with the marriage of art and technology.



CAI GUO-QIANG: SLEEPWALKING IN THE FORBIDDEN CITY

Asian artist Cai Guo-Qiang's retrospective exhibition, "Odyssey and Homecoming", featuring a virtual reality work, "Sleepwalking in the Forbidden City," in collaboration with HTC VIVE Arts kicked off at the Palace Museum in Beijing in 2020.

The exhibition comprises of three elements, a large marble model of the Forbidden City, cascading fireworks, and a VR work that is fused with all elements. The production process incorporates 3D scanning and modeling, 360-degree filming, and CG technologies.

The VIVE Pro headsets take the audience back to periods hundreds of years ago. Audiences can experience the grand opening composed with golden, silver, and red fireworks, to glittery sparks, and then to the sun shining on the double-eaves roof of the palace. Colorful smoke and pigments fall on audience's white world, transforming the Forbidden City's architecture into a phenomenal 3D gunpowder painting.

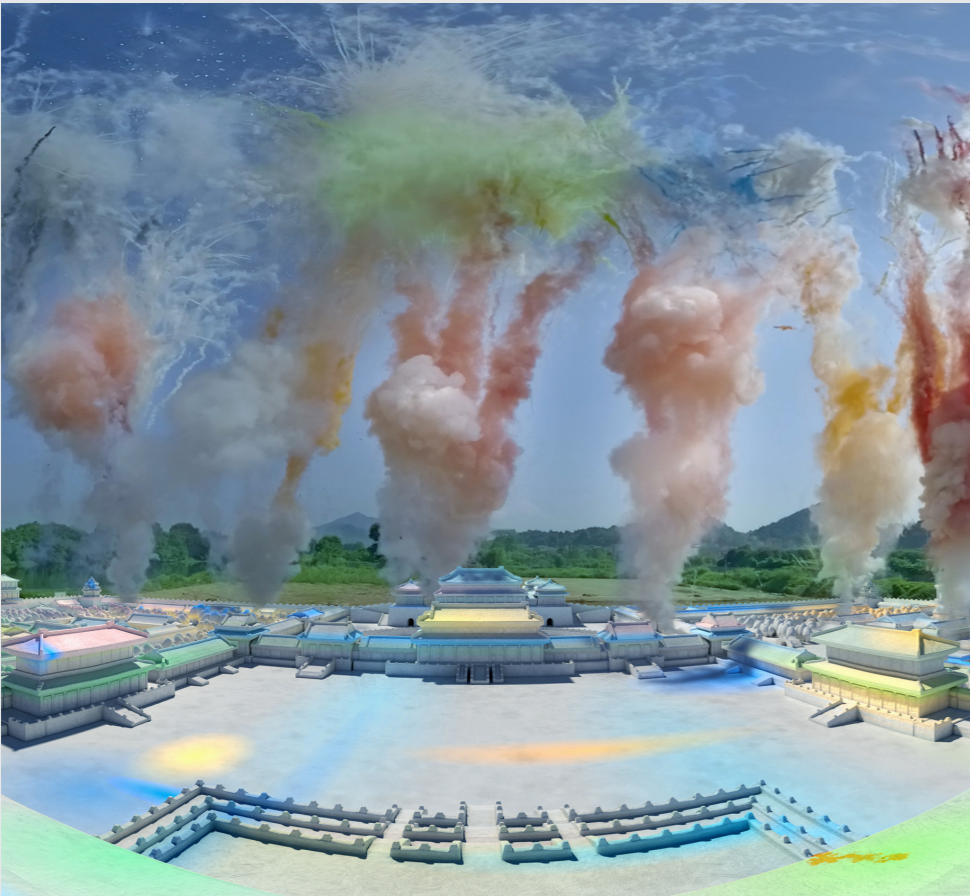


Image credit: Stills for VR work Sleepwalking in the Forbidden City, courtesy CaiStudio

TIMELESS MUCHA

Timeless Mucha, is part of a major collaboration between the Mucha Foundation and VIVE Arts, which will offer an exciting new way for audiences around the world to discover the artistic work of Art Nouveau pioneer Alphonse Mucha and to engage with the Mucha Foundation and the Mucha Family Collection. Bringing the physical and virtual worlds together, the event will take place in parallel with the exhibition Mucha to Manga – The Magic of the Line, organized by the Mucha Foundation. The exhibition will invite visitors to see the development of Alphonse Mucha's signature linear style and how it has influenced subsequent generations,

During the exhibition, visitors can link to the "Global NFT Artwork Trading Platform" through the VIVE Arts website to purchase NFT collections. The inaugural sale will be followed by new NFT drops on the platform at the start of each month, throughout the duration of the exhibition, featuring iconic works such as Zodiac, The Moon and the Stars series, Job and the theatrical poster for Gismonda, starring the most famous Parisian actress of the time, Sarah Bernhardt. The final sale will take place in April 2022, with a special two-week auction, which will commemorate the 110th anniversary of the completion of the first three paintings of Mucha's monumental series The Slav Epic in 1912, which were gifted to the City of Prague that year. All proceeds from the NFT sales will support the mission of the Mucha Foundation.



HTC VIVE Arts gave the world the Global NFT Artwork Trading Platform

At the end of 2021, HTC VIVE Arts gave the world the Global NFT Artwork Trading Platform and held an auction with support of the Mucha Foundation to bid on NFTs of selected artwork of the late Czech artist Alphonse Mucha, bringing blockchain a new possibility in digital art creation.

The VIVE Arts platform diversely serves creators and collectors on customized level and ensures privacy and trading traceability through blockchain encrypted artwork. The technology encrypts and writes artwork in the Proof-of-Work blockchain trading records, creating a transparent digital art market.

The platform accepts and displays VR-, AR- and XR-based digital artwork, and creators can decide on the number of NFTs and sales form. The platform supports payments in legal currency and encrypted currencies. Other than Ethereum, we have upcoming projects that support PoS (Proof of Stake) and PoSA (Proof of Stake Authority), blockchains that consume much less energy, building sustainable platforms for digital arts.

In the future, VIVE Arts plans to include the Metaverse for users to explore arts and culture, perfecting an all-dimension art and culture immersed ecosystem.



Art Goddesses "Music, Poetry, Painting, Dance" , Alphonse Mucha

JAKOB KUDSK STEENSEN: LIMINAL LANDS

Liminal Lands is the new creation of Danish’ artist Jakob Steensen’ in 2021. The new masterpiece presented a multiplayer virtual reality installation. It featured at LUMA Arles in France in the exhibition Prélude in June 2021, supported by HTC VIVE Arts.

Steensen's passion for environmental issues is expressed in the detailed observation of tiny organisms. His new conception, Liminal Lands, was his brain-child from his residency at LUMA village, where he reimagined Salin-de-Giraud, the salt field in the wetland of Camargue through photographs. In the artwork, natural elements of the sky, land and water exist independently of people, delivering a coexistence with nature. In this series of non-linear micro-observations, Steensen's detailed examination exposed the unseeable transformation in the formation of life through VR equipment. Participants enter new worlds with shifts of angles, perhaps diving into a bush of seaweed, or being in a feather, finding oneself in multiple, immersive spaces full of sensorial experiences.



Planet City Plans a Journey of VR on ADAE



Virtual Architect and Director Liam Young's works focuses on design, virtuality and the future. His first VR work, Planet City, is VIVE Arts based, and was on display at the Asia Digital Art Exhibition in Beijing's Times Art Museum.

The Planet City virtual city has a 10 billion population cap (about the same as that of Earth), and it represents merely a small part of the Earth. The remaining area is deserted to allow it to return to a primitive life. Narrated by renowned young actress Chloe Coleman, scores and songs by Forest Swords and EMEL, respectively, fiction is brought to life through VR equipment, allowing people to look up at buildings through windows, walk among them, or cast your eyes down from high levels, experiencing a very unusual VR space.

The girl telling the story is not only one of the first citizens of the city, but she represents a young, energetic climate activist, a role that used to be dominated by elder politicians or spokesperson of well-established institutions. The story is about modern people trying to navigate their own future, trying to reflect on present challenges through their imagination of what the future looks like.

VIVEPORT to Visualize the CAT ART Metaverse

In the waves of art industry digitalization, VR is an advancing force. In September 2021, CAT ART had its first online show, Step into Cat Art, which created a “CAT ART” Metaverse for cats around the world, giving a whole new life to art. Step into Cat Art is the world's first interact-able virtual exhibition, and through smartphones, PCs or VR devices, the audience interacts with cats in paintings. VIVEPORT used VR technology to embed actions and voices to these classic cat paintings, directing the characters in three dimensions, reducing the distance between the audience and cats, and enabling people through these immersive galleries to make contact with an animal and repose in the healing energy.



Other Social Engagement Activities

Blood Donations

Every year HTC cooperates with the Taipei Blood Center and Hsinchu Blood Center to hold blood donation drives. Many of our kind-hearted employees have developed the habit of regular blood donation since 2006. Every time the mobile vehicle from the Blood Center comes by our employees all line up to make donations to give back to society. Thanks to our employee's participation, every year we are honored with the Hsinchu Blood Donation Center's Certificate of Appreciation. In 2021, employees responded enthusiastically to blood donation activities and donated 109,250 in Taiwan alone. In 2021, employees responded enthusiastically to blood donation activities, the total blood donated in Taiwan was 109,250 ml

	2019	2020	2021
Number of incumbents	3,226	2,206	1,865
Blood Donation	799	553	278
Donation Rate(%)	24.76	25.06	14.90
Total blood donation (ml)	300,250	205,000	109,250

Note: The annual number of incumbents only counts the number in Taiwan

The HTC Child Support Club

The HTC Child Support Club was founded in 2006 as a spontaneous association formed by HTC employees. The members raise money that is donated to the Taiwan Fund for Children and Families (TFCF) to support the sponsorship of children in need. In 2021, a total of 43 children were adopted, including 35 in China and 8 in foreign countries (including Guatemala, Jordan, the Philippines, Senegal, Sri Lanka, Kyrgyzstan, and Paraguay etc.).

HTC Christmas Event: Passing on Well-Wishes

Affected by Covid-19 in 2020 and 2021, life not only changed in Taiwan but also in many other countries. It was a time when we learnt how to live with our closest ones, and social distance from others to protect society.

HTC and its people worked as a team to safeguard our office space. On Christmas Eve, we put together an event to thank every employee and their family for their support and selfless effort over the past few years.

On the day of the event, the Taipei New Life Church celebrated with talented performers, providing enjoyable shows and creating fun memories to encourage people to push through difficult times.

Summary of the communities and associations participated

Organization Name	Membership
SDA (Secure Digital Card Association)	General member
Wi-Fi (WECA Wireless Ethernet Compatibility Alliance)	General member
GSM Association	Member
TAICS (Taiwan Association of Information and Communication Standards)	General member
Khronos Group-OpenGL (Open Standards for media Authoring and Acceleration) (The Industry's Foundation for High Performance Graphics)	Member
NMEA (New Media Entertainment Association)	Group member
JBRC (Japan Battery Recycling Collection)	General member
Taoyuan importers & exporters chamber of commerce	General member
China Communications Standards Association	General member
Bluetooth SIG (Bluetooth Special Interest Group)	General member
CTIA (Cellular Telecommunications Industry Association)	Operators and industry member



The 2021 management approach and its components

Standard	Material topics	How HTC manages the topic	The purpose of the management approach	Related policies	Grievance mechanisms
Economic	Information Security	<ul style="list-style-type: none">● Follows ISO 27001 to implement all information security management systems. Annual internal audits of risk assessment, privacy and information security.● Incorporation of the Personal Information Management System, and Information Security Management System. The Legal Department, Product Safety and Information Security Department to protect privacy and information security as one team.	<ul style="list-style-type: none">● In order to ensure that information security and privacy protection are fully integrated into the organization's culture and the company's core values, HTC actively establishes and promotes information security and personal information protection policies, ensuring that they are in compliance with relevant information security and privacy protection regulations from various countries.	HTC Information Security Policy Personal Information Protection Management Policy Privacy Policy Patent Management Policy Notice and procedures for copyright infringement complaints Referral Policy	<ul style="list-style-type: none">● Internal: e-mail, announcements● Outside channel (info-security): global-privacy@htc.com, security@htc.com● Outside channels (intellectual property rights): Global-Copyright@htc.com
	Economic Performance	<ul style="list-style-type: none">● Values corporate governance and operational transparency, adopts and implements the corporate governance framework pursuant to the “Company Act” and “Securities and Exchange Act” to enhance management performance.	<ul style="list-style-type: none">● Properly and effectively assign the powers and responsibilities of the board of directors, managers, and shareholders to establish and maintain an operating team that is accountable to shareholders.● Comprehensive systematic execution of ESG to ensure the rights and interests of investors and other stakeholders.	Corporate Governance Practice Principles HTC Code of Conduct Rules for Derivatives Transactions Regulations for the Appointment of Directors/Supervisors of the Re-Investment Board of Directors Rules of Procedure	Contact for Investors: Tel: +886-2-8912-4138 e-mail: ir@htc.com Company Spokesman and Investment Relations Shen Daobang spokesman@htc.com
	Pandemic Management	<ul style="list-style-type: none">● Refer to Covid-19 Prevention and Management for pandemic management information.	<ul style="list-style-type: none">● Establishment of a contingency plan and management measures in response to Covid-19.● Effective prevention of the advance and infection of the disease to safeguard the health of personnel.	COVID-19 response plan The management measures of Covid-19 Suspected and confirmed case COVID-19 health self-management	Health Center
Environmental	Environmental regulation compliance Supplier environmental assessment Wastes GHG emission Energy Management	<ul style="list-style-type: none">● Inclusion of ISO 14001 and an independently certified management approach.● Inclusion of ISO 50001 for energy management.● Sewage prevention and control equipment at plant sites; regular detection and report online.● Classification and minimization to reduce waste; engage certified cleaning services for proper handling of waste and spot checks to ensure compliance.● Regular patrol with an inspection list to check waste storage and temporary storage area.● Thorough improvement of manufacturing processes and quality, staff training, raw material quality control and management, jig development and improvement, automatic production and tests, and precision examinations to extend the product life time and life cycle, and reduce environmental hazards.● Establishment of a supplier assessment, audit and management system. All new suppliers must meet the HSF rating criteria. Quarterly ratings for existing suppliers to assess HSF performance. Starting from 2022, a higher percentage of suppliers and performance assessments will be dominated by the carbon emission management system and improvement plan.● Joins the CDP and provide regular reports about carbon risk, and the plan, system and achievement of carbon management.● In the HTC Supplier Code of Conduct, environmental regulations are made based on the Responsible Business Alliance (RBA), and we conduct regular assessments to ensure supplier compliance and implementation.	<ul style="list-style-type: none">● Waste classification; reminders to keep waste to a minimal; increase recycle and reuse rate.● Reduce operational impact on the environment.● Extend social responsibility awareness to suppliers and ensure a responsible supply chain.	EHS Management Manual HTC ESG Policy Process for Removal and Handling Business Waste Manual Procedures for Sewage System Operation, Repair, and Maintenance HTC Supplier Code of Conduct Vendor Management Procedure Vendor Survey Procedure Supply Chain CSR and QMS Audit Procedure Contractor EHS Management Procedures EHS and Energy Regulations Requirements Management Procedures Supplier ESH and Energy Management Procedures	Internal channel: e-mail, announcements, improvement proposals, discussions during Health and Safety Committee meetings. External stakeholders may file an appeal through esg@htc.com , where cases are directed to the OSH unit and followed up pursuant to the EP-00000010 Procedures for the Control of Environmental Documents.

Standard	Material topics	How HTC manages the topic	The purpose of the management approach	Related policies	Grievance mechanisms
Social	Employment relationship	<ul style="list-style-type: none"> ● HTC has a well-established parental leave application mechanism to protect the rights of employees. 	<ul style="list-style-type: none"> ● Ensure the rights and interests of all employees. 	HTC Code of Conduct	<ul style="list-style-type: none"> ● The grievance mechanism includes employee complaint hotline, complaint suggestion box, grievance e-mail, and sexual harassment grievance mail box
	Labor relationship	<ul style="list-style-type: none"> ● Provide diverse and fair employment opportunities for employees. 	<ul style="list-style-type: none"> ● Promote good labor relations 	Customer Satisfaction Management Program Specification	
	Occupational safety and health	<ul style="list-style-type: none"> ● The Compensation Committee under the Board of Directors evaluates the remuneration policy and system and measures the performance of directors, supervisors and managers. 	<ul style="list-style-type: none"> ● Protect the labor rights of multi-ple employees. 	HTC ESG Policy	
	Training and education	<ul style="list-style-type: none"> ● Attractive and motivational salary package 	<ul style="list-style-type: none"> ● Reduce the turnover rate of em-ployees. 	Modern Slavery Act Statement	<ul style="list-style-type: none"> ● Manufacturing employees of the production line company extension 38585
	Customer privacy	<ul style="list-style-type: none"> ● The company convenes a labor-management conference every quarter and records and tracks problems and improves results 	<ul style="list-style-type: none"> ● Reduce the risk of workplace hazards for employees and re-duce occupational hazards. 	Employee Grievance Procedure	
	Socioeconomic Compliance	<ul style="list-style-type: none"> ● The Occupational Safety Department is responsible for the implementation of the occupational safety and health and energy management system and draw up the annual plan. ● Establish a multi-faceted employee complaint channel ● The five core competencies based on internal training courses to boost learning through diverse approaches. ● Leadership training combines HTC's core values and organizational development strategy and direction, emphasizing the three competencies of HTC's leadership and management. ● Set individual targets at the beginning of the year and conduct mid-year and year-end performance audits with immediate supervisors. ● HTC's commitment to customers: strict adherence to contractual agreements and confidentiality. ● Set up internal control mechanisms to control technical data, software and hardware, and customer patents or intellectual property rights. ● RBA-based ESG policy; establishment of a supplier assessment, audit and management system ● In the HTC Supplier Code of Conduct, the labor rights, code of ethics, and health and safety are adopted based on the RBA, and we conduct regular assessments to ensure supplier compliance and practice. ● HTC provides a Conflict Minerals Survey to conduct annual assessments of suppliers' mineral sources. Establishes KPIs, and feedback mechanisms to effectively manage the supply chain. 	<ul style="list-style-type: none"> ● Attract and retain outstanding talent. ● Reduce the negative impact the end of careers. ● An environment of free commu-nication for employees to im-prove work motivation and effi-ciency. ● Empowers HTC employees with sufficient professional knowledge and allow them to take up different challenges and industry movement ● A series of leadership course to build a key leader team. ● The systematic performance man-agement system and practical tools help employees set up work targets that adhere to the Company's opera-tional guidelines, improve perfor-mance, and achieve overall good op-erational performance. ● Inclusion of the personal information management system to protect personal information in the product and internal management procedure. ● Incorporation of the User Cookie Management Center to leave control rights to cookies and similar tools to users to protect user privacy. ● Ensure products are non-toxic and harmless green products that comply with national laws and customer specifications. ● Protect customer health and safety. ● Protect customer privacy. ● Reduce harmful substances and packages of products. ● Conformity to relevant socioeconomic regulations. 	<ul style="list-style-type: none"> ● ESH Management Manual ● Health and Safety Rules ● HTC hazardous substance management policy ● HTC Supplier Code of Conduct ● HTC Information Security Policy ● Personal Information Protection Man-agement Policy ● Privacy Policy ● Customer Service Privacy Protection Declaration ● Vendor Management Procedure ● Vendor Survey Procedure ● Supply Chain CSR and QMS Audit Pro-cedure ● HTC Conflict Mineral Procurement Policy ● Supplier EHS and Energy Management Procedures 	<ul style="list-style-type: none"> ● Other general employees company extension 28585 ● Employee helpline e-mail HelpMe_8585@htc.com ● Customer service hotline: 0809-090-166, please call: 02-2162-6788 ● Set up local customer service hotlines in 11 countries around the world ● Build more than 59 websites in different countries ● Provide PR, Service, Copyright, Security and other different types of e-mail

2021 Management Approach

Standard	Material Topic	Mechanism of Evaluation	The result of Evaluation (referring page)
Economic	Information Security	ISO 27001 Information security management systems ISO 27701 Privacy Information Management System	P.75-79 Privacy protection and information security risk management
	Economic performance	Independent director, Audit committee, Internal Audit System Corporate Governance Evaluation of TWSE	P.28 Overview of Financial Performance P.69-73 Corporate Governance
	COVID-19 Prevention Management	Corporate Management Office Health Center	P.51-54 COVID-19 Prevention Management
Environmental	Environmental Compliance	HTC ESG Committee Responsible Business Alliance (RBA) EU WEEE- Waste Electrical & Electronic Equipment	P.60 ESG Management Procedures and Systems P.82-86 Management of Climate Change Risk P.87 GHG Emission and Reduction
	Supplier Environmental Assessment	France Repairability Index EU RoHS / EAC RoHS / China RoHS	P.103 Sustainable Agenda P.105 Green Facility P.109-117 Sustainable Design
	Waste	ISO 50001 Energy Management System ISO 14001 Environmental Management ISO 14064-1 Greenhouse Gas Emissions	P.118-120 Hazardous Waste Management P.131-132 Sustainable Supply Chain
	Emissions	Carbon Disclosure Project, CDP Supplier assessment and management mechanism.	
	Energy	Domestic related environmental regulations	
Social	Customer Privacy	ISO 27001 Information security management systems ISO 27701 Privacy Information Management System Corporate customer satisfaction management General Data Protection Regulation(GDPR) Domestic and foreign related capital regulations	P.75-79 Privacy protection and information security risk management P.96 Protection of IP Rights P.99-100 Customer Satisfaction Management
	Employment	HTC ESG Committee Responsible Business Alliance (RBA) The Universal Declaration of Human Rights (UDHR)	P.58 ESG Committee P.69-71 Organization Structure P.139 Human Rights and a High Standard of Professional Ethics
	Labor Management Relations	Corporate Governance Evaluation of TWSE ISO 45001 Occupational Health and Safety Management System Labor contract	P.151-153 Diversified Employee Welfare P.156-157 Listening to the Voice of the Employee P.157 Employee Satisfaction Survey P.163 Occupational Safety and Health Committee
	Occupational Health and Safety	Industry union Grievance mechanisms Employee satisfaction survey labor-management meetings	
	Socioeconomic Compliance	Other social and economic related regulations (do-mestic and foreign)	P.60 ESG Management Procedures and Systems P.72-73 Strict Mechanisms for Avoiding Conflicts of Interest P.76 Structure of HTC Personal Information Management System P.109 Sustainable Design P.132 The HTC Supplier ESG Assessment and Audit P.139 Human Rights and a High Standard of Professional Ethics P.156-157 Listening to the Voice of the Employee
	Training and Education	Annual Training Program	P.145-149 Talent Cultivation and Development

GRI Standards Content Index

Disclosed Topic		Referring Page	Re-mark
GRI 102 : General Disclosures 2016			
102-1	Name of the organization	P.9 About HTC	●
102-2	Activities, brands, products, and services	P.9 About HTC	●
102-3	Location of headquarters	P.12 Global Operation Locations	●
102-4	Location of operations	P.12 Global Operation Locations	●
102-5	Ownership and legal form	P.9 About HTC	●
102-6	Markets served	P.12 Global Operation Locations	●
102-7	Scale of the organization	P.9-12 About HTC P.28 Overview of Financial Performance P.140-142 Overview of Human Resource Structure	●
102-8	Information on employees and other workers	P.140-142 Overview of Human Resource Structure	●
102-9	Supply chain	P.15-16 Virtual Reality P.17-18 5G, Smartphones and Connected Devices	●
102-10	Significant changes to the organization and its supply chain	Please refer to Market Observatory Post System: http://mops.twse.com.tw	●
102-11	Precautionary Principle or approach	P.74 Tax and Risk Management P.82-86 Management of Climate Change Risk	●
102-12	External initiatives	P.33-48 HTC 2021 SDGs Performance P.59 The HTC ESG Policy P.131-132 Sustainable Supply Chain	●
102-13	Membership of associations	P.185 Summary of the communities and associations participated	●
102-14	Statement from senior decision-maker	P.3-4 Statement of the Management P.5-6 Letter from Chief Sustainability Officer	●
102-15	Key impacts, risks, and opportunities	P.74 Tax and Risk Management P.82-86 Management of Climate Change Risk	
102-16	Values, principles, standards, and norms of behavior	P.29-32 The Pursuit of Brilliance P.59 The HTC ESG Policy	●
102-17	Mechanisms for advice and concerns about ethics	P.69-73 Corporate Governance	
102-18	Governance structure	P.58 ESG Committee P.69-73 Corporate Governance	●
102-19	Executive-level responsibility for economic, environmental, and social topics	P.58 ESG Committee	
102-20	Consulting stakeholders on economic, environmental, and social topics	P.58 ESG Committee	
102-22	Composition of the highest governance body and its committees	Please refer to HTC 2021 Annual Report P.30-69	
102-23	Chair of the highest governance body	Please refer to HTC 2021 Annual Report P.30-35	
102-24	Nominating and selecting the highest governance body	Please refer to HTC 2021 Annual Report P.36	

Note: ● means GRI core options ; ○ means material topic

Disclosed Topic		Referring Page	Re-mark
102-25	Conflicts of interest	Please refer to HTC 2021 Annual Report P.71	
102-26	Role of highest governance body in setting purpose, values, and strategy	P.70 Board of Directors	
102-32	Highest governance body's role in sustainability reporting.	P.58 ESG Committee	
102-36	Process for determining remuneration	P.70 Compensation Committee	
102-40	List of stakeholder groups	P.65-66 Diversified Channels for Transparent Information Disclosure Significance	●
102-41	Collective bargaining agreements	P.157 Effective Advisory and Assistance Channel	●
102-42	Identifying and selecting stakeholders	P.60 ESG Management Procedures and Systems	●
102-43	Approach to stakeholder engagement	P.65-66 Diversified Channels for Transparent Information Disclosure Significance	●
102-44	Key topics and concerns raised	P.60 ESG Management Procedures and Systems P.63-64 HTC 2021 Material Issues and Boundary P.65-66 Diversified Channels for Transparent Information Disclosure Significance P.187-190 The 2021 management approach and its components P.191 2021 Management Approach	●
102-45	Entities included in the consolidated financial statements	Please refer to HTC 2021 Annual Report P.312-314 The main manufacturing and operating bases of the scope disclosed in the ESG report: Taiwan	●
102-46	Defining report content and topic Boundaries	P.1 Report Scope and Boundary P.63-64 HTC 2021 Material Issues and Boundary P.65-66 Diversified Channels for Transparent Information Disclosure Significance	●
102-47	List of material topics	P.63-64 HTC 2021 Material Issues and Boundary	●
102-48	Restatements of information	None	●
102-49	Changes in reporting	None	●
102-50	Reporting period	P.1 Time Coverage of Disclosure	●
102-51	Date of most recent report	2021/06	●
102-52	Reporting cycle	P.1 Time Coverage of Disclosure	●
102-53	Contact point for questions regarding the report	P.2 Contact Us	●
102-54	Claims of reporting in accordance with the GRI Standards	P.1 Report Basis	●
102-55	GRI content index	P.192-196 GRI Standards Content Index	●
102-56	External assurance	P.197-199 Assurance Statement	●
GRI 103 Management Approach 2016			
103-1	Explanation of the material topic and its Boundary	P.63-64 HTC 2021 Material Issues and Boundary	●
103-2	The management approach and its components	P.82-86 Management of Climate Change Risk P.187-190 The 2021 management approach and its components	●
103-3	Evaluation of the management approach	P.191 2021 Management Approach	●

Note: ● means GRI core options ; ○ means material topic

Disclosed Topic		Referring Page	Re-mark
Topic-Specific Disclosures: GRI 200 (Economic topics)			
GRI 201 : Economic-Performance 2016			
201-1	Direct economic value generated and distributed	P.28 Overview of Financial Performance	○
201-2	Financial implications and other risks and opportunities due to climate change	P.82-86 Management of Climate Change Risk	○
201-3	Defined benefit plan obligations and other retirement plans	P.150-151 Salary and Benefits P.151-153 Diversified Employee Welfare	○
GRI 202 : Market-Presence 2016			
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	P.150 Competitive Compensation	
GRI 204 : Procurement Practices 2016			
204-1	Proportion of spending on local suppliers	P.131-132 Sustainable Supply Chain	
GRI 205 : Anti-Corruption 2016			
205-2	Communication and training about anti-corruption policies and procedures	P.72-73 Strict Mechanisms for Avoiding Conflicts of Interest	
205-3	Confirmed incidents of corruption and actions taken	None	
GRI 207 : Tax 2019			
207-1	Approach to tax	P.74 Tax Guidelines	
207-2	Tax governance, control, and risk management	P.74 Tax and Risk Management	
207-3	Stakeholder engagement and management of concerns related to tax	P.74 Stakeholder Engagement	
Topic-Specific Disclosures: GRI 300 (Environmental topics)			
GRI 302 : Energy 2016			
302-1	Energy consumption within the organization	P.87 Energy Consumption Analysis	○
302-4	Reduction of energy consumption	P.88-89 Energy-saving and carbon reduction Actions	○
GRI 305 : Emissions 2016			
305-1	Direct (Scope 1) GHG emissions	P.87 GHG Emission and Reduction	○
305-2	Energy indirect (Scope 2) GHG emissions	P.87 GHG Emission and Reduction	○
305-3	Other indirect (Scope 3) GHG emissions	P.87 GHG Emission and Reduction	○
305-5	Reduction of GHG emissions	P.88-89 Energy-saving and carbon reduction Actions	○
GRI 306 : Waste 2020			
306-1	Waste generation and significant waste-related impacts	P.118-120 Hazardous Waste Management	○
306-2	Management of significant waste-related impacts	P.111-112 Product Recyclability Design	○

Note: ● means GRI core options ; ○ means material topic

Disclosed Topic		Referring Page	Re-mark
306-3	Waste generated	P118-120 Hazardous Waste Management	○
306-4	Waste diverted from disposal	P118-120 Hazardous Waste Management P121 Waste Reduction, Recycling and Reuse	○
GRI 307 : Environmental Compliance 2016			
307-1	Non-compliance with environmental laws and regulations	P60-61 ESG Management Procedures and Systems	○
GRI 308 : Supplier Environmental Assessment 2016			
308-1	New suppliers that were screened using environmental criteria	P132 The HTC Supplier ESG Assessment and Audit	○
308-2	Negative environmental impacts in the supply chain and actions taken	P132 The HTC Supplier ESG Assessment and Audit	○
Topic-Specific Disclosures: GRI 400 (Social topics)			
GRI 40 : Employment 2016			
401-1	New employee hires and employee turnover	P141-142 The Global Distribution of HTC Personnel	○
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	P150-151 The Global Distribution of HTC Personnel P151-153 Diversified Employee Welfare	○
401-3	Parental leave	P156 Work-life Balance Support	○
GRI 402 : Labor Management Relations 2016			
402-1	Minimum notice periods regarding operational changes	P156-157 Listening to the Voice of the Employee	○
GRI 403 : Occupational Health and Safety 2018			
403-1	Occupational health and safety management system	P163 Occupational Safety and Health Committee	○
403-2	Hazard identification, risk assessment, and incident investigation	P164-166 Positively Preventing Occupational Accidents	○
403-3	Occupational health services	P159 Health Management	○
403-4	Worker participation, consultation, and communication on occupational health and safety	P163 Occupational Safety and Health Committee	○
403-5	Worker training on occupational health and safety	P164-166 Positively Preventing Occupational Accidents	○
403-6	Promotion of worker health	P160 Health Promotion	○
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	P122-123 Hazardous Substances and Chemical Control P132 The HTC Supplier ESG Assessment and Audit P166 Comprehensive Emergency Rescue Measures	○
403-9	Work-related injuries	P167-168 2021 Occupational injury in Taiwan	○
403-10	Work-related ill health	P167-168 2021 Occupational injury in Taiwan	○
GRI 404: Training and Education 2016			
404-1	Average hours of training per year per employee	P149 Training Result	○
404-2	Programs for upgrading employee skills and transition assistance programs	P145-149 Talent Cultivation and Development	○
404-3	Percentage of employees receiving regular performance and career development reviews	P148 Training and Performance Integration	○

Note: ● means GRI core options ; ○ means material topic

Disclosed Topic		Referring Page	Re-mark
GRI 405: Diversity and Equal Opportunity 2016			
405-1	Diversity of governance bodies and employees	P.70 The composition of HTC Management (Directors) by Age & Gender P140 Overview of Human Resource Structure P141-142 The Global Distribution of HTC Personnel	
405-2	Ratio of basic salary and remuneration of women to men	P150 Competitive Compensation	
GRI 410: Security Practices 2016			
410-1	Security personnel trained in human rights policies or procedures	P164 Professional Security Service Team	
GRI 417: Marketing and Labeling 2016			
417-1	Requirements for product and service information and labeling	P128 Environmentally friendly with sustainable packaging	
417-2	Incidents of non-compliance concerning product and service information and labeling	None	
417-3	Incidents of non-compliance concerning marketing communications	None	
GRI 418: Customer Privacy 2016			
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	None	○
GRI 419: Socioeconomic Compliance 2016			
419-1	Non-compliance with laws and regulations in the social and economic area	P156-157 Listening to the Voice of the Employee	○

Note: ● means GRI core options ; ○ means material topic



ASSURANCE STATEMENT

SGS TAIWAN LTD.'S REPORT ON SUSTAINABILITY ACTIVITIES IN THE HTC CORPORATION'S SUSTAINABILITY REPORT FOR 2021

NATURE AND SCOPE OF THE ASSURANCE/VERIFICATION

SGS Taiwan Ltd. (hereinafter referred to as SGS) was commissioned by HTC CORPORATION (hereinafter referred to as HTC) to conduct an independent assurance of the Sustainability Report for 2021 (hereinafter referred to as the ESG 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 verification. 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.

INTENDED USERS OF THIS ASSURANCE STATEMENT

This Assurance Statement is provided with the intention of informing all HTC's Stakeholders.

RESPONSIBILITIES

The information in the HTC's ESG Report of 2021 and its presentation are the responsibility of the directors or governing body (as applicable) and the management of HTC. SGS has not been involved in the preparation of any of the material included in the Report

Our responsibility is to express an opinion on the text, data, graphs and statements within the scope of verification with the intention to inform all HTC's stakeholders.

ASSURANCE STANDARDS, TYPE AND LEVEL OF ASSURANCE

The SGS ESG & Sustainability Report Assurance protocols used to conduct assurance are based upon internationally recognized assurance guidance, including the Principles contained within the Global Reporting Initiative Sustainability Reporting Standards (GRI Standards) 101: Foundation 2016 for report quality, and the guidance on levels of assurance contained within the AA1000 series of standards and guidance for Assurance Providers.

The assurance of this report has been conducted according to the following Assurance Standards:

Assurance Standard Options and Level of Assurance	
A.	SGS ESG & SRA Assurance Protocols (based on GRI Principles and guidance in AA1000)
B.	AA1000ASv3 Type 2 High Level (AA1000AP Evaluation plus evaluation of Specified Performance Information)

SCOPE OF ASSURANCE AND REPORTING CRITERIA

The scope of the assurance included evaluation of quality, accuracy and reliability of specified performance information as detailed below and evaluation of adherence to the following reporting criteria:

Reporting Criteria Options	
1.	GRI Standards (Core)
2.	AA1000 Accountability Principles (2018)

- evaluation of content veracity of the sustainability performance information based on the materiality determination at a high level of scrutiny for HTC and moderate level of scrutiny for applicable aspect boundaries outside of the organization covered by this report;
- AA1000 Assurance Standard v3 Type 2 evaluation of the report content and supporting management systems against the AA1000 Accountability Principles (2018); 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.

ASSURANCE METHODOLOGY

The assurance comprised a combination of pre-assurance research, interviews with relevant employees, superintendents, ESG committee members and the senior management in Taiwan; documentation and record review and validation with external bodies and/or stakeholders where relevant. In response to COVID-19 pandemic situation the assurance process was conducted via Teams.

LIMITATIONS AND MITIGATION

Financial data drawn directly from independently audited financial accounts, Task Force on Climate-related Financial Disclosures (TCFD) and SASB related disclosures have 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 HTC, 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 specified performance information included in the scope of assurance is accurate, reliable, has been fairly stated and has been prepared, in all material respects, in accordance with the reporting criteria.

We believe that the organisation has chosen an appropriate level of assurance for this stage in their reporting.

AA1000 ACCOUNTABILITY PRINCIPLES (2018) CONCLUSIONS, FINDINGS AND RECOMMENDATIONS

Inclusivity

HTC has demonstrated commitment to stakeholder inclusivity and stakeholder engagement. A variety of engagement efforts such as survey and communication to investors, customers, consumers, employees, suppliers, and communities are implemented to underpin the organization's understanding of stakeholder concerns.

Materiality

HTC has established 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.

Impact

HTC has included in this report the disclosures of the organisation's impacts on stakeholders and on the organization itself. Measurements and evaluations on potential impacts, such as direct and indirect, intended and unintended, and positive and negative impacts and the relevant management process to address these impacts are to be further described in future report.

GLOBAL REPORTING INITIATIVE REPORTING STANDARDS CONCLUSIONS, FINDINGS AND RECOMMENDATIONS

The report, HTC's ESG Report of 2021, 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 HTC's involvement with the impacts for each material topic, including how it has identified actual and potential, negative and positive impacts on the economy, environment, and people, including impacts on their human rights, across its activities and business relationships.

Signed:

For and on behalf of SGS Taiwan Ltd.



David Huang
Senior Director
Taipei, Taiwan
13 June, 2022
WWW.SGS.COM



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