

Tencent 腾讯

**ENVIRONMENTAL, SOCIAL AND
GOVERNANCE REPORT 2021**



About Tencent

Tencent is a world-leading internet and technology company that develops innovative products and services to improve the quality of life of people around the world.

Founded in 1998 with its headquarters in Shenzhen, China, Tencent has been listed on the Stock Exchange of Hong Kong since 2004. Tencent's guiding principle is to use technology for good. Our communication and social services connect more than one billion people around the world, helping them to keep in touch with friends and family, access transportation, pay for daily necessities, and even be entertained.

Tencent publishes some of the world's most popular video games and other high-quality digital content, enriching interactive entertainment experiences for people around the globe.

Tencent also offers a range of services, such as cloud computing, advertising, FinTech, and other enterprise services to support our clients' digital transformation and business growth.

Value for Users, Tech for Good

User value is our guiding principle, and we strive to incorporate social responsibility into our products and services. We also promote technology innovation and cultural vitality; help industries digitally upgrade; collaborate for the sustainable development of society.

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Message From the Management

Following a long period of rapid development, the Internet industry in China has revolutionised many aspects of our daily lives and contributed significantly to the digitisation of industries. However, for several years, industry participants have overemphasised zero-sum competition, aggressive marketing, reckless expansion, short-term growth, and corporate benefits, overlooking the most important elements of sustainable growth. Since early 2021, the Internet industry has faced fundamental changes and challenges. In China, new regulations have been introduced to correct misbehaviour by industry participants in multiple sectors and to promote fair competition, user protection and data security. At the same time, the global macro-environment has become increasingly challenging.

Amid these changes and challenges, we strongly believe that it is time for the Internet industry to return to its roots of creating sustainable value in a responsible way. In the new paradigm, the industry should refocus on the most important and fundamental elements for healthy development, including user value, technology and innovation, cost efficiency, long-term sustainability, and the balance of interests between corporations, industry and society.

At Tencent, we believe we are already well-positioned for the new industry paradigm and remain confident in our future. We have a long-term-oriented corporate culture that focuses on the key elements for long-term sustainable and healthy development, including user value, social responsibility, technology innovations and compliance. We also proactively embrace changes to better align ourselves with the new industry paradigm.

Our culture and adaptability are the bedrock of the significant progress that we have made in environmental, social and governance during 2021:

Environmental

We voluntarily pledged to reach carbon neutrality across our operations and supply chains by 2030 and to use green power for 100% electricity consumed. Our net-zero pledge will be following the principle of prioritising the use of active emissions reduction measures while keeping the use of carbon offsets to a minimum and committed to the "Science Based Targets initiative" (SBTi). At the same time, we will continue to facilitate consumers and industries to transition to a low-carbon lifestyle and operation by leveraging our strength in technologies, products and platforms.

Social

We continue to fulfil our "Tech for Good" mission via our new Sustainable Social Value organisation, which is responsible for exploring high-quality and sustainable paths to enhance social well-being through innovation in technologies, products, funding and operational models. Tencent Charity platform has launched a kick-start programme to subsidise 1,000 digital personnel of public welfare organisations and fund 100 industry programmes that support charitable organisations to run sustainable social value innovation projects by leveraging the Internet charity platforms. Our industry-leading audio lab, through our "Ethereal Audio Campaign", worked with partners to improve the audio clarity and intelligibility of cochlear implants by 40% with our proprietary AI technology, delivering a better hearing experience at a lower price for hearing-impaired individuals. Our interdisciplinary artificial intelligence research team released its *Explainable AI Development Report 2022*, the first explainable AI report published in China that aims to drive the advancement of explainable and responsible AI.

Governance

We have established a new ESG governance structure to strengthen our capability to manage ESG risks and nurture opportunities that enhance sustainable growth. The Corporate Governance Committee has been delegated by the Board to oversee ESG matters and is supported by the new ESG Working Group at the Company level. Under the leadership of ESG Steering Team, which includes senior executives with responsibilities over our key ESG topics, the ESG Working Group will work with the Corporate Governance Committee to identify and execute our ESG priorities.

We are committed to continuously enhancing our ESG performance via materiality assessment and action plans to manage risks and nurture new opportunities.

We have also upgraded our ESG disclosure by publishing this standalone report, which encapsulates our efforts to demonstrate our commitment to sustainable growth.

James Mitchell John Lo

Co-chairs
ESG Working Group

Performance Overview in 2021

2030

To reach carbon neutrality across our operations and supply chains by 2030

5.111 million metric tons

Greenhouse gas emissions based on the GHG Protocol (Scopes 1, 2, and 3)

65,334 MWh

Annual renewable energy usage

LEED

Tencent Tianjin Binhai Data Centre Building No. 4 received LEED V4 0+M Platinum Certification

3 consecutive years

Gradual improvement for 3 consecutive years based on annual employee and satisfaction survey

11,909 courses

Tencent Academy offered 11,909 courses this year

40.97 hours

Average employee training hour
An increase of 26% compared to the previous year

3.55 million views

Three video classes were launched under "Protecting Children: Courses for Minors, Parents, and Teachers" on Children's Day, receiving 3.55 million views by students and parents

RMB **1.513** billion

Tencent's annual contribution to the Tencent Foundation (the Mainland of China)

100%

All employees participated in the *Tencent Sunshine Code of Conduct* and anti-fraud training

Corporate Governance

Corporate Governance Structure

Tencent is committed to maintaining high-level corporate governance and providing our stakeholders with a thorough understanding of the Group's management and development. We believe strong corporate governance is critical to creating sustainable value for our shareholders.

Tencent has a unitary Board. The non-executive directors of the Company bring a wide range of business and financial experience to the Board. Independent non-executive directors of the Company represent more than one-third of the Board (among the 8 directors, 4 are independent non-executive directors, 2 are non-executive directors, and 2 are executive directors), providing sufficient checks and balances that safeguard the interests of the shareholders and the Group.

We put a premium on a diverse board composition. The *Board Diversity Policy* was formulated in 2013 and revised in March 2022. We focus on many diversity factors including, but not limited to, skills, knowledge, experience, gender, and background. The board includes one female director, two directors with a doctorate, and one postdoctoral director. Each board member contributes their deep experience in respective fields, including computing, electronic engineering, business administration, law, medicine, and social sciences.

The Board has established the Audit Committee, Corporate Governance Committee, Investment Committee, Nomination Committee, and Remuneration Committee. The Board delegated the Corporate Governance Committee to oversee the Group's ESG matters.

For details of our corporate governance, please refer to the "*Corporate Governance Report*" section in the *Tencent 2021 Annual Report*.

- Among the board members, two are executive directors while the remaining six are independent non-executive directors or non-executive directors who do not participate in the management of the Company.
- Among the five committees, three committees, namely the Audit Committee, Corporate Governance Committee and Remuneration Committee, are chaired by and composed of independent non-executive directors and non-executive directors only.

- The board includes one female director, two directors with doctorate, and one postdoctoral director. Each board member contributes their deep experience in respective fields, including computing, electronic engineering, business administration, law, medicine, and social sciences.
- In 2021, the Corporate Governance Committee was delegated by the board to oversee the Group's ESG matters and fulfil ESG governance with support from the new established ESG Working Group.

Risk Management

Adequate and effective risk management and internal control systems are the key to safeguarding the achievement of the Company's strategic objectives. Under the supervision and guidance of the Board, the Company has adopted a risk management and internal control structure, referred to as the "Three Lines of Defence" model, to ensure the effectiveness of its risk management and internal control systems.

We have also formulated the *Risk Management and Internal Control Policy* as well as related risk management processes, conducted regular identification and assessment of risks, and established appropriate risk response measures. ESG has been incorporated into the Company's risk assessment and management system, including climate risks.

For more details regarding the Company's significant risks and detailed risk management for the year, please refer to the "*Corporate Governance Report*" section in the *Tencent 2021 Annual Report*.

First Line of Defence

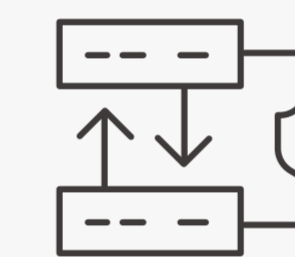
Operation and Management



Our First Line of Defence is mainly comprised of business and functional departments of each business group of the Company who are responsible for the day-to-day operation and management. They are responsible for designing and implementing controls to address the risks.

Second Line of Defence

Risk Management



Our Second Line of Defence is comprised of the Risk Management and Internal Control Department. They are responsible for formulating policies related to the risk management and internal control of the Company and for planning and implementing the establishment of integrated risk control systems. To ensure the effective implementation of such systems, they also assist and supervise the first line of defence in the establishment and improvement of risk management and internal control systems.

Third Line of Defence

Independent Assurance



Our Third Line of Defence is comprised of the Internal Audit Department and Anti-fraud Investigation Department.

The Internal Audit Department holds a high degree of independence and is responsible for providing independent evaluation on the effectiveness of the Company's risk management and internal control systems and monitoring the Company's improvement on risk management and internal controls.

Anti-fraud Investigation Department is responsible for receiving whistle-blower reports through various channels and following up and investigating alleged fraudulent activities. It also assists management in promoting the *Tencent Sunshine Code of Conduct* and the value of integrity to all employees of the Company.

ESG Strategy

Tencent's ESG strategy is guided by our long-established mission and vision, "Value for Users, Tech for Good". The mission and vision, in which our employees respond to what they like most about Tencent in the annual employee surveys, is the driving force behind the incorporation of ESG considerations into our products, services and business operations. In view of the rapid changes in social and business environments, including the COVID-19 pandemic, extreme weather, macroeconomic challenges, regulatory tightening, mobile internet ubiquity and new enabling technologies, as well as the digital upgrade of local economies, we have strengthened our capabilities to manage the associated risks and nurture new opportunities. Since April 2021, we have taken an innovative and coordinated approach to create value for our users, business partners and the society, and to strengthen our foundation in ESG governance. Specifically:

We upgraded our corporate strategy to promote "Sustainable Innovations for Social Value" alongside our existing consumer internet and industrial internet strategies.

We integrated our corporate social responsibility and charitable activities to form a new Sustainable Social Value (SSV) organisation. SSV is funded with an initial capital of RMB50 billion to invest in key areas, including research in basic sciences, education innovation, rural revitalisation, carbon neutrality, primary healthcare, philanthropic platform, assisting with public emergencies, technologies enabling the silver generation, enhanced accessibility, and digitalisation of culture. We allocated an additional RMB50 billion to support the "Common Prosperity" initiative in China.

We established a new ESG governance structure to support the Board's expanded oversight on the Company's ESG matters, coordinate internal priorities and engage stakeholders via the ESG Working Group and the ESG Coordination Office.

Board Statement

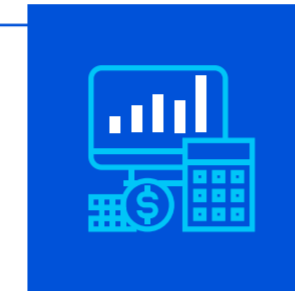
The Board oversees ESG matters via the Corporate Governance Committee and is engaged in formulating and implementing the Company's ESG strategy. The Corporate Governance Committee supported the Company's decision to strengthen ESG governance via the establishment of the ESG Working Group, where the ESG Coordination Office serves as the secretariat.

The Board was involved in the materiality assessment and prioritisation of key ESG topics of Tencent, which was conducted by an independent professional consultancy. The Board has participated in surveys and interviews that solicit views and recommendations on ESG topics that may have significant influence on the Company's long-term sustainability (please refer to the sections titled "[Materiality Assessment](#)" for more details). Key ESG risks have been incorporated into the Company's comprehensive risk management system. From principal business leaders to senior management, the Group has formulated risk response measures by considering the possibility, impact, and trends of key ESG risks. The Board has regularly reviewed these key risks at the Board and Corporate Governance Committee meetings and has made recommendations to the measures taken.

During the reporting period, the Board has reviewed the Company's carbon neutrality plan, progress in certain sustainable social value projects and the annual ESG report.

Our ESG strategy focuses on the management of risks and the pursuit of opportunities, unlocked by the ongoing convergence of physical and virtual worlds as well as the digital transformation enabling industries to extend their presence online and expand globally. The implementation of our ESG strategy can be summarised as follows:

Business operations



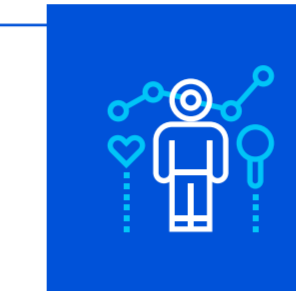
- Operate in compliance with applicable laws and regulations;
- Operate business with integrity and protect the interests of shareholders and stakeholders;
- Provide our employees a safe, inclusive and equitable work environment; empower them to pursue professional growth.

Community and industry



- Increase community investment, and leverage our platforms and technologies to implement "Tech for Good";
- Create and promote a digitally inclusive environment;
- Contribute to the advancement of the internet industry via open-source partnerships and open platform collaboration.

Users



- Protect the privacy of our users and the security of their data and digital properties;
- Listen to feedback from users and actively respond to their needs, enquiries and complaints, based on which we continuously enhance the quality of our products and services;
- Protect our users, especially Minors and content creators; take responsibility for the content on our online platforms.

Environment



- Consider the environmental impact of our products and services during the development and operation stages;
- Reduce our carbon footprint and increase renewable energy use, ultimately reaching net-zero in operations and supply chains by 2030;
- Assist in driving the transition towards a low-carbon society via the promotion of a low-carbon lifestyle for users, and technologies that enhance the management of climate change for enterprises.

Business partners



- Assist industries, especially small and medium-sized enterprises, in managing digital transformation;
- Ensure fair and equitable treatment when dealing with our business partners; encourage them to give us feedback on our business practices;
- Combat illegal or unwarranted behaviours that are harmful to long-term business partnerships by empowering our Risk Management and Internal Control Departments and Anti-Fraud Investigation Department.

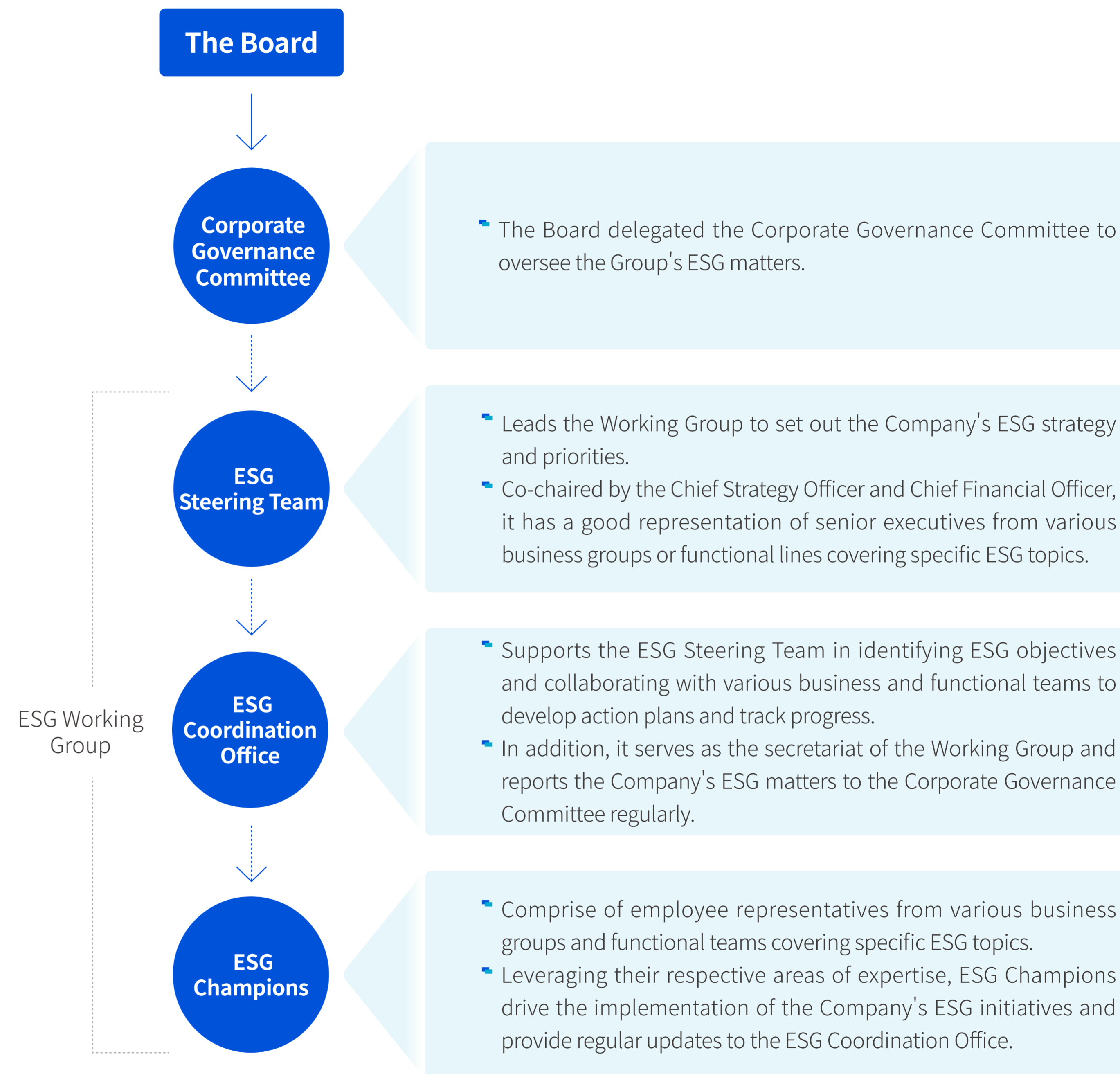
Our shareholders and stakeholders play an important role in our ESG strategy and implementation. The Company has commissioned an independent consultant to conduct online surveys and interviews with our stakeholders, and integrated their feedback into our materiality assessment. For details of our materiality assessment, please refer to the sections "[Materiality Assessment](#)" and the "[Stakeholder Communication Report](#)" in Appendix.

ESG Governance Structure

ESG governance at Tencent is overseen by the Board's Corporate Governance Committee and implemented by the Company's ESG Working Group.

In 2021, the Corporate Governance Committee expanded its focus to ESG oversight. It shall report regularly to the Board relevant ESG issues as well as the progress of key performance indicators (KPIs). The Corporate Governance Committee shall exercise oversight via inquiries, regular updates on the Company's ESG initiatives, reviewing and approving annual ESG reports submitted by the ESG Working Group.

The ESG Working Group (the Working Group) is a cross-functional body established in January 2022 and reports to the Corporate Governance Committee twice a year. The Working Group, which is tasked to advance Tencent's overall ESG performance and promotes internal coordination, operates on three levels. (as seen in diagram on the right)



We will review the composition of the Working Group regularly to ensure the Corporate Governance Committee is kept abreast of the Company's ESG initiatives and overall performance.

Materiality Assessment

We regularly engage with our stakeholders to learn about their expectations and feedback on our ESG performance. Our stakeholders include users, employees, government and regulatory bodies, investors, business partners, the media and public, and non-governmental organisations (NGOs). Our communication channels include but are not limited to regular meetings, investor and press conferences, satisfaction surveys and social media platforms.

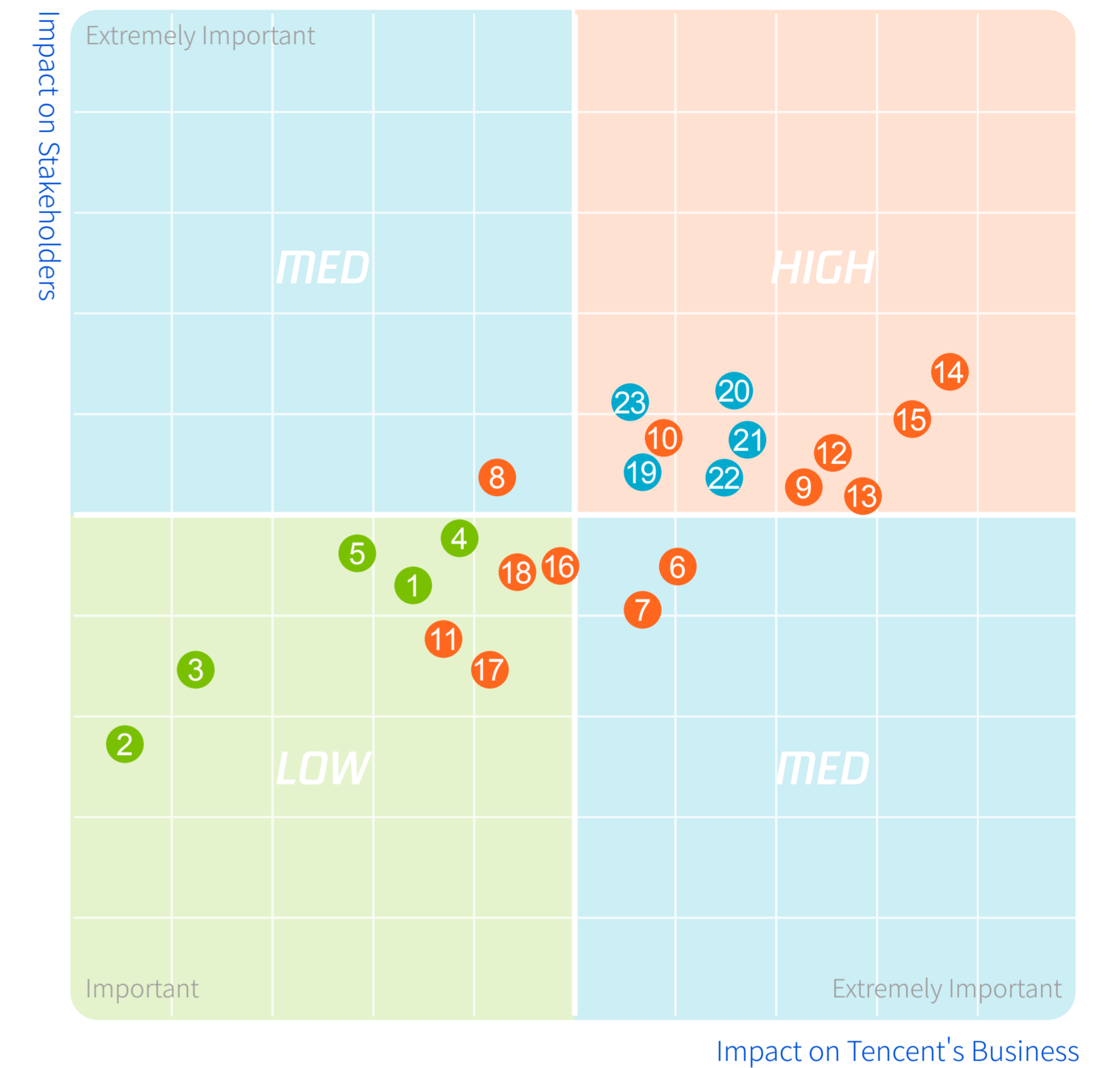


Assessment on the Materiality of ESG Topics

To identify and understand various ESG topics that are of high priority to Tencent, we have engaged an external professional agency to conduct a materiality assessment. The assessment process is as follows:

- Identify a list of potential ESG material topics by taking into consideration:
 - common issues raised by internal and external stakeholders, and
 - topics highlighted in recognised reporting frameworks, including the *ESG Reporting Guide*, the *Task Force on Climate-Related Financial Disclosures (TCFD)*, the *Global Reporting Initiative (GRI) standards*, and the *Sustainability Accounting Standards Board (SASB) standards*.
- Identify key concerns via interviews and online surveys across stakeholder groups, including the Board members, senior executives, employees, customers (users and business partners), suppliers, investors, governments and regulators, academics, media and NGOs.
- Prioritise relevant material ESG topics through materiality mapping.

The material topics which fell into the upper right quadrant of the matrix were defined as highly material to the Company. These material ESG topics include Data Privacy and Cyber Security, Protection of Minors, Responsibility of Content, Social Impact of Products & Services, Employee Health and Safety, Intellectual Property, Anti-corruption, Corporate Governance, Labour Standards, Active Stakeholder Engagement, and Anti-trust. For details of the materiality assessment, please refer to the "[Stakeholder Communication Report](#)" in Appendix.



- | | |
|---|---|
| 1 Climate Change & Greenhouse Gas Emissions | 13 Responsibility of Content |
| 2 Waste Management | 14 Data Privacy and Cyber Security |
| 3 Water Management | 15 Protection of Minors |
| 4 Energy Use | 16 Digital Inclusion and Digital Literacy |
| 5 Environmental Impact of Products & Services | 17 Literacy |
| 6 Employee Rights & Benefits | 18 Community Investment |
| 7 Employee Career Development | 19 Support Common Prosperity |
| 8 Diversity and Equal Opportunity | 20 Anti-trust |
| 9 Employee Health and Safety | 21 Intellectual Property |
| 10 Labour Standards | 22 Anti-corruption |
| 11 Supply Chain Management | 23 Active Stakeholder Engagement |
| 12 Social Impact of Products & Services | |

- Environmental topics
- Social topics
- Governance topics

The United Nations
Sustainable Development Goals (SDGs)



We are committed to protecting the environment and conserving natural resources to ensure sustainability for future generations. In 2021, we voluntarily pledged to reach carbon neutral for our operations and supply chains by 2030, and announced our commitment to fully transition to green power.

From operating our platforms daily to building data centres, we have considered energy and water efficiency, ecological impact, and climate-related risks in our decision-making processes and policies. In 2020, China announced that the country would reach carbon neutrality by 2060, and may introduce new regulatory requirements to ensure this target can be met. We will closely monitor the latest developments and do our utmost best to tackle climate change.

Climate Change and Carbon Neutrality Commitment

Investing in Green Operations

Building a Green Society

Environmental Targets



ENVIRONMENTAL PROTECTION

Climate Change and Carbon Neutrality Commitment

As climate change has already caused significant damages and irreversible consequences to our terrestrial, freshwater, coastal, and oceanic marine ecosystems, taking steps to mitigate and adapt to climate change has become a front-of-mind issue. Tencent has actively responded to the Paris Agreement's 1.5° C goal and China's "3060" goal, and is among the first Internet companies in China to announce our commitment to carbon neutrality.

Improving Climate Governance

Tencent has incorporated the climate-related risks into its overall risk assessment and management system to better cope with climate change and strengthen the climate governance structure. We have also identified climate-related risks based on the Task Force on Climate-Related Financial Disclosures (TCFD) recommendations to develop a sound climate risk prevention strategy that is fully aligned with the global climate action.

Governance

Climate-related risks and issues of the Company are considered and monitored by the Board via the Corporate Governance Committee. Climate change is regarded as a specific issue for revision and discussion.

During the reporting period, the Corporate Governance Committee has reviewed the Company's carbon footprint, net-zero goals, and decarbonisation pathways.

Strategy

We acknowledge that climate change brings physical and transition risks and opportunities to our business. Our physical risks primarily result from acute and chronic risks caused by climate change, while transition risks mainly come from the market and policy changes that arise during the transition to a low-carbon economy. Reputational risks are linked to the potential failure in fulfilling our commitment to developing into a low-carbon business. On the other hand, climate change would also provide us with the opportunity to improve our energy efficiency and develop low-carbon technologies and climate-resilient products and services.

There are transition risks as well. In the context of accelerating the transition to a low-carbon economy, if we fail to effectively control or reduce the carbon emissions generated from our operations and provide low-carbon services and products, it may result in reputational damage, loss of users, or market share reduction. Our carbon neutrality initiative follows the principle of "prioritising the use of active emissions reduction measures while keeping the use of carbon offsets to a minimum". In addition to achieving our carbon neutrality goal, we aim to play a leading role in the transition towards a low-carbon society by (i) fostering open innovation and knowledge sharing and (ii) leveraging the reach and influence of our platforms and products.

In terms of physical risks, acute climate events caused by climate change, such as frequent typhoon weather and rainstorms, may affect our operational continuity. On the other hand, chronic risks, such as high temperatures and droughts may increase energy consumption and operating costs for our offices and data centres. Rising sea or water levels may lead to loss of assets in certain regions. We have considered the impact of regional climate when allocating assets and have formulated emergency measures for acute climate events to avoid and reduce operational impacts or asset losses.

We believe that climate change has also brought various opportunities to Tencent. By improving the efficiencies of energy consumption and water use at our office buildings and data centres, we could optimise operating costs and minimise sensitivity to changes in carbon trading prices. We provide various products and services, including Tencent Cloud, WeCom, and Tencent Meeting to help our users reduce their carbon footprint and accelerate their digital transformation.

Risk Management

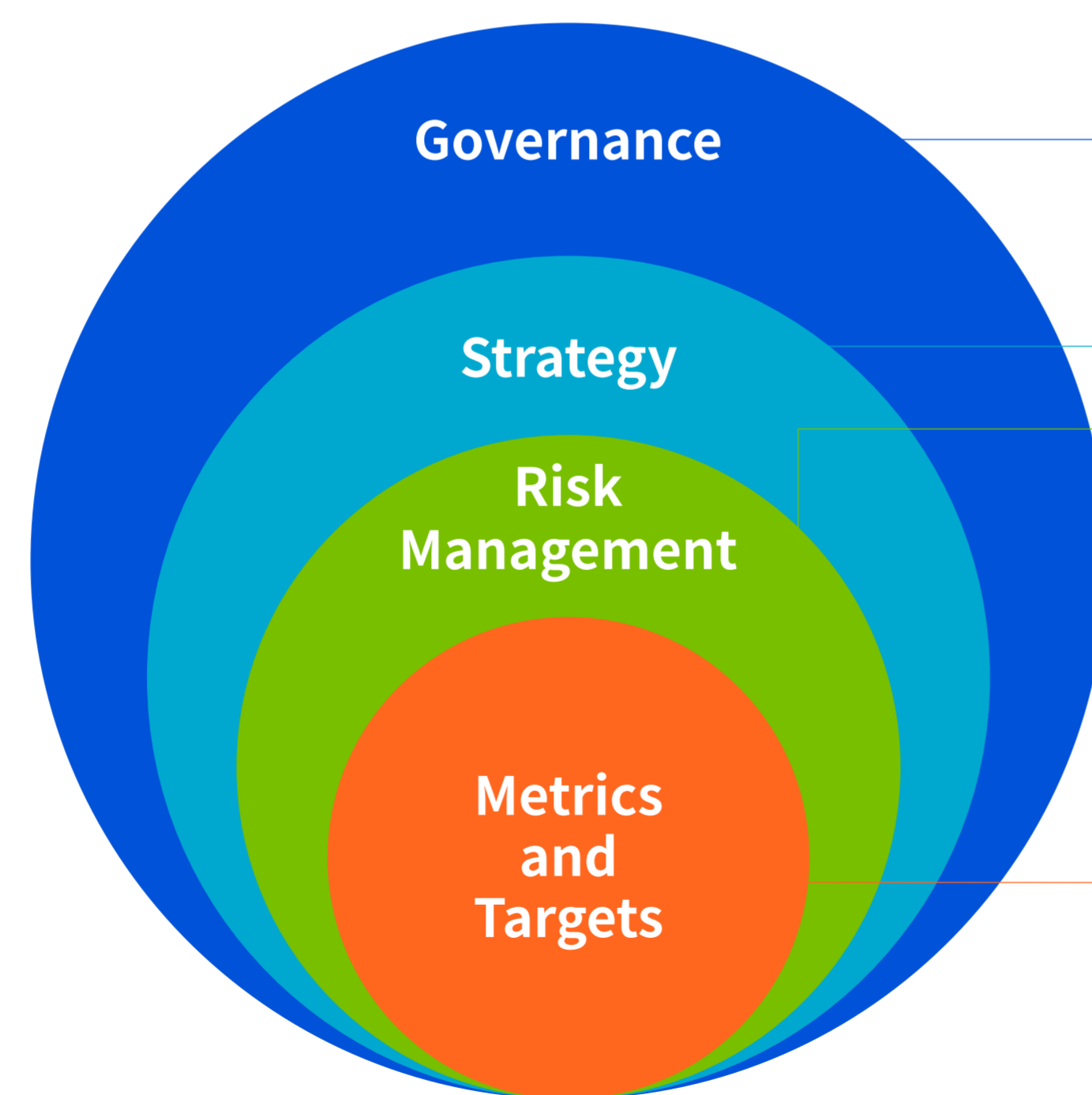
We have integrated ESG risks into the Company's overall risk assessment and management system, including risks related to climate change. As part of our climate risk assessment, we consider the probability and the relative impact of the risks on our Company.

chronic physical risk, policy & legal risk, technology risk, market risk, and reputational risk on the business, and provided mitigation and adaptation responses. For acute physical risks, we have taken extreme weather events, such as rainstorms, typhoons and high temperatures into consideration during our site selection, construction, and operations of our data centres. We have also drafted corresponding mitigation and adaptation measures to address the potential impacts of these events.

Metrics and Targets

We pledge to reach carbon neutrality across our operations and supply chains by 2030, and to switch our electricity supply to 100% green power or renewable energy where feasible. We have signed on the Science-

Based Targets initiative (SBTi) and will work to refine targets for our decarbonisation pathways in the following months.



Tencent Comprehensively Addresses Physical Risks at Its Data Centres

We address physical risks posed by climate change during the site selection, design, and operations of our data centres.



Before selecting a site, we consider and assess the impacts of extreme weather, such as typhoons, rainstorms, floods, and high temperatures at the location.



Our data centres are designed in strict compliance with the local requirements for discharging stormwater and pollutants as well as the design criteria of wind and rainfall.



In case of a sudden climate event at our operations, an emergency response steering team, with clearly defined tasks and responsibilities, will be dispatched to respond and evaluate the situation.

Carbon Neutrality Initiative

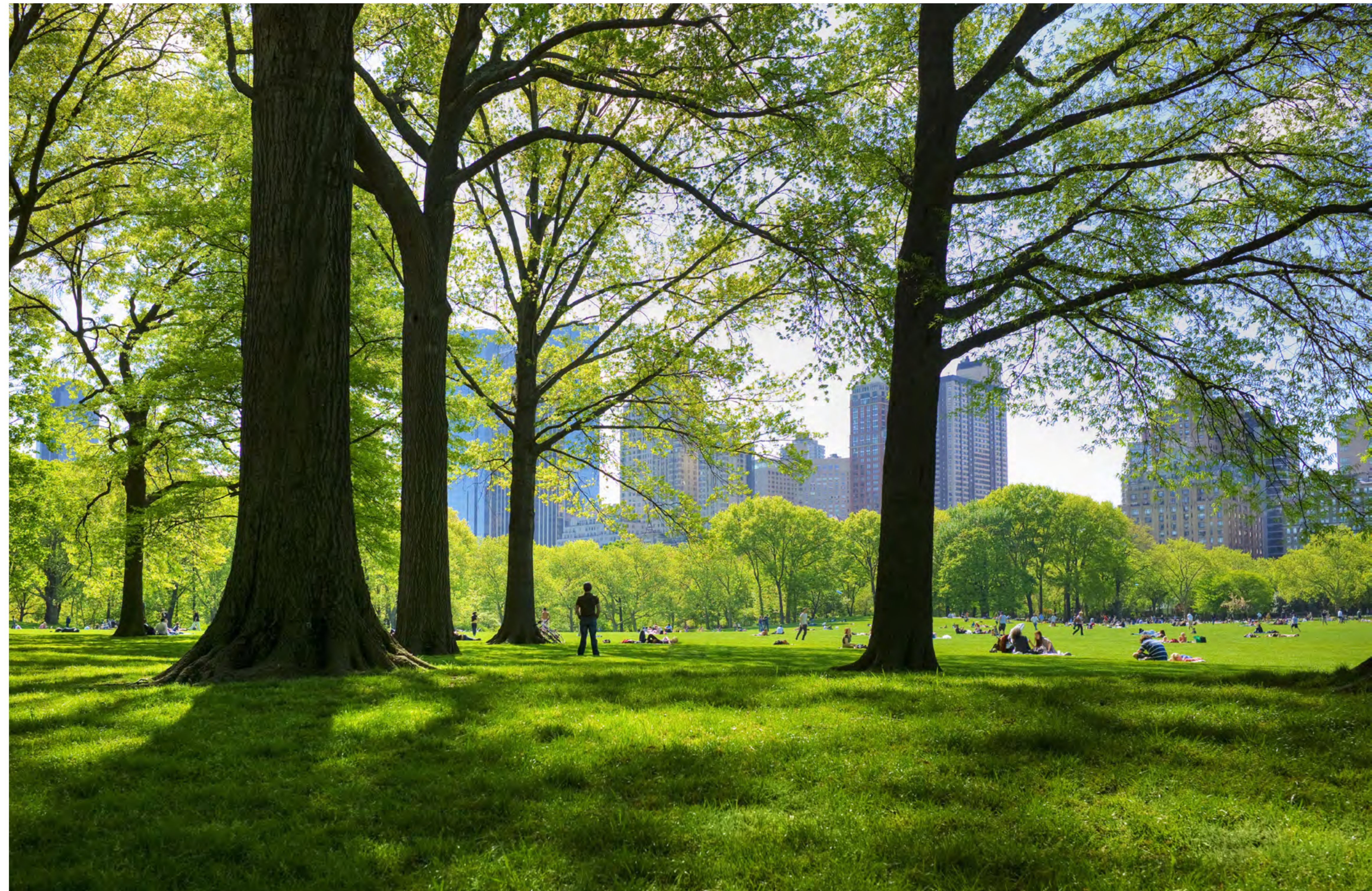
In early 2021, we unveiled our carbon neutrality plan, in which we formulated emission reduction targets with decarbonisation pathways based on our emission characteristics and digital advantages. Besides reaching carbon neutral in our own operations, we also aim to use digital technologies to help consumers and industries accelerate their transition to low-carbon lifestyle and operations. For details on our net-zero pledge, please refer to the *Tencent Carbon Neutrality Target and Roadmap Report*.

Carbon Neutrality Targets

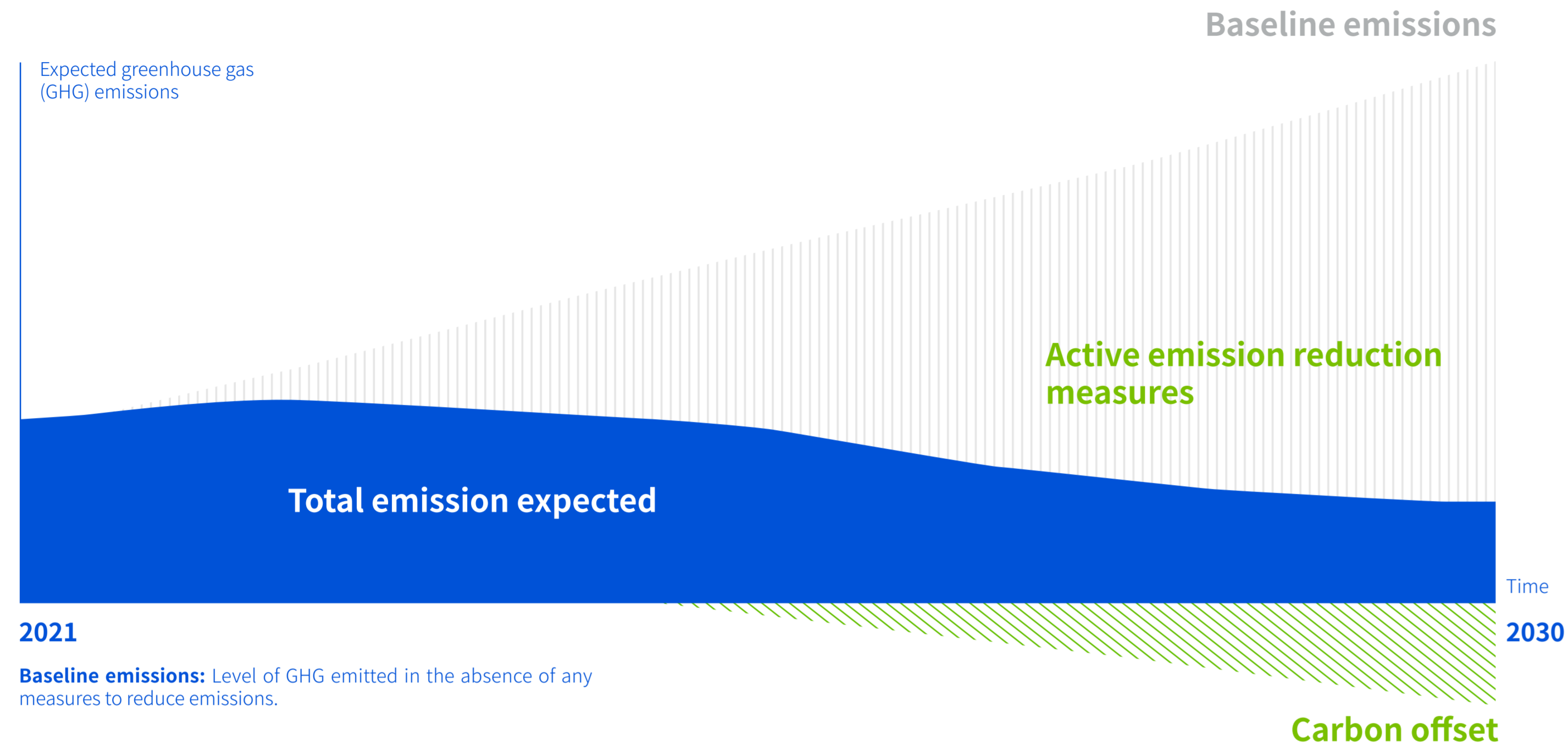
Embarking on the journey to setting Tencent's carbon-neutral target and roadmap, representative of National People's Congress (NPC), and the Chairman of the Board and CEO of Tencent, Pony Ma, submitted a proposal titled *Recommendations on Implementing the New Development Philosophy and Promoting the Achievement of Carbon Neutrality for Tech Companies* during China's Two Sessions 2021. Over the past year, we have worked to identify our carbon neutrality targets (covering Scope 1, 2, and 3), which are demonstrated as follows.

Tencent's Pledges

To achieve carbon neutrality across our operations and supply chain, and to use green power for 100% of all electricity consumed by 2030.



Carbon Neutrality Pathway



Carbon Accounting

Based on the *Greenhouse Gas (GHG) Protocol*, we began an internal review of our greenhouse gas emissions and used 2021 as the base year to develop our carbon neutrality roadmap and decarbonisation pathways. Our total GHG emissions of 5.111 million metric tons of carbon dioxide equivalent includes:

Scope 1

Direct emissions from operations owned or controlled by the Company (Scope 1) amounted to 0.019 million MtCO₂e, or 0.4% of the emissions.

Scope 2

Indirect emissions generated by purchased electricity and other purchased energy (Scope 2) amounted to 2.349 million MtCO₂e, or 45.9% of the emissions.

Scope 3

Indirect emissions generated from the supply chains (Scope 3) amounted to 2.743 million MtCO₂e, or 53.7% of the emissions.

Three Key Actions to Achieve Carbon Neutrality

Key actions listed below are to be taken in order to achieve carbon neutrality across our operations and supply chains. We follow the best practice of "prioritising the use of active emissions reduction measures while keeping the use of carbon offsets to a minimum".



Improve resource efficiency



Increase the proportion of renewable energy use



Explore carbon offset schemes and technologies

① Including the construction emission reduction, such as Dachan Bay.

Boosting Social Carbon Neutrality

In addition to reaching carbon neutrality across our operations and supply chains, Tencent also integrates low-carbon development into our corporate strategy of "taking root in the consumer Internet, embracing the industrial Internet, and promoting sustainable social value innovation" so as to mobilise the transition to low-carbon economy and society.



Encourage consumers to live a greener lifestyle



Facilitate a low-carbon transformation for industry partners through digitalisation



Promote sustainable social value innovation

Investing in Green Operations

We uphold the "Green, Energy Conservation, and Environmental Protection" principles. To put our commitment to green operations into practice, we utilise advanced technologies in the design, construction, and daily operation of our office buildings and data centres. We track and comply with all applicable laws and regulations in China, including *The Environmental Protection Law of the People's Republic of China* and *The Law on Energy Conservation of the People's Republic of China*.



Office Buildings

We continuously promote energy conservation in our office buildings by adhering to the best practises for building design, the management and operation of facilities and equipment. Our "Management + Technology + Procedure" approach underpins our energy conservation measures, through which we have improved resource and energy use efficiency and diminished the impacts of our activities on the environment.

01 Management

Green Building Management

Environmental and sustainable considerations are incorporated into the design and construction of our office buildings, including the green infrastructure design, adoption of intelligent facility systems, and natural ventilation and lighting. Since 2011, all our new buildings in China have been designed to attain the Green Building Two Star standard and other relevant internationally recognised green building standards.

Performance Assessment Management

We assess the progress of our energy-saving and other environmental performance indicators in office buildings and provide incentives for meeting the environmental targets. We have also upgraded environmental management measures for office buildings with an environmental management system. All Tencent-owned office buildings are serviced by property management companies certified for ISO 14001 (Environmental Management System).

Online Energy Consumption Management

The Tencent Facility Management (FM) platform was launched to manage the energy consumption of office buildings. The FM platform compiles and analyses the energy consumption on a monthly basis, monitors and corrects anomalous data, and generates energy consumption management reports. All of our new buildings are equipped with a real-time energy consumption monitoring system, which allows for statistical analysis of electricity and water use by area and purpose.

02 Technology

Water-Saving Retrofits

Only water-saving sanitary wares that are defined by the *Domestic Water Saving Devices (CJ164-2002) standard* are utilised in our buildings. Drinking water systems have been installed to replace the purchase of bottled water, thereby improving water use efficiency and reducing the usage of plastic packaging materials.

Energy-Saving Renovations

We continuously seek ways to improve our energy efficiency by regularly evaluating our office buildings' energy consumption and optimising our energy consumption through innovative technologies. In 2021, we renovated the lighting system, air-conditioning system, and car park facilities at the Tencent Binhai Towers: (i) we replaced LED lighting in our lobby, optimised lighting duration for our underground car parks; (ii) we installed thermostats and fan coil systems with automatic switches in our IT machine rooms and power distribution machine rooms to reduce the energy cost for cooling; (iii) and we encourage staff to take part in green travel by installing electric vehicle charging stations and providing priority parking spaces for new energy vehicles (NEV).

Emission Monitoring

For Tencent Binhai Towers and Beijing Headquarters, we monitor the levels of air pollutants, such as carbon monoxide, and carbon dioxide inside the buildings with an online system, which backed up by a manual measuring system. A smart ventilation system is installed to respond to the changing carbon monoxide in our underground car park and carbon dioxide levels in our office spaces. For our office cafeterias, the cooking ventilation comprises a fire-resistant environmental exhaust hood that removes oil droplets, activated carbon filtration, and air ionisation to ensure the oil fumes emissions meet the discharge requirements.

03 Procedures

Energy Conservation

Unnecessary electricity consumption is reduced in our daily operations by installing automatic switches for the lighting and air conditioning systems based on the local climate condition and the schedule of employees. Employees are encouraged to turn off the light, the air conditioner, and other office equipment and devices before leaving the workplace. We also have stringent onsite office management in place with routine inspections, where the property management companies closely monitor the electricity consumption, such as turning off office equipment manually in unoccupied office spaces.

Waste Disposal

We ensure compliant waste disposal and have implemented garbage classification in all office buildings. We advocate waste reduction at the source and recycling through a number of measures:

- To promote employee awareness around waste classification, we replaced the previous garbage containers with classified containers in the common areas.
- For electronic products that are no longer suitable for office use, such as laptops, we encourage employees to claim the devices for personal reuse. Other discarded electronic waste will be recycled and reused by qualified second-hand vendors.
- We entrust qualified third parties to harmless handling of hazardous waste generated in office buildings in accordance with applicable laws and regulations, such as waste toner and waste ink cartridges.

Eco-Friendly Packaging

We discourage excessive packaging of gifts for employees. For example, the mooncake gift boxes in 2021 were made from degradable materials such as sugarcane bagasse. The takeout boxes provided in cafeterias are also phased out in favour of eco-friendly alternatives.

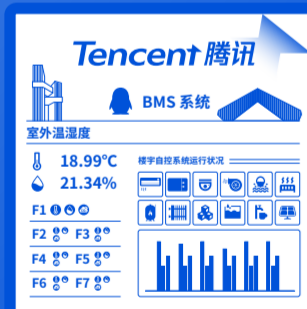
Our Low-Carbon Headquarters in Beijing

Tencent's Beijing Headquarters integrates multiple energy-saving technologies such as building automation, intelligent lighting, and "breathable" curtain walls to expand the possibilities in green office practices and reduce resource consumption.



Building Automation System

The Honeywell building management system enables effective building management. The building is equipped with computer-controlled air-conditioning units, exhaust fan units, and fan coil and underfloor heating, as well as equipment testing in systems such as the boiler system, heat exchange system, and integrated solar system.



Intelligent Lighting System

The Dynamite intelligent lighting control system dynamically adjusts the ratio of natural lighting to artificial lighting to provide employees with an efficient, energy-saving, and comfortable working environment. The system also helps improve energy management and lower maintenance costs.



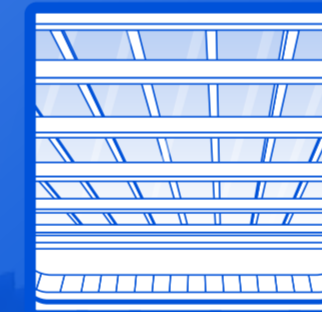
VAV Central Air-Conditioning System

Variable air volume (VAV) controls are used in the building's office area, which automatically modify the output of air-conditioning system in response to changes in the interior environment or pre-set parameters. With the additional function of embedded underfloor fan coils in the outer zone, we are able to keep temperature stable in the office areas despite temperature fluctuations caused by the glass-clad external walls throughout the day.



Breathable Curtain Wall

The disguised electric ventilators put on the curtain walls can lower the switching frequency of the air-conditioning system when seasons change, extending the shell life of the equipment, saving energy, and ensuring ventilation.



Curtain Wall Photochromic Glass

The roof is fitted with photochromic glass, which automatically darkens or lightens in colour depending on the strength of outdoor lighting, or can be controlled manually on Weixin. The low contrast mode will also reduce energy consumption, especially during the summer.

Green Building Certifications



LEED
Gold certification
Building Design and
Construction

Tencent Binhai Towers



LEED
Gold certification
Building Design and
Construction

Tencent Beijing
Headquarters



LEED
Gold certification
Building Design and
Construction

Chengdu Tencent
Towers A and B



LEED
Platinum certification
Operations and
Maintenance

Tencent Binhai Towers



LEED
Gold certification
Operations and
Maintenance

Chengdu Tencent
Towers A and B



China's Green Building
Two-Star Rating

Tencent Binhai Towers



China's Green Building
Two-Star Rating

Tencent Beijing
Headquarter



China's Green Building
Two-Star Rating

Chengdu Tencent
Towers A and B



China's Green Building
Two-Star Rating

Wuhan R&D Centre



China's Green Building
Two-Star Rating

Shanghai Binjiang Towers



China's Green Building
Two-Star Rating

Tencent Guangzhou
Headquarters

Data Centres

Tencent is committed to providing green computing power. We strive to improve the energy use efficiency of data centres and continuously increase the proportion of renewable energy use. Tencent has made a concerted effort to conserve energy throughout the process of data centre site selection, design and technologies, operation and maintenance (O&M), and resource recycling. Tencent has been actively exploring green power trading while leveraging technological capabilities.

All Tencent's data centres have completed environmental impact assessments and obtained relevant approvals or filings in accordance with the *Law of the People's Republic of China on Environmental Impact Appraisal*. In 2021, Tencent's Huailai Dongyuan and Yizheng Dongsheng Data Centres were rated as 2021 National Green Data Centres. Tencent's Tianjin Data Centre Building No.4 passed the LEED O+M: DC Platinum Level certification, making it the first data centre in China to receive this certification.



Site Selection and Planning

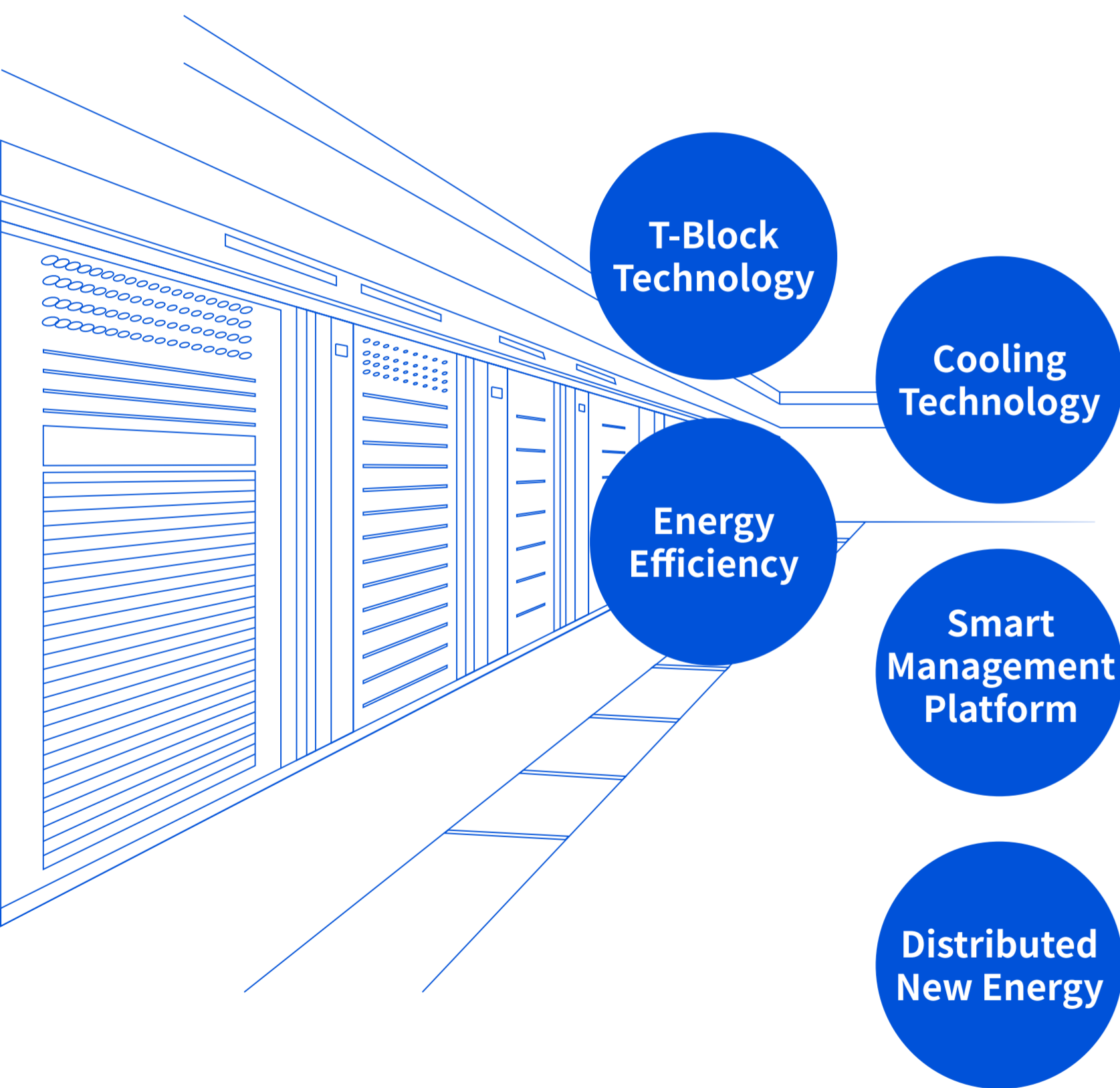
Tencent considers a variety of factors in the site selection phase, including the amount of local new energy resources, external power resources, network infrastructures such as internal and external network connection and communication, business needs, and climate conditions. Most importantly, we prioritise areas with abundant green energy resources, such as wind/solar energy (Hebei Huailai) and hydropower (Qingyuan, Chongqing, Gui'an).

For example, Tencent Gui'an Seven Star Data centre is built in a cave to take full advantage of naturally cool temperature to reduce the energy use of air conditioning.



Technology-Driven

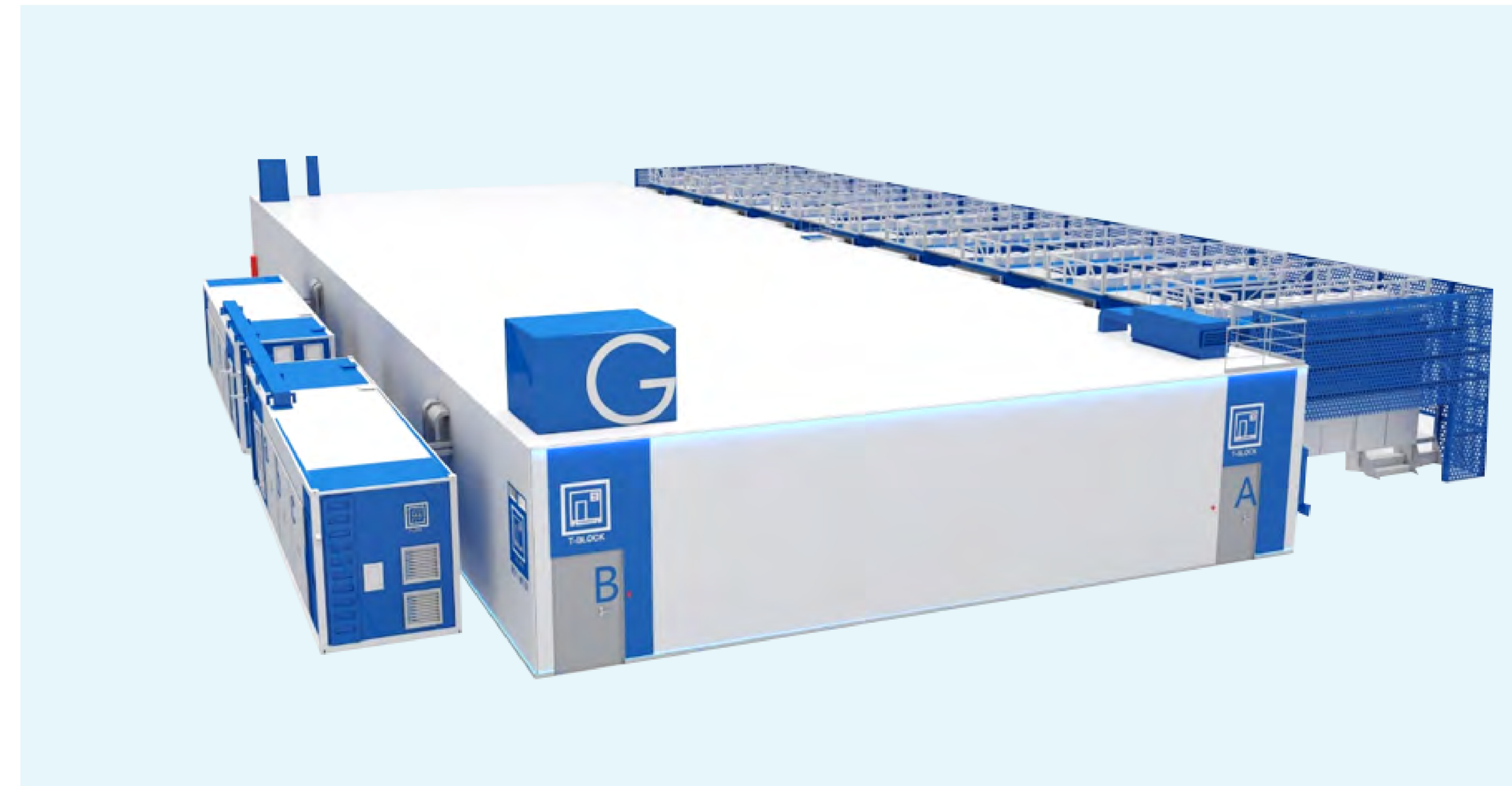
As Tencent explores green data centre operations and energy efficiency improvement methods, we recognise technology and management systems have always been the key drivers to achieving energy conservation and emission reduction.



T-Block Technology

The fourth-generation T-Block technology from Tencent makes building data centres simple, as the prefabricated standard products enable rapid delivery of data centres. It is also a cutting-edge power-saving endeavour to lower the Power Usage Effectiveness (PUE) to 1.2. T-Block technology adopts high-efficiency cooling technology and power supply and distribution design in comparison to the conventional large-

scale data centres. The office, power supply, IT, cooling, and photovoltaic (PV) power generation modules are grouped into a "container", which enhances the system's power use efficiency. The technology has been applied in locations such as Qingyuan, Huailai, Yizheng, Gui'an, Chongqing, and Tianjin.



Liquid Cooling

Given the increasing demand for better computing capability and server performance, the efficiency of cooling equipment when the data centre is processing massive data has become a challenge. Liquid cooling, as opposed to conventional air cooling, uses a liquid with a high specific heat capacity, resulting in a more effective cooling effect. Consequently, the server efficiency and stability has also improved. Tencent Data Centre is experimenting with cold plate liquid cooling technology to create highly energy-efficient data centre solutions. The PUE can reach as low as 1.06, according to the small-scale pilot data project in Qingyuan.

Tnebula AI Platform

Tencent Data Centre has developed the Tnebula AI Platform (the Platform) featuring automated management tools and artificial intelligence (AI) scheduling, leveraging on our operation experience and AI technology. The Platform aids the decision-making process for energy saving and emission reduction. With a "physical model + data-driven" approach, the Tnebula AI Platform has built a simulation model of the data centre cooling system and optimised the control parameters for optimal system operation. Guided by Tencent's carbon neutral strategy, in 2021, the Platform started to explore ways to build carbon management modules that support carbon accounting, renewable energy utilisation, and micro-grid monitoring. It aims to improve the efficiency, timeliness, and accuracy of carbon data statistics, allowing for real-time carbon accounting in the data centres.

Simultaneously, the Platform built a battery O&M and monitoring system based on AI models using massive historical data accumulated by millions of batteries in the data centres. For greater efficiency, the system allows for targeted battery maintenance and replacement planning, as well as preventing unnecessary battery replacement. Various safety hazards of the battery are nipped in the bud, assisting in the protection of the data centre's power supply and enhancing its continuous and reliable operation. Battery failures can be predicted 15 days in advance with the new approach, which has a prediction accuracy of over 98%. The workforce needed for operating and maintaining 10,000 batteries is reduced by 75 persons, while the O&M efficiency improved by 50%.

Trigeneration

Tencent's Shanghai Qingpu Data Centre features the green technology of "Combined Cooling, Heating, and Power (CCHP) ", also called "trigeneration", on natural gas power generation in addition to PV power generation. Natural gas is used to power the equipment in the data centre, while the hot water and gas generated are imported into the evaporative cooling equipment to produce chilled water for cooling. The hot water generated can also be used to heat nearby office buildings and residential areas in the winter. Through the CCHP technology, the energy utilisation rate is maximised while the consumption of standard coal and CO₂ emissions are reduced significantly. The CCHP technology allows Tencent Qingpu Data Centre to save about 1,000 tons of standard coal and reduce 2,470 tons of CO₂ emissions per year. The year-on-year emission reduction rate is approximately 42%.

Waste Heat Recovery

The Tianjin Data centre of Tencent recycles and recovers waste heat from servers. Through heat pumps, water in the municipal network can be heated to 55 °C by the recovered heat for residential heating in the winter. This equates to an annual reduction of 52,400 tons of CO₂ emissions every year.

Water-Saving Measures

The innovative self-developed air handling unit (AHU) in the data centre can utilise cool outdoor air all year around, and evaporative heat absorption of water sprays to replace large compressor systems and greatly reduce water consumption. This technology has been widely applied in Tencent 's data centres. We are working on projects, such as waste water recycling and reclamation, to further reduce the demand for municipal water in our data centres.

Annual reduction of
52,400
tons of CO₂ emissions

Equivalent to planting
2,860,000 trees

Equivalent to covering a forest area of
2,500 football fields

Tianjin Waste Heat Recovery Technology

Process Management

Formulation of Evaluation System

Tencent has formulated a sound quantitative evaluation system for data centre operation in order to meet the data centre operation and management objectives. The system contains more than 60 indexes at six dimensions, covering personnel management, equipment management, facility operation management, IT operation management, asset resource management, and security management. The operating quality and efficiency of our data centres can be well represented by a quarterly quantitative review.

High Procurement Standards for Equipment

Tencent procures energy-saving and efficient equipment, including transformers, special air-conditioners for data centres, and other hardware. For example, the new data centres use Class II or above energy-efficient transformers to reduce energy loss in voltage conversion so as to achieve energy-saving.



Waste Management

In order to reduce and properly dispose the electronic waste generated at data centres, we have implemented a recycling and disposal programme for waste servers. The programme first examines whether old servers can be reused before they are disassembled. Otherwise, obsolete servers will be recycled and reused by qualified vendors. In 2021, a total of 5.32 million processing cores were sent back in service for Tencent's data centres.

For hazardous waste such as lead-acid accumulators and destroyed hard-drive components, we have entered into agreements with service providers that guarantee 100% of our hazardous waste will be handled in strict compliance with relevant regulations.

In 2021, a total of 5.32 million processing cores were sent back in service for Tencent's data centres.



Use of Renewable Energy

Carbon emissions due to electricity consumption in data centres is the primary source of Tencent's carbon emissions in its own operation. For realising carbon neutrality at data centres, the key is to determine methods to reduce carbon emissions while satisfying the electricity demands. Tencent has made a number of measures to increase the usage of renewable energy, including adopting distributed new energy and energy storage, actively participating in green power trading, and paying close attention to centralised new energy initiatives.

6.6 Megawatt

Distributed PV project has been launched in 2021

2 Million kWh

Renewable energy was generated by PV project by the end of 2021

○ Distributed New Energy

Tencent began building distributed new energy projects for data centres in 2020. Distributed photovoltaic (PV) projects in data centre campuses can provide green energy supply for data servers, reduce power transmission losses, and cut additional carbon emissions. In September 2021, Tencent's Qingyuan Qingxin Data Centre connected its 6.6 MW of distributed PV installations to the grid, and produced over 2 million kWh of electricity by the end of 2021. In February 2022, the 13 MW distributed PV project in Tencent's Yangzhou Yizheng Data Centre has also saw grid connection and power generation. We are planning to launch the distributed new energy projects in Qingyuan Qingcheng, Tianjin Gaoxin, and Hebei Huailai.



Qingyuan Qingxin Data Centre

○ Energy Storage

To enhance the load elasticity of data centres, Tencent plans to build energy storage power stations in Qingyuan Qingxin Park and Shanghai Qingpu Park to enable flexible and adjustable power utilisation at data centres.

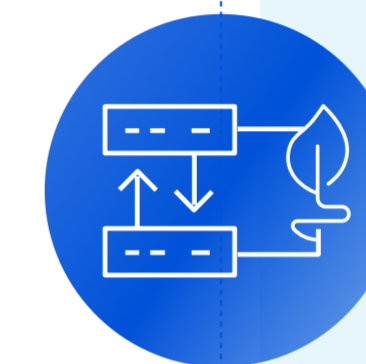
○ Green Power Trading

Tencent has been active in green power trading since 2021. We have built a robust green power trading system on top of our existing achievements made in green power trading, laying a solid foundation for green power procurement in 2022.

Tencent's Green Power Trading Milestones



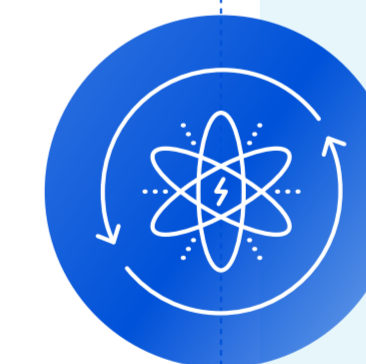
Tencent has assembled a dedicated team of green energy professionals responsible for developing systematic green power trading strategies and methods, and exploring feasible trading options. We aspire to become a pioneer in exploring green power trading.



In September 2021, Tencent made its first attempt in purchasing 60 million kWh clean energy for the Chongqing Tencent Cloud Data Centre, allowing the data centre to be supported by 100% renewable energy from August to December 2021. **As a result, it is Chongqing's first large data centre that consumes 100% green power during the operation period.**



A wind power procurement agreement was signed at the Green Power Trading Pilot Launch Meeting held in September 2021, and Tencent's Shenshan Data Centre **became one of the first batches of market players to participate in the national green power trading.**



Tencent has optimised its overall green power trading strategy. It plans to secure renewable power generation projects through long-term agreements, which allows for consistent green power procurement in the long run while avoiding market volatility. We are also aligned with the principles of **"additionality", "traceability", and "proximity"** during procurement practices.



Tencent **signed green power trading contracts of 500 million kWh for 2022** in the fourth quarter of 2021.

Building a Green Society

Besides reaching carbon neutral in our own operations, we also focus our efforts on spreading the environmental concept and encouraging collective action among consumers, industries, and society. To this end, we, as an assistant and a connector, leverage technology to innovatively integrate the consumer Internet and the industrial Internet, as a result driving the transition towards a low-carbon, green, and circular society.

We have also been thinking about how to use technology to address pressing issues that threaten human survival, such as food, energy, and water (FEW) provision. In doing so, we proposed an international initiative- "AI FOR FEW" to harness the potential of AI and other cutting-edge technologies to tackle the world's major environmental challenges. For additional information about our AI applications in various industries, please refer to the section ["Supporting the Development of the Industrial Internet"](#).

Advocating a Green Lifestyle

Building on the large consumer base connected in the Tencent ecosystem, we have rolled out popular science products and games related to environmental protection based on our digital technology and platform strengths to convey environmental protection concepts to users and encourage them to lead a green lifestyle.

Increasing Environmental Awareness and Knowledge

We launched a variety of environmental protection quizzes on the Weixin Mini Programme platform, such as "Answer to Win a Little Red Flower" and the "Carbon Neutrality Quiz", with the goal of popularising environmental protection knowledge such as ecological protection and carbon neutrality in an engaging and interactive question-and-answer manner.



Building an Interactive Carbon Inclusive Platform

Tencent cooperated with Shenzhen Municipal Ecology and Environment Bureau to release "Blue Planet", the first carbon inclusive operation platform in Shenzhen that can compute and convert the reduced carbon emissions into carbon points claimed by a user commuting by public transportation using the Tencent Transit QR Code. This Mini-Programme connects personal carbon points to the development of the planet, allowing users to participate in and contribute to the transition of low-carbon society.



Using Games as a Medium to Disseminating Green Ideas

We have been actively seeking new ways that fit in with environmental protection in our business ecosystem to broaden our reach to users. We strive to make games an effective tool for conveying low-carbon concepts and popularising environmental protection knowledge.

- Tencent's TiMi Studio Group joined the UN Environment Programme (UNEP)-facilitated "Playing for the Planet" Alliance, and held the "Green Game Jam for Youth" competition themed on forest restoration and ocean conservation, reaching hundreds of millions of users and over 300 colleges and universities.
- Tencent's "Peacekeeper Elite" and the Institute of Oceanology of the Chinese Academy of Sciences jointly launched a digital marine science popularisation project titled "The next circle is the blue ocean".
- In January 2022, Tencent rolled out our first carbon neutrality-themed public welfare mini-game "Carbon Island", which allows players to learn low-carbon knowledge and concept by interacting in the carbon neutrality progress in the idle game.

In the future, we will place a greater emphasis on our role as a connector, explore more possibilities with consumers, and continue disseminating green concepts and knowledge while also providing customers with accessible tools to engage in a greener and low-carbon lifestyle.

"The Green Game Jam for Youth" represents Tencent's corporate social responsibility, using games to achieve the UN's Sustainable Development Goals (SDGs) of protecting our planet.

— Kritte Manoleehagul, Vice President of Tencent Cloud International for Southeast Asia



Assisting Industries in Managing Digital Transformation

It has always been Tencent's pursuit to digitally fuel the real economy. For that, we maximise our technological advantages to provide strong support for energy conservation and emissions reduction in various industries by helping them improve efficiency, build flexibility, and reach more consumers, so as to promote industrial upgrading and the development of a low-carbon economy.

Promoting Green Payment

Leveraging our strengths as a technology company, we have deeply integrated with the consumer Internet to incorporate the latest Weixin Pay technology into various green payment scenarios that cover all aspects of life, guiding users towards a greener, low-carbon, and sustainable lifestyle. Currently, Weixin Pay has enabled paperless processes in a variety of use cases, including online payments for utility bills, food and beverage, accommodation, ticket purchases, and municipal

services. Statistics indicated over 25 million users have used Weixin's online check-in and e-boarding pass services and 100 million users have requested electronic receipts over Weixin in 2021. We are doing small things to change the behaviour of millions of consumers.



Promoting Green Office Software

Due to the COVID-19 pandemic, businesses have been increasingly turning to online platforms to pursue green office practices. Our online office tools, such as Tencent Meeting, WeCom, Tencent Docs, and Tencent WeCard, help businesses carry out office work online. Tools that offer electronic approvals, paperless office, teleconferencing, and video conferencing allow companies to save a large amount of paper and physical consumables while also reducing carbon emissions from business travel and commuting.

Developing a Smart Resource Platform

Backed by our powerful technology and connectivity, Tencent Cloud Energy Studio provides smart energy management services to help enterprises achieve net-zero campuses. The Carbon Engine built on Tencent Cloud Energy Studio can assist enterprises in quickly building their own carbon inventory solutions. The Carbon Engine analyses and generates reports using carbon emission data that are automatically calculated, which enables data-driven monitoring, optimisation, and decision-making.

Tencent Cloud Energy Studio was selected among "Germany's Industry 4.0 - Digital Business Model Templates for Sustainable Development".

Tencent Cloud was named a "2021 Carbon Peak, Carbon Neutrality, and High-Quality Development and Innovation Case Studies - Green Supplier" for its Carbon Engine product.

Delivering Green Computing Power

The shift from traditional IT infrastructure to cloud computing is a change in technical architecture that can improve resource utilisation significantly. To this end, we work in various areas of data centres to optimise energy consumption and increase the proportion of renewable energy use. This not only promotes carbon neutrality across our operations and supply chains, but also provides low-carbon and green computing power to help our customers reduce their carbon footprint.



We dedicate to discovering new opportunities that will help us accelerate the low-carbon transition. Digitalisation will undoubtedly play a valuable role in facilitating industrial transformation in terms of efficiency gains, energy consumption optimisation, and the development of smart energy systems.

Protecting Biodiversity

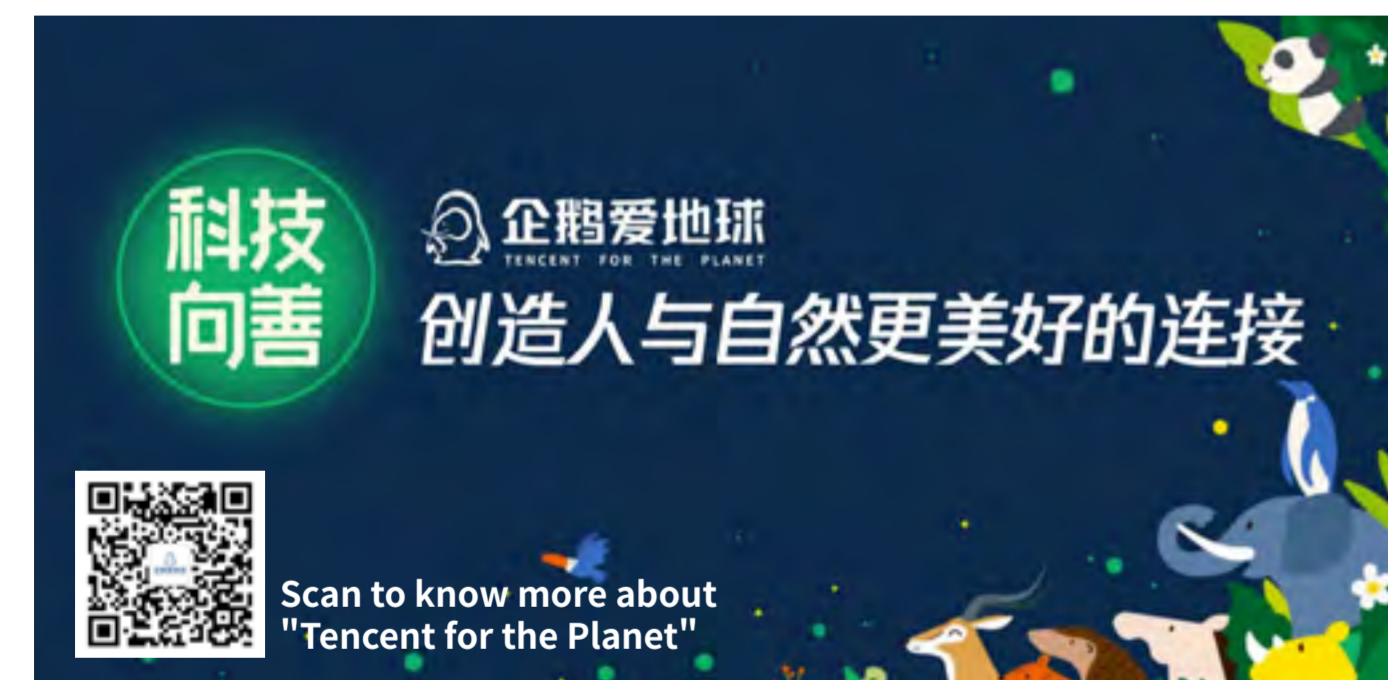
The rapid extinction of species around the world and the subsequent dramatic decline of biodiversity have posed a major challenge to human and social development, raising widespread concerns and attention from the international community. We have initiated and participated in a number of biodiversity conservation activities, making contribution with our technology and platform strengths.

Boycotting Illegal Wildlife Trade

"Tencent for the Planet" initiative was introduced in 2015 as China's first online social platform for reporting illicit wildlife trading activities. This milestone initiative brought together many sectors and communities to fight illegal wildlife trade, spearheading a full-stack solution that includes online reporting and offline collaboration with law enforcement agencies. The platform has successfully cracked down on many criminal cases involving species under the state protection.

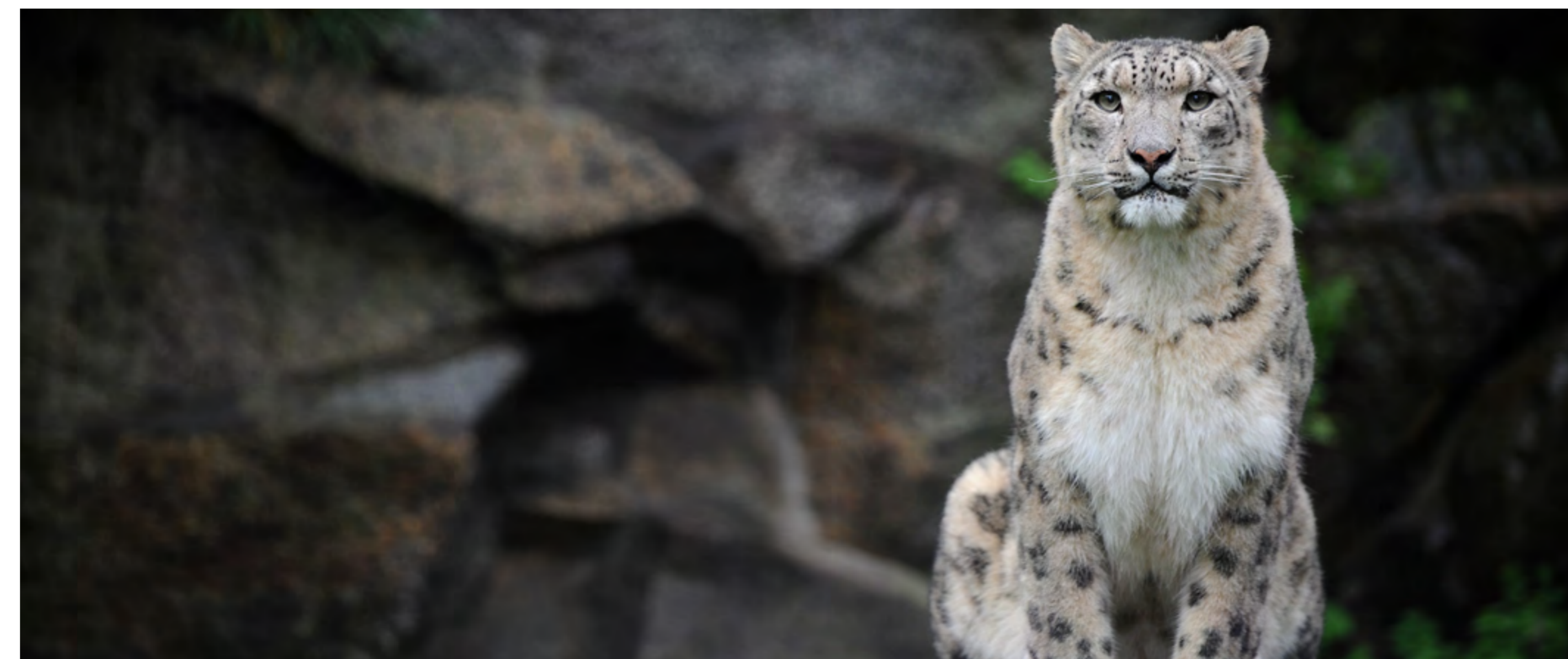
Tracing Snow Leopards

Tencent has set up the Intelligent Snow Leopard Recognition and Monitoring Data Management Cloud Platform, the first digital platform for snow leopard protection by integrating AI recognition, cloudification, and model building technologies. The platform uses AI to intelligently identify species and optimise data entry, processing, and analysis, allowing rangers to find photos and videos with snow leopards in seconds and relieving them from the tiresome work of logging, labelling and matching. With the time saved, ranger can increase their focus on tracking and preserving snow leopards in the field.



"Tencent for the Planet" was selected as one of the "100+ Biodiversity Positive Practices and Actions Around the World Specially Recommended Examples" at COP15.

The cloud platform was chosen as one of the "100+ Biodiversity Positive Practices and Actions Around the World" at COP15.

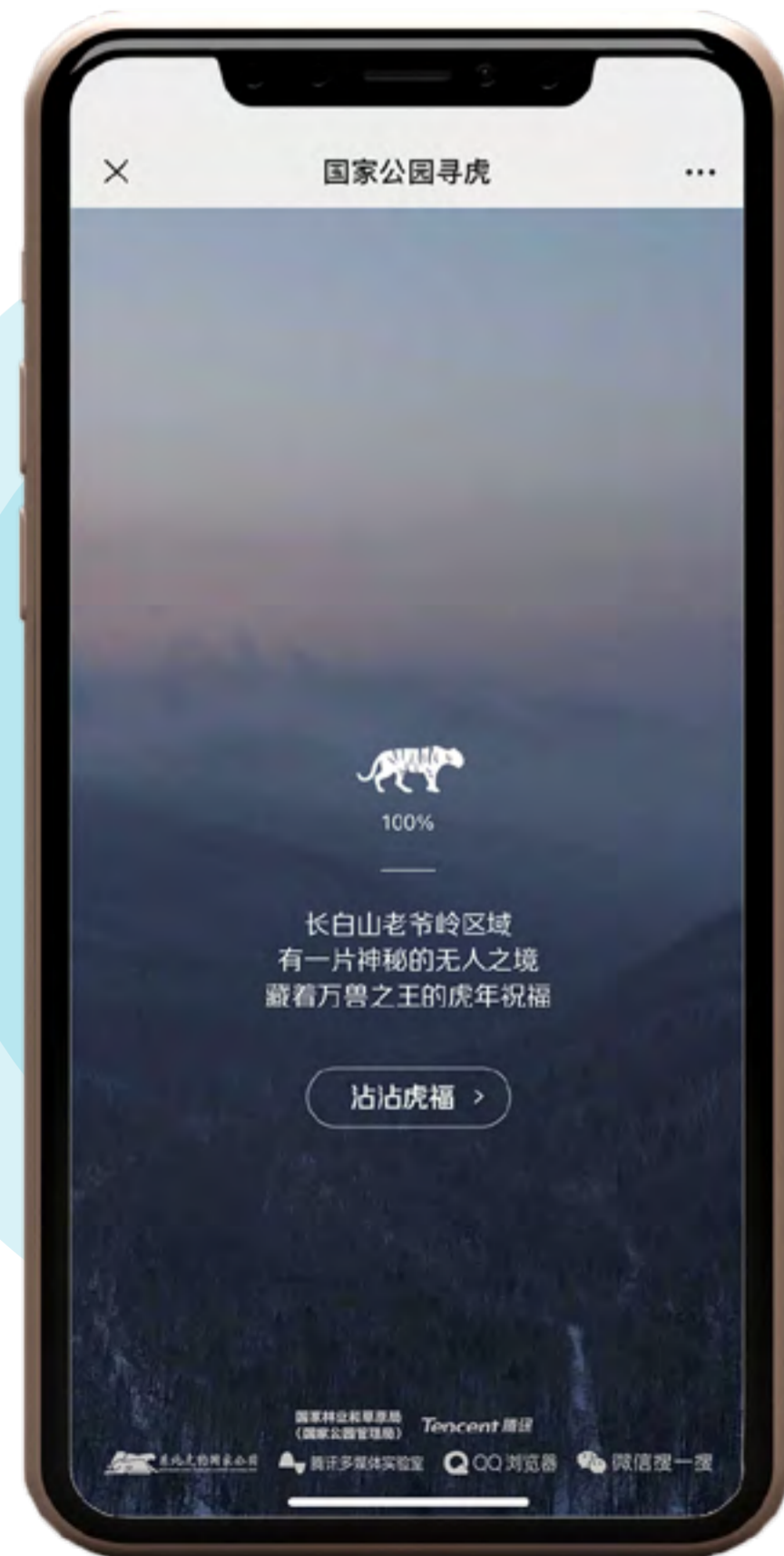


Tencent has long been interested in and invested in sustainable development, and has been at the forefront of the digitalization of biodiversity conservation. Adhering to the principle of using Tech for Good, we will open up our products and technical capabilities to a wider audience and provide a "digital toolbox" for more public welfare institutions and social organisations, continuously contributing the power of technologies and platforms to promote sustainable social values.

—Guo Kaitian, Senior Vice President of Tencent and Chairman of the Tencent Charity Foundation

Exploring a Protection and Sharing Mechanism

Tencent's technical team used its proprietary multi-level segmenting and other image processing technologies to render plants in the Northeast China Tiger and Leopard National Park. We also created a digital platform centring around the provision of "fully authentic and connected" experience, allowing the public to easily access the most authentic scenery in this secret land on a tap.



Innovative Public Welfare Campaign

Tencent launched the "Connecting with Nature Through the Power of Technology" programme in September 2021, in partnership with the China Environmental Protection Foundation and the Paradise International Foundation, and has demonstrated our support to the COP15 biodiversity public welfare campaign. The programme harnessed Tencent's core product portfolio and charitable events, including "Tencent for the Planet", Weixin, and Tencent Public Welfare. Various promotion channels (Weixin video, Search and Scan, display on Weixin Red Packet covers) were used to facilitate the activities, such as public education and live broadcasts of visits to natural reserves. The ultimate goal is to raise public awareness, call for

action to conserve biodiversity, as well as look for better and innovative ways to connect humans and nature.



Environmental Targets

In 2021, we formulated environmental targets. The progress is shown in the following table.

Goals	Progress Updates in 2021
Achieving carbon neutrality by 2030 across our operations and supply chains.	Target and baseline have been set recently.
Using green power for 100% of all electricity consumed by 2030.	Target has been set recently.
For any given year, the property management companies of all Tencent-owned office buildings in the Mainland of China will obtain the Environmental Management System (EMS) certification.	The target for 2021 has been achieved.
By the end of 2021, Tencent Beijing Headquarters would have obtained LEED Gold certification.	The target for 2021 has been achieved.
Using the electricity consumption per capita in 2019 as a benchmark, the electricity consumption per capita in all Tencent-owned office buildings in the Mainland of China will be reduced by 15% by the end of 2025.	The interim target for 2021 has been achieved.
Using the water consumption per capita in 2019 as a benchmark, the water consumption per capita in all Tencent-owned office buildings in the Mainland of China will be reduced by 15% by the end of 2025.	The interim target for 2021 has been achieved.
For any given year, the average annual PUE of self-built data centres will not be greater than 1.35.	The target for 2021 has been achieved.
For any given year, at least one additional data centre will obtain ISO 50001 or GB/T 23331 energy management system certification.	The target for 2021 has been achieved.
For any given year, all Tencent-owned office buildings in the Mainland of China will categorize waste.	The target for 2021 has been achieved.
For any given year, all destroyed hard drive components and waste lead-acid accumulators are collected by qualified vendors for harmless disposal.	The target for 2021 has been achieved.



The human mind is the main source of innovations. We recognise that our employees are the most valuable asset of the Company and play an important role in driving innovations in the Internet industry and creating product experiences to fulfil the needs of our users and business partners. We care about the personal growth and professional development of our employees and believe that an open, equal and inclusive culture is crucial to attracting and retaining talents. We respect and protect the legitimate rights of our employees while maintaining a fair, respectful, healthy, safe and harmonious work environment so that they can reach their full potential.

Talent Diversity

Rights and Benefits

Talent Development

Health and Vitality

CARE FOR OUR PEOPLE

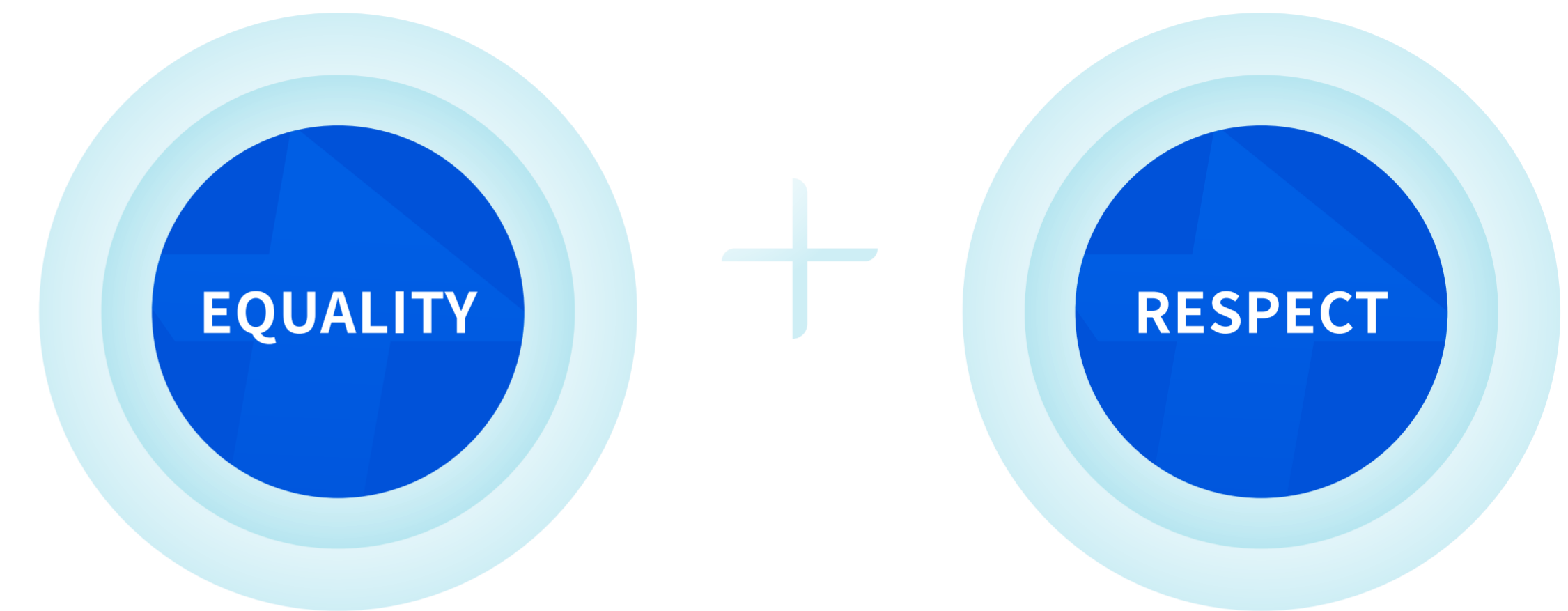
Talent Diversity

Equal Opportunities

Tencent recruits its dynamic workforce via many open channels. We reach out to a diverse pool of talents globally and evaluate their suitability fairly and equally. Our hiring, on-boarding, promotion and off-boarding practices are equitable and non-discriminatory. We are against all forms of discrimination when assigning work to employees and strive to provide inclusive and fair opportunities for growth and promotion, regardless of their gender, nationality, age, race, ethnicity, religion, disability, sexual orientation, or family status.

Tencent advocates a culture of equality and respect. Our Sunshine Code of Conduct expressly forbids all forms of discrimination pertaining to nationality, race, ethnicity, gender, age and disability, as well as all forms of sexual harassment. "Rui Xue", which serves as a guide for good behaviours for Tencent employees, was upgraded in 2021. The emphasis placed on equality, mutual respect and tolerance are conducive to a civilized, healthy, equal and respectful workplace. We introduced Anti-Sexual Harassment Policy in April 2022, which includes a dedicated channel to allow the alleged victim to report cases in confidence and

a set of procedures to ensure an investigation is conducted timely and appropriately, in addition to promoting awareness among our employees to prevent occurrence.



Diversity and Inclusion

We value diversity, equality and inclusion. Tencent believes that a diverse and inclusive workplace helps us attract talents and allows employees to fully develop and innovate. Meanwhile, we have been integrating the diverse thoughts and perspectives of our employees into our products and services, thereby allowing us to realise our vision and mission of "Value for Users, Tech for Good".

We have offices across China, including Beijing, Shanghai, Chengdu, Guangzhou, and other parts of the world, bringing employees from over 40 countries together to work at Tencent. We recognise the importance of cross-culture communication and cohesion among our multinational and multi-cultural workforce and have provided ongoing cross-culture training to employees. We also created promotional videos, organised seminars, and provided one-on-one consultations to business and functional teams to reinforce a culturally diverse and inclusive work environment.

We strive to foster a family-friendly environment so working parents can achieve work-life balance and fulfil their responsibilities as parents or caregivers. In addition to flexible work arrangements that enable employees to work in ways that best suit them, we provide various additional benefits to employees who have children, including parenting gifts and stipends, maternity and paternity leave, breastfeeding leave, parental leave, medical insurance

for children, and counselling service provided by our Employee Assistance Programme (EAP)^① to help improve parent-child relationships. Parents also have the option to share parenting-related information and suggestions using our Q Parent Club and Ezhangbang Mini Programme. Both communication channels connect parents to share experiences and learn from one another. In addition, we have designated priority seats on our Company shuttle buses and in cafeterias for expectant mothers, as well as safe and clean nursing rooms for new mothers.

In 2021, our North American office established its Diversity, Equality, and Inclusion Committee (DEIC) and provided training to committee members on how to integrate DEI strategy and action plan in the workplace.

At our self-built office buildings, we took proactive planning to ensure all slopes, lifts, bathrooms, parking spaces and other areas are accessible and to employees and visitors with activity limitations.

"Diversity" and "inclusiveness" are also reflected in our product designs and services. To improve information accessibility, we continue to invest in technologies that help meet the needs of the silver generation as well as hearing and visually impaired individuals. For more details, please refer to section entitled [Promoting Digital Accessibility](#).

China's Best Employer Award 2021 organised by Zhaopin and Peking University's Social Survey Research Centre

Most Caring Employer for Women Award 2021 organised by Lagou.com, a popular job seeking-platform in China

^① EAP (Employee Assistance Programme) is a programme designed to provide support for employees.



The Beauty of Technology Knows No Gender: The Remarkable Women at Weixin

As a supporting partner of the United Nations Development Programme's (UNDP) *HERstory: Women in Tech* initiative, we shared the stories of remarkable, entrepreneurial, and influential women in the Weixin ecosystem in celebration of 2021 International Women's Day. We hope that these role models will inspire more women to develop their careers in the tech sector, break gender stereotypes, boldly pursue their dreams, and become independent, confident, and unique individuals who promote the sustainable development of gender equality and technological innovation.

Since Weixin's establishment ten years ago, the percentage of women serving in tech roles at Weixin has increased every year. To further advance our effort in supporting women in this industry, we have been supporting our female employees in their career development, equipping them with various digital skills needed to excel in the digital economy.



Women in Tech



HERstory

Women in Tech

What Gender Equality Means to Them

When we no longer feel the need to emphasise women in technology, or even International Women's Day, that's when we have truly achieved gender equality.

—Gu Chenchen,
Weixin Video Technology Team

Gains and losses are always determined by ability, not gender.

—Li Xiaoqin,
Weixin Quality Team

Employee Rights and Benefits

Tencent recognises the dedication and contribution of our employees and rewards them with an equitable and competitive compensation and benefits package. Our system is designed to cover various aspects of work and life to attract, motivate and retain talents as well as to contribute to the long-term development of the Company.



Employment Compliance

We respect and protect the rights of our employees across our global operations in accordance with international conventions on labour and workers' rights, including the "Universal Declaration of Human Rights", International Labour Organization ("ILO") conventions and *Labour Law of the People's Republic of China*, as well as other applicable local laws and regulations. To ensure that employees have fair and equal access to opportunities for career development, we have implemented comprehensive policies and procedures for managing probationary periods, employee career development, performance evaluation, and resignation.

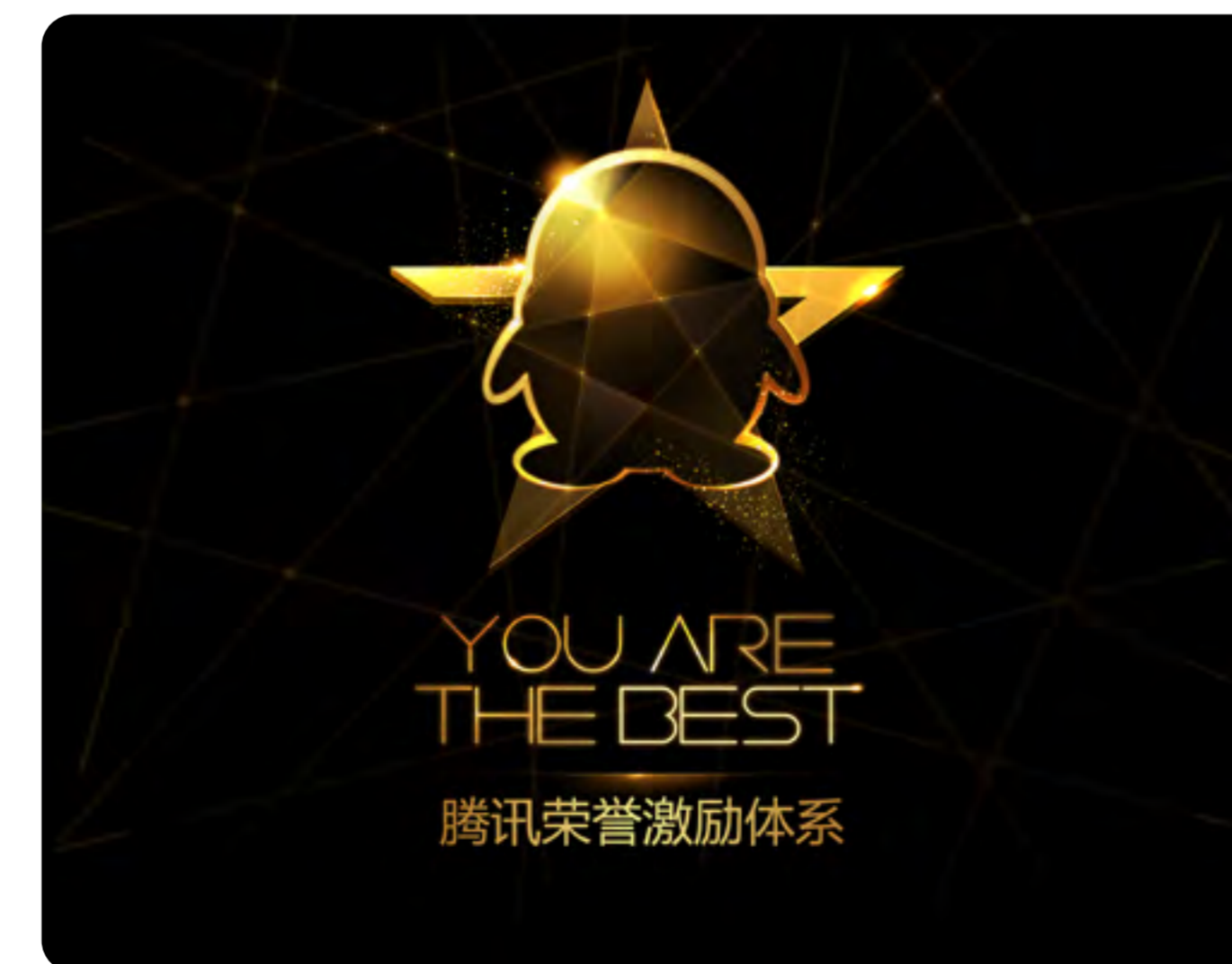
In keeping with our open, people-oriented culture, we encourage flexible work schedule and actively help our employees maintain a healthy work-life balance. We assess the performance of our employees based on their work output and contributions, and not by the number of hours they spend at the office. This performance evaluation mechanism ensures that employees can take full advantage of the time off they are entitled to.

Our hiring and employment provisions also forbid the use of any child labour. Necessary due diligence is conducted by our Human Resources Department, along with qualified third-party agencies. Furthermore, our Group Procurement Department requires suppliers to sign the *Corporate Social Responsibility Commitment* and operate in accordance with our requirements concerning child labour and forced labour.

Compensation and Remuneration

We comply with relevant local laws and regulations of the countries and regions in which we operate and emphasise the concept of "equal pay for work of equal value". Our competitive remuneration system includes performance-based incentives and share incentive schemes that reward employees for their outstanding performances. Performance evaluations take place twice a year and consist of a self-evaluation by the employee followed by comprehensive feedback from their direct supervisor that is designed to help employees improve and strive for the best. All results are fully communicated to employees, and outstanding performers are commended. Appeals on performance and promotion

appraisals can be emailed directly to our career development officer, who will respond to employees' queries and concerns. Depending on the nature of their job and position, employees may also receive allowances to cover phone bills and other expenses incurred due to transportation, relocation and/or business trips. In an additional effort to reward the outstanding performance of individuals or teams, we distribute performance bonuses and other special bonuses, and present the top awards, such as the "Sustainable Social Value Award", "Business Breakthrough Award" at annual employee meetings.



Founder Award	Top Products	Special Contribution Award	
Sustainable Social Value Award	Business Breakthrough Award	Technology Breakthrough Award	Management Breakthrough Award
Marketing Breakthrough Award	Open-Source Collaboration Award	Cloud Migration Award	Cost Optimization Breakthrough Award

Employee Care and Benefits

As a people-oriented company, we care deeply for the health, lives, and financial well-being of our employees as well as their needs when they have a family. In response to the evolving business development and employee needs, we continuously upgrade our benefit packages to reward their contributions and increase their loyalty.

On-Boarding

On-boarding gift, letter to the parents of newly hired fresh graduates

Work Anniversaries

1st/5th/10th/15th/20th-anniversary gifts

Marriage

Marriage leave, gifts, and plastic figurines

Housing

Yiju and Anju plans, housing fund, government-supported housing for outstanding talent, and rental subsidy

Parenting

Fully-paid maternity leave, fully-paid paternity leave, leave for prenatal check-ups, social and maternity insurance, maternity allowance, fully-paid parental leave for employees with children under the age of 3, unique QQ identification numbers, Children's Day gifts

Lifestyle

Volunteer leave, QQ coins, corporate family day, group-purchase discounts, annual team building activities, company shirts, Christmas gala, cultural and sports clubs, Tencent Flex Benefits (a special benefits platform)

Daily Needs

Image (a Tencent coffee and souvenir store), company shuttle bus service, pantries

Insurance

Social health insurance, commercial health insurance, life insurance, critical illness insurance, accident insurance, employee assistance loans, overseas travel insurance, insurance for employee dependents

Health

Informative talks, a hotline for reporting issues related to physical and mental well-being, health advisors, health check-ups, health consultations, 30 days of fully-paid annual sick leave, medical assistance for critical illnesses, on-site consultations with top-notch doctors, and psychological counselling for employees and their family members via phone, video, or in-person



Holidays & Other Special Occasions

Special leave for the Spring Festival (Chinese New Year), desk calendars, Women's Day gifts, Dragon Boat Festival gifts, Fruit Day gifts, Mid-Autumn Festival gifts, Chinese New Year red envelopes, Tencent Culture Day

Annual Leave & Personal Leave

7-15 days of fully paid annual leave, plus 15 days of partially (50%) paid personal leave

Bereavement

Bereavement leave, bereavement money

Retirement

Social endowment insurance, customised souvenirs, long-service gratuity, retirement honorarium

 Helping Our Employees Live Better with the Anju and Yiju Plans

We believe that workers who have safe, secure, and comfortable housing tend to be happier and more productive. To that end, in 2011 we launched an interest-free loan scheme, known as the Anju Plan, for employees in the Mainland of China, where the skyrocketing property price has placed a lot of pressure on first-time home buyers. Over the past ten years, we have improved the Anju Plan six times. In April 2021, we launched the Anju Plan Plus, which represents the latest improvement to the housing support we offer our employees. By the end of 2021, the Anju Plus Plan has granted interest-free loans to approximately 13,000 employees.

Since 2016, the Yiju Plan has been providing recent graduates with rental subsidy to help reduce their financial burden as they start their careers. In 2021, we increased the rental subsidy under the Yiju Plan to be in line with the various city's standard of living.

13,000 employees

By the end of 2021, the Anju Plus Plan has granted interest-free loans to approximately 13,000 employees.

 Giving Back to Our Long-Serving Employees

We appreciate the continued service of every employee. We comprehensively upgraded the caring employee scheme in 2021, namely the "Career Milestone" plan and to be implemented in 2022. We improved and expanded the benefits and specifications detailed in the plan, raising the amount of assistance loans and adding a deferred payment alternative. In addition, we have also added other benefits, marking employees' 5th, 15th, and 20th anniversaries milestones, and improved the statutory retirement package.

Formal employees are given long-term health insurance after being with us for 5 years; a customised souvenirs and an additional 10-day leave are given to those after 10 years of service; lifetime health insurance are provided after 15 years of service; and on top of the above benefits, a tailor-made commemoration gift package and customised employee badge are rewarded for employees with 20 years of service or above. As part of our retirement benefits plan, employees can

enjoy the following upon reaching the statutory retirement age: customised souvenirs, a long-service gratuity (which consists of six months' worth of fixed pay), and a retirement honorarium. In addition, employees who have been with us for 15 years have the option to retire early and embark on a new chapter of life with our statutory benefits package, which includes customised souvenirs, a long-service gratuity, and a retirement benefit.

Career Milestones



Employee Participation and Communication

We place an emphasis on communicating and engaging with our employees while encouraging them to share their thoughts with us. To this end, we have established multiple communication and feedback channels so that employees have a true stake in our business development. Our Annual Employee Meeting held at the end of the year is the most important and anticipated event, where the senior executive management will speak about the Company's strategy and commend outperforming teams. We have also created the Lewen Community, an internal Q&A forum, to promote open communication and mutual learning between departments and across hierarchies.

To ensure that employees can submit appeals and receive timely feedback, we have, in addition to email, established an internal grievance platform. Employees can file various grievances, including those related to disciplinary violations by direct managers, probationary period assessments, performance assessments, and resignations. We have established an independent investigation department to look into submitted cases and resolve and respond to appeals in a timely manner.

As part of our efforts to gather employees' overall feedback and expectations of the Company, we have commissioned a reputable and independent third-party agency to conduct an online employee survey every year on their views on the work environment, values and culture, the Company's strategies and future direction among other topics. In 2021, a total of 46,437 employees responded to the survey, the results of which revealed greater engagement and higher overall satisfaction rates year on year. Of all categories surveyed, the top three aspects employees were most satisfied with were "Culture/Values", "Tech for Good", and "Company's Future Development". For three consecutive years, "Culture/Values" received the highest recognition from our employees, scoring over 85% satisfaction rate.

We respect the career choices of our employees and have been transparent in setting out the terms of employment and applicable reasons for termination in labour contracts signed by employees. Off-boarding is carried out in strict accordance with all applicable laws and regulations. We also conduct exit interviews with departing employees to understand their reasons for leaving so as to determine if and how we can do better as an employer. Every year, we analyse the turnover rate and formulate target and improvement measures. In 2021, the overall employee turnover rate was 12.4%, which has remained relatively stable from previous years.



46,437 employees^①

responded to the satisfaction and engagement survey

① The scope includes the formal employees in the businesses directly operated and managed by Tencent, excluding probationary employees and employees of subsidiary and investees.



85%

For three consecutive years, "Culture/Values" received the highest recognition from our employees, scoring over 85% satisfaction rate.

Employee Development

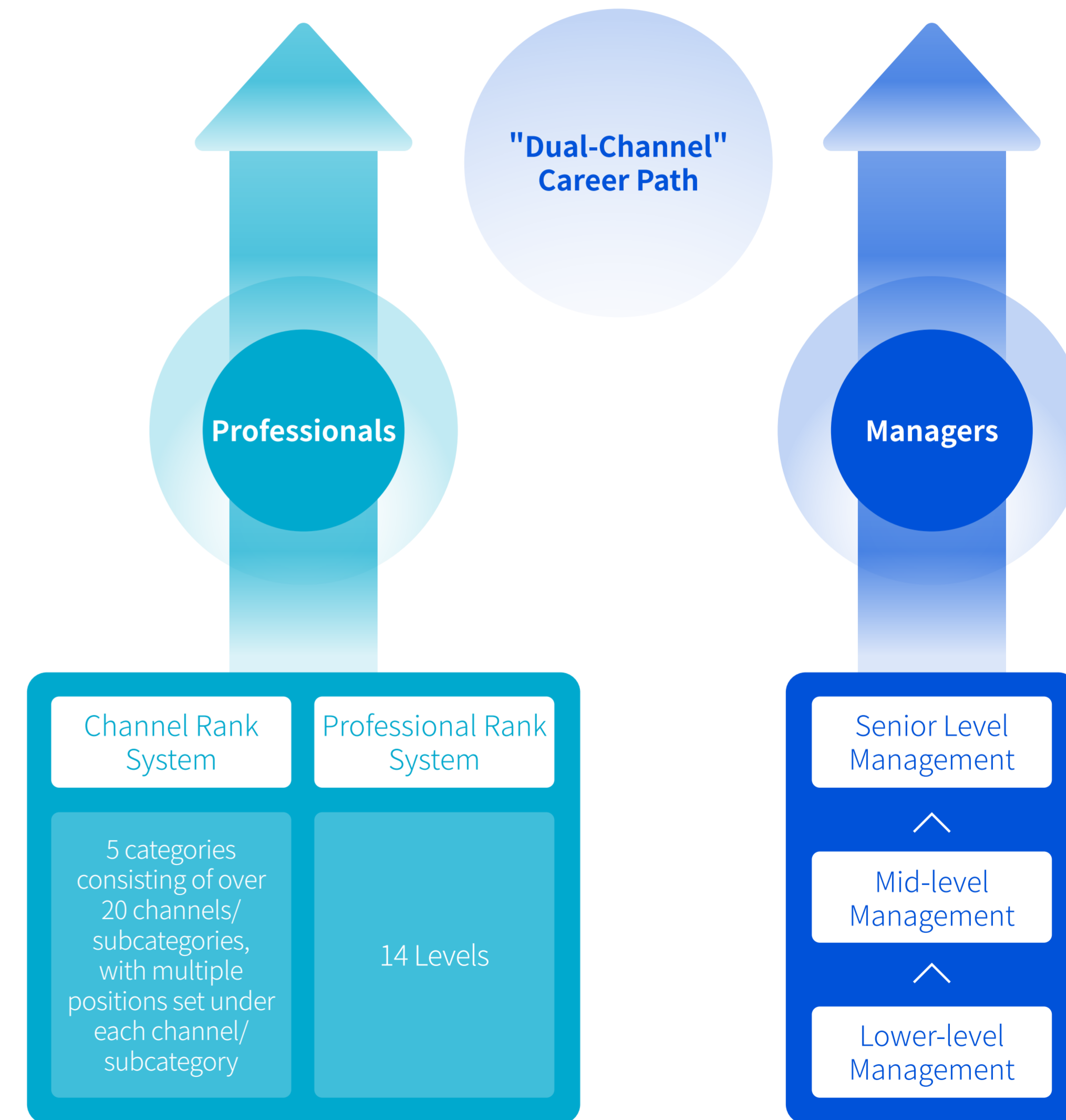
Supporting Career Development

We attach great importance to employee development and have designed a "dual-channel" where employees can choose to develop their careers along either the professional channel or management channel. The professional channel branches out into technical, product or project, design, marketing, and professional fields, with each of these fields further branching out into over 20 paths. This has provided employees the opportunity to gain access to a highly diverse array of options. By doing so, they may be able to develop their careers in a thoughtful manner based on their own preferences and expertise, and to be recognized for their various contributions to the Company. In 2021 we increased the transparency of the review process by encouraging colleagues to attend promotion presentations given by individuals from similar professions. We believe the events can help employees develop a deeper understanding of relevant career trajectories and requirements.

Allowing talent to flow freely to where it is needed most is also crucial for the vitality for the Company. In 2012, we launched the Huoshui Programme ("HSP") to build a smooth mechanism for internal transfers. This has helped employees find the best opportunities for their career development within the Company, which has in turn made both the Company and our employees more dynamic and flexible. In 2021, HSP facilitated over 4,000 internal transfers, greatly boosting the vitality of the Company

by bringing more talent from different backgrounds to our core products and fast-growing businesses while also nurturing more individuals, broadening minds, and giving greater access to a wealth of diverse experience. For those who plan to relocate to another city or country, HSP can serve as an alternative option for them. This talent allocation programme has proven to be highly effective in improving employee and organisational vitality and has been used as a case study by the Harvard Business School previously and was included in the case library of Tsinghua School of Economics and Management in 2021.

Our Elite Youth Programme also seeks to stimulate such vitality. We encourage departments to identify, cultivate, and elevate talents by shifting from the conventional, seniority-based promotion system to removing upward barriers for budding talents so that they can prove themselves with additional responsibilities. We provide training sessions to help elevate their management skills and financial knowledge to fast-track their transition to mid-level management.



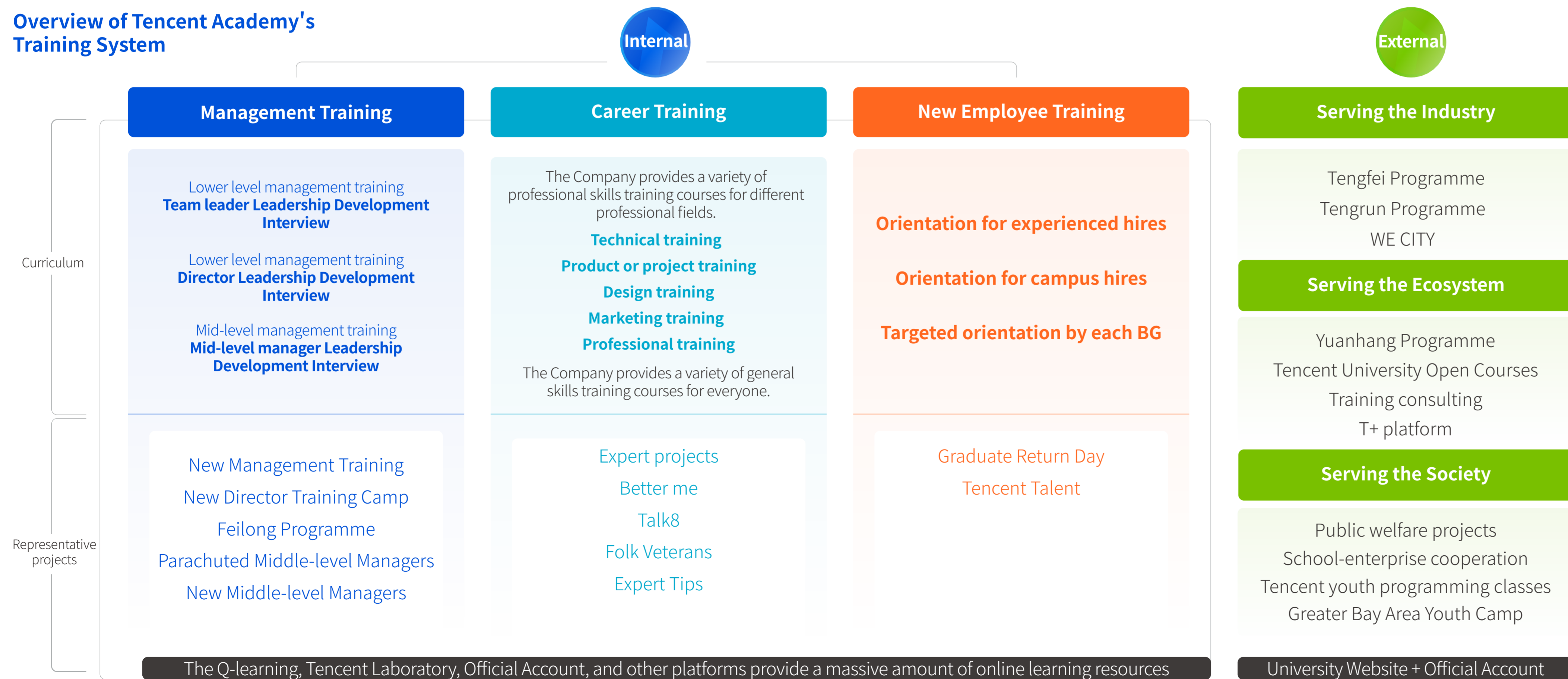
Enhancing Professional Capabilities

Training at Tencent

Tencent attaches great importance to talent development. In 2007, we established Tencent Academy, whose mission is "to be the most respected corporate university in the Internet industry". It offers comprehensive educational resources that correspond to our employees' career development in the professional channel or management channel. Internally, Tencent Academy carries out multi-dimensional training for not just new hires but also for professionals and key

personnel. Externally, we endeavour to share our industry insights, practices, and experience and nurture future talents by offering training courses for the industry partners and society. In addition to its on-site training, Tencent Academy also has an online learning system so that employees can learn anytime, anywhere.

Overview of Tencent Academy's Training System



784 types of courses

As of 2021, Tencent Academy has offered 784 types of courses, of which 111 of them were recently added

1,917

We had a total of 1,917 in-house trainers

12,000 classes

These courses were offered all year round and added up to 12,000 classes in total

40 hours

The average training was over 40 hours

99.61%

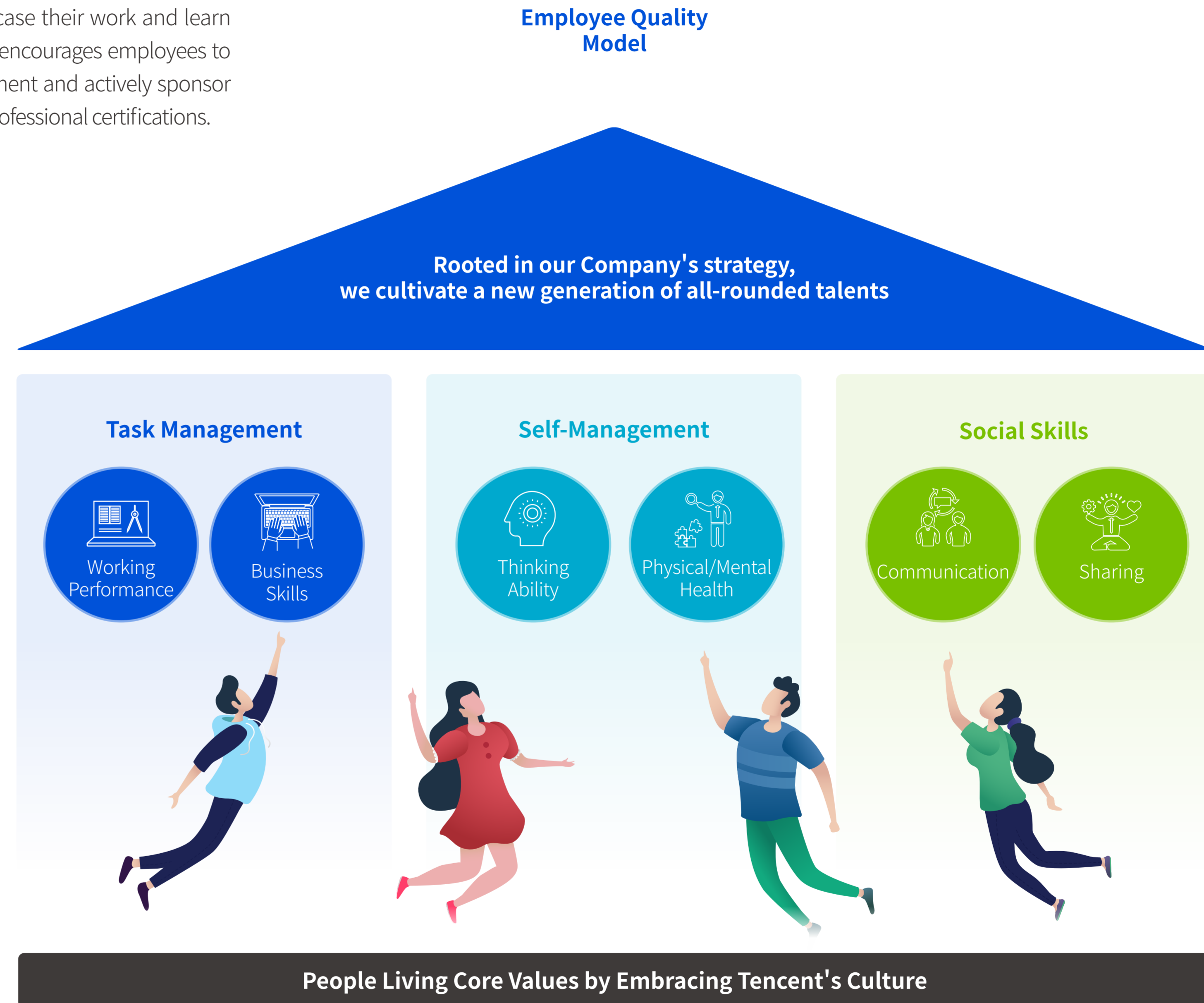
The average participation rate was over 99.61%

Enhancing Professional Capabilities

Tencent Academy provides employees from different professions with a variety of vocational and general training courses taught by external experts and leading academics, to help them upgrade their professional capabilities and aptitude.

The Academy also promotes learning and sharing experiences via "Folk Veterans", who are employees possessing expertise in specific domains and can offer a unique perspective on innovative thinking, work culture, and idea pitching, among other topics within the context of Tencent's businesses. In "Expert Projects", experienced employees or senior experts in certain fields are invited to share their knowledge on this internal platform. "Better Me" focuses on the all-rounded development of talents, offering courses on emotional intelligence, personality and self-awareness, among other courses in career planning, humanities, art, health and lifestyle. These courses aim to inspire continuous learning and elevate their capabilities in learning, logical, independent and critical thinking. Tencent Technology Week and Tencent Design Week, which are annual company-wide events, as well as many other technical competitions organised with business groups are great

opportunities for the buffs to showcase their work and learn from each other. The Company also encourages employees to continue their professional development and actively sponsor employees in their efforts to obtain professional certifications.



 Tencent Technology Week: A Feast of Learning Tailored for Tech Professionals

Every year, during the week of 24 October, the Programmers' Day, Tencent Academy teams up with the Tencent Culture team, Tencent Technology Committee and other departments to host the Tencent Technology Week ("TTW"). During this event, internal and external specialists will share their insights on current technological developments, future exploration, and the career development of tech professionals. TTW provides an opportunity for Tencent programmers to broaden their horizons and think deeply about their career while gaining valuable experience and knowledge from a wide range of experts.

The 4th annual TTW hosted three tech competitions, 21 themed discussion tracks and 17 exhibition booths organised by more than 30 teams at our headquarters in Shenzhen, attracting over 520,000 attendees.



 Design Week: A Learning and Exchange Platform for Design Professionals

Tencent Design Week ("TDW") was launched by Tencent's Design Channel Committee in collaboration with Tencent Academy. Based on the concept of "Design for Good", TDW aims to create a platform for designers to showcase their work and interact with their counterparts from different business groups. The main events of TDW are the design summit and creative bazaar, which allow Tencent's designers to learn about concepts and experiences that are at the forefront of international trends. The 6th annual TDW was held in December 2021, featuring "Efficient Design, Easy Collaboration". International guests working with cutting-edge design tools were invited to share their know-how in this event, drawing a total of 27,437 attendees.



Leadership Training

We attach great importance to developing leaders. Based on our "All in Leadership" model^②, we have come up with differentiated training strategies for developing outstanding leaders in lower level, mid-level, and senior level management. Our online and offline training, themed seminars, and executive sharing sessions are designed to meet the need for elevating employees' capabilities at every level.

② The All in our Leadership model is based on our cultural values (Integrity, Commitment, Collaboration, Creativity) and three core competencies (Insight, Inspire, Win)



Feilong Programme: Developing Talent for Mid-Level Management

The Feilong Programme is at the core of our development of mid-level management. It provides trainees various opportunities to interact with managers from industry-leading companies and engage in discussions about the Company's strategies, products, and management challenges. This approach helps mid-level managers to broaden their horizons and learn through participating in decision-making scenarios. Trainees are assigned a mentor to assist their progress. This programme has a rigorous curriculum, where trainees will participate in three off-site modules with a mix of seminar classes, group activities and post-evaluation to ensure learning outcomes.

After over a decade of fine-tuning and adjustments made in response to ever-evolving needs, the Programme has assembled an outstanding team of instructors that consists of top international experts and business leaders and has established a system for developing talents that carry an international perspective. To date, 58% of mid-level management at Tencent, or 603 managers, are alumni of Feilong.



Developing Talents to Support Industry Growth

In addition to our continuous effort to nurture talents within the Company, we also contribute to talent cultivation for the industry. Since 2017, Tencent has signed a comprehensive strategic partnership agreement with China's Ministry of Education ("MOE"). Through this partnership, we worked with higher education institutions, launched various young talent empowerment programmes and jointly explored fields, including curriculum design and reform, teacher training, hands-on practises for students, and innovative and entrepreneurial project incubation. In 2021, Tencent was approved by the expert group of the Steering Committee for the Employment and Entrepreneurship of National College Graduates to participate in the MOE's "Project on Matching Supply and Demand in Employment and Education". Relying on rich expert resources, innovative management experience, and unique platform advantages, we were able to integrate the perspectives of enterprises with the teaching systems of higher education institutions. Ultimately, our effort has improved the overall aptitude of students, equipping them with the skills and knowledge needed to match into higher quality employment. As of December 2021, Tencent has cooperated with 39 higher education institutions and launched over 70 collaborative projects covering aspects, such as targeted talent training, internships, and human resource improvement.

Tencent's Rhino-Bird Elite Training Programme

Tencent's Rhino-Bird Elite Training Programme was launched in 2017 with the purpose of identifying and supporting students who are interested in and has potential in scientific research. Shortlisted students will be assigned two mentors, one from the academia and one from the corporate world. Based on real-world industry scenarios and mass data from scientific experiments, students are encouraged to blend the theory and application while they participate in the development and application of cutting-edge technologies. We collaborated with higher education institutions to nurture curious individuals who are passionate about exploring and seeking the truth, and who will become the future leaders of independent scientific and technological innovation. As of December 2021, this programme has nurtured over 280 elite researchers from more than 70 research institutes and higher education institutions from not just China but all over the world. There have been numerous research outcomes that have already been validated and applied to real-world scenarios, with many of these being presented at NeurIPS, CVPR, AAAI and international academic conferences.

70 research institutes **280** elite researchers

This programme has nurtured over 280 elite researchers from more than 70 research institutes and higher education institutions from not just China but all over the world

2021 Tencent Youth Game Designer Challenge

The Tencent Youth Game Designer Challenge, a ground-breaking event in China that seeks to discover game talent and creative work, has now been held for seven consecutive years. In comparison with the previous year, the 2021 competition placed a greater emphasis on the social values in games, as well as gameplay and the theme of innovation. In response to the "Playing for the Planet Alliance" launched by the United Nations Environment Programme, Tencent Institute of Games and Tencent TiMi Studio Group hosted the Tencent Youth Game Designer Challenge to create a subdivision called "Green Game Jam for Youth". The best works have showcased to the public during the 26th United Nations Climate Change Conference (COP26). This competition, hosted by the Tencent Institute of Games, provides an open and diverse platform for university students to showcase their inspiration, creativity, and the value of gaming projects to the world. The 2021 event brought together over 260 teams representing 2,200 young game designers from around 300 universities and colleges worldwide to explore the values of different games in various societal contexts.

300 universities

The 2021 event brought together over 300 universities and colleges worldwide to explore the values of different games in various societal contexts.

2,200 teams

together over teams representing 2,200 young game designers from around



Improve Employee Health and Vitality

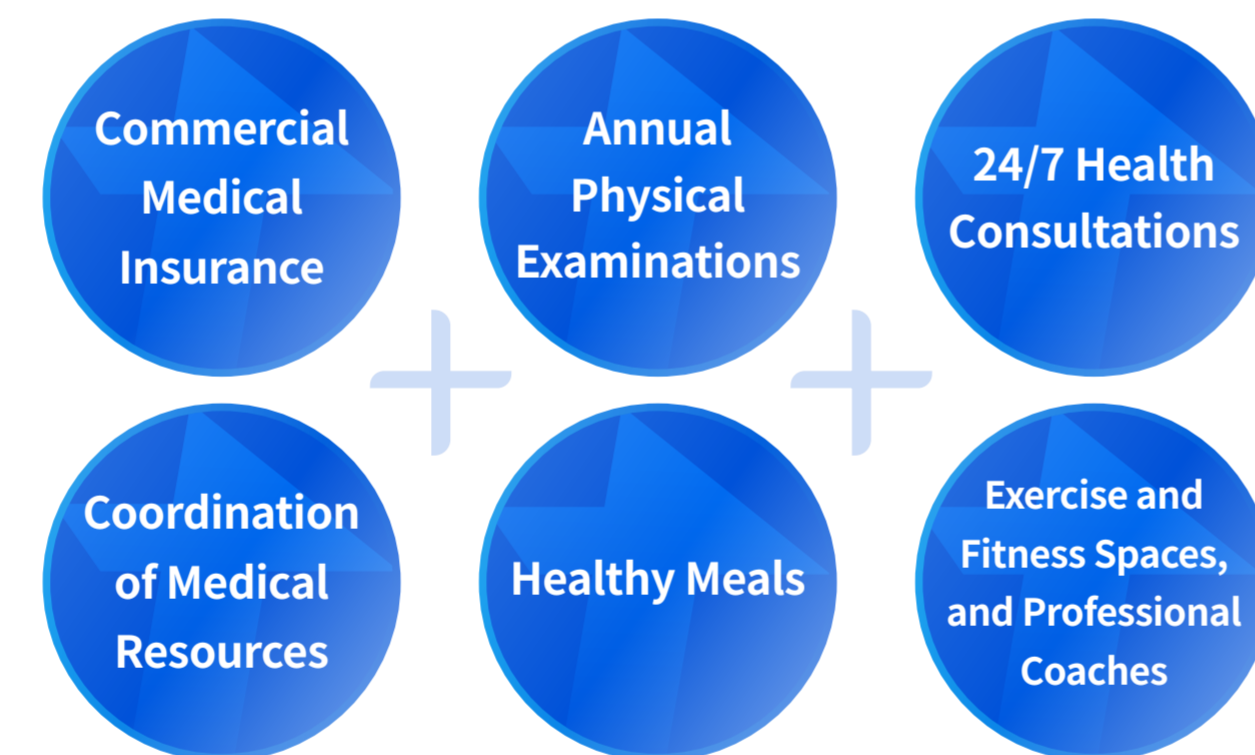
Emphasis on Physical and Mental Health

To protect the physical health of our employees, we provide them with comprehensive care and services, including social insurance, commercial medical insurance, critical illness insurance, accident insurance, life insurance, annual physical examinations, 24/7 health consultations, coordination of medical resources, healthy meals, exercise and fitness spaces, and professional coaches. We also care about our employees' mental health and well-being. A free "stress relief cabin", which includes psychological counselling, an emergency hotline, courses on mindfulness, and psychological assessments and evaluations, is provided for employees and their families to help regulate their emotions and reduce stress.

In addition, we have also set up over 70 different associations and clubs featuring a variety of activities, such as dance, music, basketball, board games, drama for employees to enjoy themselves during their spare time. To strengthen team spirit within the workplace, we have also provided funding for various team building activities.



These associations, annual competitions, and external activities have noticeably enhanced communication and interaction among employees, helping them cultivate their hobbies and interests outside of work and expand their social circles, with improved team cohesion. In addition, exclusive venues for sports and fitness are provided in our Tencent Sports Space, along with group exercise classes. In 2021, Tencent invested nearly RMB8 million to upgrade its fitness equipment and expand its fitness spaces. With the venues being more comfortable and convenient, employees have taken a greater interest in exercise and the usage rate increased by 50% over 2020.



Safeguard Occupational Health and Safety

In order to prevent accidents in the workplace while reducing occupational hazards and maintaining a safe and comfortable working environment, Tencent has employed *Safety Management Policy and Public Emergency Management Policy in accordance with the Guidelines on Occupational Health and Safety Management Systems* by the International Labour Organisation and *Law of the People's Republic of China on the Prevention and Control of Occupational Diseases*, and other applicable regulations.

To maintain a safe and comfortable workplace, we have a security system, fire safety system, and food safety monitoring system in place. We invite third parties to conduct security risk audits on our premises every year to identify hardware defects and deficiencies in the operation management system and address other hidden risks.

Over the past year, the COVID-19 outbreak resurged globally, bringing suffering to people and forcing local economies to a halt. We continue to closely monitor the pandemic and inform employees to quarantine or work from home, if needed. Surgical masks, hand disinfectants and personal protective equipment are provided at our offices, and to employees in need. A continuously updated Tencent COVID-19 Response Guideline is used to provide guidance on office management and promote anti-pandemic awareness among employees. We apply strict practices to ensure a safe working environment, including enhanced cleaning and sanitation procedures,

temperature monitoring, social distancing, and other measures that can minimise transmission risk. Tencent has also teamed up with five major online healthcare platforms, including WeDoctor, Medlinker, and Good Doctor, to provide free online health consultations and build a strong line of defence for safeguarding the health of our employees. Tencent has also provided dynamic, real-time guidance and support for both local employees and employees who must travel for business by keeping a watchful eye on the ever-changing local measures for pandemic prevention and control. When there were major outbreaks of Covid-19 cases in Guangzhou, Shenzhen, Shanghai, Xi'an, and Hong Kong, we worked with employees and the government to fight the pandemic by implementing flexible working arrangements.



Acquiring First Aid Skills to Save Lives

In 2012, Tencent formed its team of first aid volunteers and established a Rescue Chapter as part of the Tencent Volunteers' Association. Since then, first-aid training course called "Everyone is a First Responder" was developed and made widely available to employees and their families. As of 2021, our team has provided in-person first-aid training courses to more than 7,000 employees, taught online courses to more than 12,000 employees, and trained and certified 40 in-house instructors. In addition to popularizing first-aid skills internally, our team supports large-scale activities and events both inside and outside the Company. By the end of 2021, nine volunteers from our first-aid team had saved more than 10 lives.

In addition, Tencent is also committed to building an emergency response management system. To date, the company has distributed over 3,800 emergency call QR codes and set up relevant location settings inside our 50 different office buildings and data centres in 10 cities across China, and fully deployed over 400 automated external defibrillators ("AED"). Daily operations and emergency response plans have also been fully integrated into property management procedures. In 2021, Tencent organised 38 internal drills, with all licensed first-aid staff arriving at the scene within the golden four minutes.

Tencent has teamed up with the Red Cross Foundation of China to build a pilot public emergency response system for China while also introducing a barrier-free online first-aid system for hearing impaired individuals. For more information, please refer to sections entitled [Promoting Digital Accessibility](#) and [Public Emergency Response](#) in this report.



This (for the drill) was the 11th time I 'fainted' but 'was saved' at Tencent. Within just four minutes, 34 first-aid staff have already arrived at the scene, and I was moved to tears when I heard their anxious footsteps.

— An employee participating in the "Guarding the Heart" drill



Digitization is not just about improving productivity, even more importantly, it is about ensuring that digital development serves the community and creates value for its users. As part of its pursuit of a "responsible product culture", Tencent works hard to continuously upgrade its products from the four dimensions of security, health, inclusiveness, and user-friendliness, while ensuring that all its products meet compliance requirements. As a company dedicated to the exploration, promotion, and development of responsible products, Tencent is also committed to providing users with a better digital experience.

- Protecting Data Security
- User Protection
- Customer-centric Services
- AI for Good

RESPONSIBLE PRODUCTS

Protecting Data Security

Privacy Protection

At Tencent, user privacy and data security are our highest priorities. We believe that protecting the data privacy of our users is essential to creating a safe and market-leading user experience, and that users should be in control of their data and be well-informed of our data policies and practices. Our belief has followed through to our adoption of "Privacy by Design" and "Privacy by Default" when developing our products and services.

Management Approach

Security, autonomy, compliance, and transparency are the cornerstones of our privacy protection policy. Tencent is privacy-focused on every level. Our dedicated privacy and legal teams work hand-in-hand with our product teams to ensure that our products and services are built with privacy in mind from the ground up, and comply with all applicable laws and regulations. Our product teams also work together with our engineering teams to ensure that our data collection and use practices for products and services are transparent, and that users have control over how their data is used.

We adhere to the following principles for user privacy protection and data security:

- **Security and reliability.** We work to prevent user data leakage, damage and loss through reasonable and effective data security technology and management.
- **Independent choice.** We provide convenient data management options for users to make appropriate choices and manage personal data.
- **Protect communication secrets.** We strictly abide by laws and regulations, protect users' communication secrets and provide secure communication services.
- **Reasonability and necessity.** We only collect necessary data to provide better services to users.
- **Clarity and transparency.** We strive to introduce the privacy policy on data processing to users in easy-to-understand language.
- **Integrate privacy protection into product design.**

Tencent Management is committed to privacy-first governance approach and has formulated a series of privacy policies, such as the *Tencent Privacy Policy*, *Product Privacy Protection Guidelines*, and *Children's Privacy Protection Statement*. It has also established a sound internal evaluation process to ensure that all products are fully assessed and compliant with all applicable data privacy laws, and that all collected data is securely transmitted and stored.

Tencent complies with all applicable privacy protection and data security laws and regulations in the jurisdictions we operate. To ensure the Company's products and business processes comply with the regulatory requirements, we monitor the relevant regulations and laws in China and international markets closely, implement such new requirements and upgrade our know-how in a timely manner.

On November 1, 2021, the *Personal Information Protection Law (PIPL) of the People's Republic of China* came into effect, which is intended to regulate the storage, transmission, and processing of personal information. After a thorough analysis of the PIPL's requirements, we took steps to optimize the way we manage users' personal information based on the new changes, and have continuously upgraded the overall management policies, methods, and tools. In compliance with the regulatory requirements for algorithms, we have also improved our internal algorithm filing mechanism; enhanced the supervision, review, and security assessment requirements for product algorithms; clarified the user's product rights, thereby strengthening our efforts around algorithmic accountability.

Tencent acts in accordance with applicable laws and follows the following general principles whenever we receive requests to disclose data from government agencies and regulators:

- We respond to valid legal requests consistently and fairly across all jurisdictions where we offer our products and services, subject to applicable laws and regulations and our interpretation of potential differences between jurisdictions;
- Whenever possible and subject to applicable laws, we are transparent with our users in the actions that we take in response to valid legal requests, to provide affected users with an opportunity to respond to the request; and
- We carefully review all requests to ensure that we comply with all applicable laws and regulations in our response, while respecting our users' rights. That may include taking sufficient internal and third-party professional advice.

Oversight

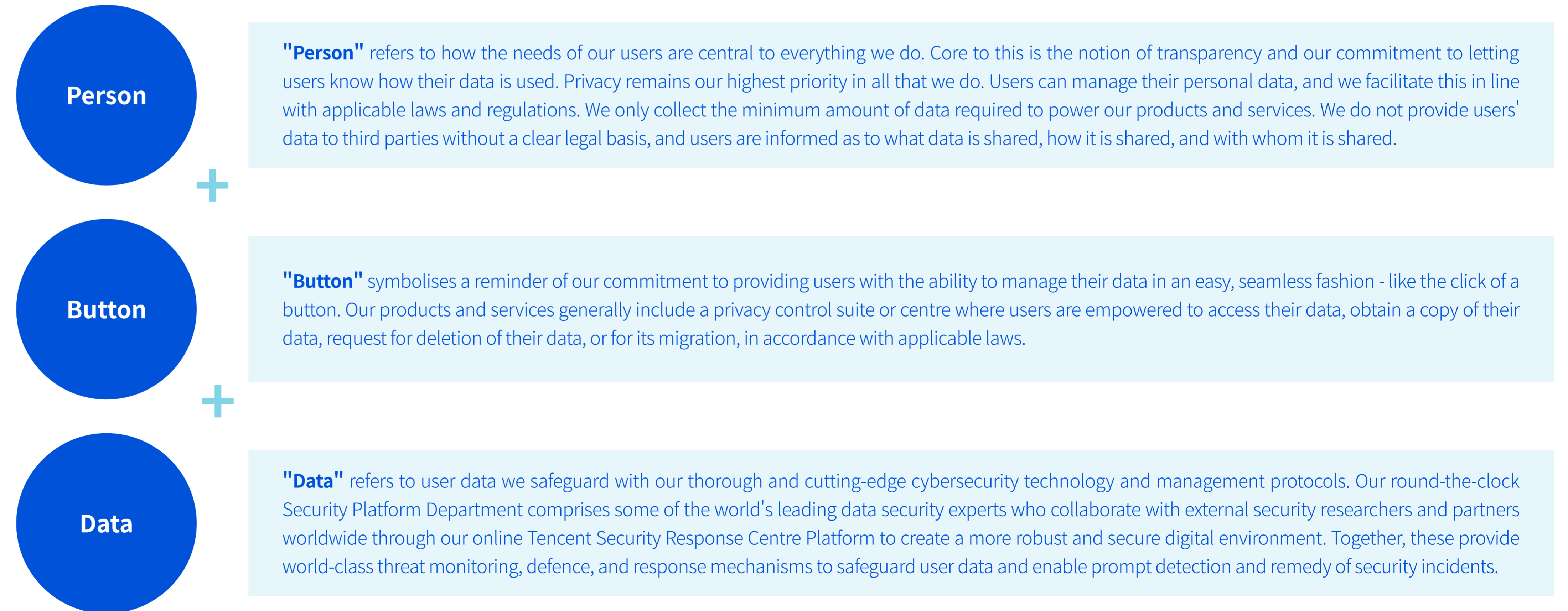
The Board and Management have always attached great importance to the protection of our users' personal data. Tencent's Management is committed to a privacy-first governance approach and has institutionalised a robust internal evaluation process to ensure that all products are fully assessed to comply with all applicable data privacy laws and that all data collected are securely transmitted and stored. From top-down, to bottom-up, data privacy is an organisational effort.

Approach and Procedures

We believe that users should be able to manage their own data. Therefore, our products and services are designed to the maximal extent that restricts the collection of and access to user data by Tencent or anyone else. While using our products and services, users can manage the scope and extent to which their data is collected, used, and shared. These features have been researched, designed, and implemented over many years in order to protect users' privacy and allow them to directly manage their data.

Our approach to data protection follows the widely recognised "Privacy by Design" concept, which dictates that all our products and services are designed with privacy protection from the outset and that we continuously think about privacy protection throughout the product lifecycle. Our approach to "Privacy by Design" is encapsulated in three words: "Person-Button-Data".

Our Data Protection Officer undertakes the related responsibilities according to laws, including communicating with regulators and providing advice to management on related compliance requirements in different jurisdictions. The Data Protection Officer is supported by a team of qualified privacy protection professionals and is available to address any questions regarding Tencent's privacy practices, or any product-specific privacy policy, at Dataprotection@tencent.com.



Privacy Impact Assessments and Follow-Up

As part of our privacy-focused work, we regularly undertake Privacy Impact Assessments ("PIAs") for our products and services. These PIAs evaluate the privacy-related risks of our products and services in the relevant jurisdictions where we operate. Our dedicated privacy legal team is trained to identify, highlight, and manage privacy risks, minimise potential impacts to individual rights, and address other adverse privacy issues.

Our privacy protection policy is also published on the product's official website and app, which is also accessible on the Tencent Privacy Protection Platform. Users can also submit complaints or make inquiries through the feedback button on the website, app and privacy feedback email Dataprivacy@tencent.com.

Culture and Responsibility

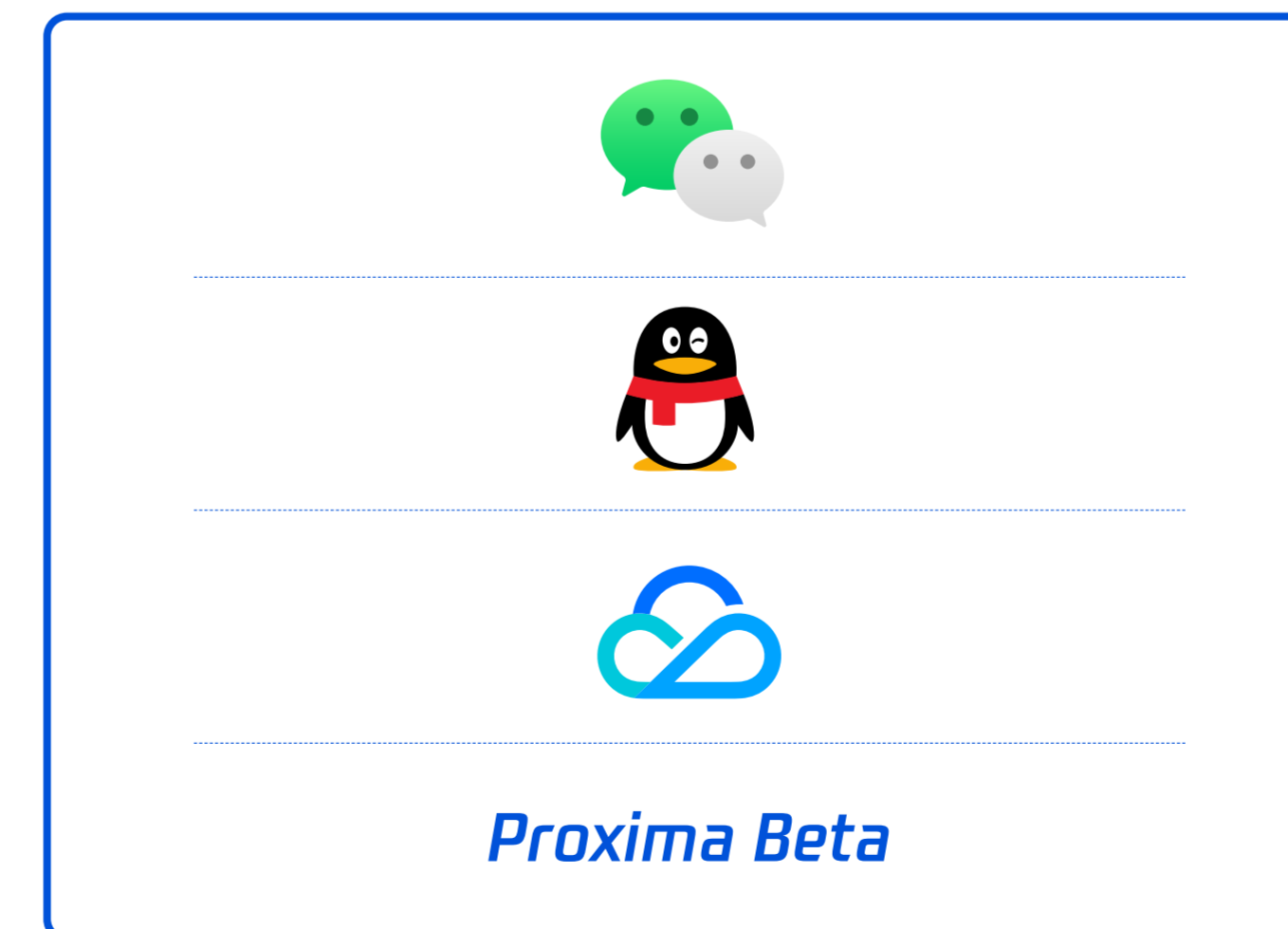
We are committed to a privacy-conscious culture and making the protection of user privacy our top priority. We believe that ensuring privacy is a shared responsibility for all Tencent employees, regardless of their roles or ranks at Tencent. We regularly provide comprehensive and company-wide privacy education and awareness training programmes to all our employees. These programmes are designed to provide employees with an understanding of general privacy and data protection considerations, including "Privacy Protection in Design" and "Privacy Protection by Default," how to build privacy-centric user interfaces, how to identify privacy issues in mergers and acquisitions, how to respect the rights of data subjects and handle related requests, and the risks of cross-border data transfers. We systematically communicate our privacy protection and cybersecurity guidelines and procedures to all employees and strictly enforce safeguards across our products and services at all levels.

In 2021, Tencent established a "Personal Information Protection and Data Compliance Team" composed of the management committee, decision-making group, public affairs group, overall coordination group, and product compliance teams from various business groups. As the overall coordination department of the Company that mainly handle matters pertaining to data compliance and privacy protection, the Team is also responsible for improving the Company's data and privacy compliance and protection system, as well as formulating management strategies, procedures and specifications on data compliance, personal information protection, user privacy protection and other fields. It works closely with relevant teams to improve the compliance implementation rules for specific businesses from different business groups and functional departments (including those overseas), investigate and assess business compliance risks, handle risk incidents, and guarantee the

implementation of compliance requirements. By doing so, this ensures that the Company's products and businesses remain fully compliant in terms of the protection of users' personal information and personal data during each step of the entire lifecycle: collection, processing, use, sharing, and handling.

Incident Management

Tencent has comprehensive systems in place to empower our teams to respond rapidly and effectively to all types of information security incidents, including attacks from attrition, ransomware, the web, email, impersonation, improper usage, system outages and deletion, loss, or theft of data. Our main goals are to continuously ensure the cybersecurity of our platforms, to protect the information entrusted to us by users, and to ensure our operations meet the applicable laws and regulations. We also use various incident analysis mechanisms and risk protocols to ensure that Tencent responds appropriately and swiftly to any threat detected.



Recognition and Cooperation

Tencent's data privacy protection efforts are internationally recognized. Weixin and QQ have secured TrustArc and ISO/IEC 27018 accreditations, Tencent Cloud has secured CISPE and ISO 27701 accreditations, and Proxima Beta has secured ISO/IEC 27001 and 27701 accreditations, and many more. In addition to improving its own practices, Tencent has also been actively promoting the awareness and standardization of data privacy protection in the industry and society. In 2021, Tencent co-authored the *Privacy-Preserving Computation White Paper (2021)* to provide insights to the industry regarding the application of privacy-computing technologies. Tencent Security also officially released the *Lingkun App Privacy Compliance White Paper*, which introduces how enterprises can offer privacy and security solutions for users, and shares helpful references for the industry.

TrustArc and ISO/IEC 27018 accreditations

TrustArc and ISO/IEC 27018 accreditations

CISPE and ISO 27701 accreditations

ISO/IEC 27001 and 27701 accreditations

Data Security^①

In September 2021, we established our Security Technology Committee to enhance the internal coordination of the development and application of security technologies and strengthen our capability to analyse various types of incidents and risk protocols, thereby enabling us to respond swiftly and effectively to various threats and attacks.

We only collect the necessary and minimum data for the provision of our products and services, and keep the personal data of users strictly confidential and shall not leak, distort, damage, sell or illegally provide such information to others. We establish and improve the user information protection system by hierarchically managing the access rights of internal staff to ensure data security and prevent any leakage, damage, or loss of information. We provide an easy-to-use channel for employees to look up the Company's data security policy through internal communication tools to timely confirm Tencent whether their behaviour meets the Company's security policy requirements. When employees discover potential data security violations, they can report the cases through the internal communication tools or reporting system; once the violations are verified, the Company will take strict disciplinary measures, including but not limited to notice of criticism and corresponding punishment. We provide privacy protection and data security training to all employees, including full-time, part-time and interns, to instil a long-term data security protection culture.

① "Percentage of the total number of products sold or shipped subject to recalls for health and safety reasons" and "recall procedures" are not closely relevant to the Company's main businesses.

② Technical experts who use their hacking skills to intentionally cause damage to individuals or organisations are hailed as the "black hats" by the security industry. Technical experts who apply their skills in the design of defence systems to protect the security of individuals or organisations are the "white hats".

Tencent Engineering Group has a dedicated security team, which provides comprehensive security protection for our products and services with the technical support of Tencent Security Labs. By formulating comprehensive active and passive defence solutions, the team is able to actively improve basic security and layered defence detection capabilities; implement strict monitoring and timely alerts for security systems and databases; and formulate measures, such as blocking, regular monitoring and review, and traceability of abnormal behaviors. The security response team can operate timely

Tencent Security Labs are composed of seven professional security research teams, namely Keen, Xuanwu, Yunding, Big Data Security, Anti-virus, Tianma, Zhuque. The expert teams focus on research in security technologies, scenario construction of defence systems, as well as prevention and protection measures in six key areas pertaining to connectivity, system, applications, data, equipment and cloud.

Tencent Security Labs have conducted many security research projects for global open-sourced communities and large-scale ICT companies, thus assisting them in enhancing their security systems in multiple dimensions. All security research-related projects are completed by our white-hat[®] researchers, with strict adherence to the widely accepted industry practice of responsible security disclosures.

passive defence and handling measures through a 24/7 emergency response mechanism. In addition, through Tencent Security Response Centre, we work with security researchers and partners around the world to jointly defend and safeguard security.

Cutting-Edge Technologies

We conduct frontier and in-depth research on security technologies applied in the Internet, Internet of Things, big data, cloud and artificial intelligence, with the objective to elevate our overall preparedness not only in passive defence but also active prevention and control. In January 2022, the China Information Technology Security Evaluation Center announced the latest batch of qualified information security service providers. Tencent Security has obtained "Class I in Security Operations" and "Class I in Cloud Computing Security".



2,200

As of December 2021, Tencent has more than 2,200 granted patents in security-related areas in China

(including all fully-owned subsidiaries)

Tencent Cloud was granted the "CSA 2021 Security Cornerstone Award" and was mentioned in the "Top 10 CSA Digital Transformation Security Support Case Studies".



Cloud Security

Tencent Cloud has established an efficient internal control system and strengthened its foundation in data security from the aspects of system process and control activities. Our Cloud Security Management System has also received accreditations globally. We apply our internal best practices in data security to Tencent Cloud's security products and services, including the intelligent gateway, cloud firewall, DDoS (Distributed Denial-of-Service) protection, network intrusion protection, and anti-fraud. Tencent Cloud provided all-rounded security service offerings including identifying and deploying protection measures on physical security, virtualization security, network security, host security, data security, application security, business security, security audit and security management. With the evolution of cloud computing and security technologies, Tencent Cloud will continue to build an efficient security internal control system, enhance security compliance capabilities, and upgrade cloud security and big data security standards.

As of December 2021, Tencent Cloud has earned hundreds of accreditations globally, including the highest-level security certifications granted by renowned institutes in South Korea, Singapore, the United States, Germany, and the European Union.

Continuous, Precise defence Against DDoS Attacks

Given the accelerated speed with which digital technology is being integrated into the real economy, a large number of economic activities are moving online. A DDoS(distributed denial of service) attack is a common threat to cybersecurity and, is considered as one of the biggest "tumor" on the Internet due to the mature "industry" chain, crude and violent methods, low cost and high return. DDoS attacks have grown rapidly for four consecutive years. In face of the severe network security situation, we have developed the Tencent Cloud T-Sec Anti-DDoS solution that leverages our second-level response latency and Tbps-level cleaning capabilities all over the world. Based on multi-dimensional algorithms for IP profiling and behavioral pattern analysis, coupled with AI intelligent engines, our defence strategies are continuously updated to respond dynamically to various types of DDoS attack scenarios ranging from the network layer to the application layer. This ensures millisecond-level network stability and second-level cleaning and switching can improve the cleaning accuracy to as high as 99.995% without affecting business operations.

腾讯云 Security Certifications

ISO 29151 Code of Practice for Personally Identifiable Information Protection

ISO 27017 Code of Practice for Information Security Controls Based on ISO/IEC 27702 for Cloud Services

C5 Audit

ISO 27701 Extension to ISO/IEC 27001 and ISO/IEC 27002 for Privacy Information Management

OSPAR Audit

ISO 27001 Information Security Management Systems

PCI DSS and TISAX Audit

MPAA (Motion Picture Association of America)

CSA STAR Cloud Security Management System Certification

ISO 27018 Code of Practice for Protection of Personally Identifiable Information (PII) in Public Clouds Acting as PII Processors

MTCS T3 Certification

HIPAA (the Health Insurance Portability and Accountability Act)

CSA STAR Cloud Security Management System Certification

K-ISMS Certification

Game Security

Cheating and DDoS attacks are two major security threats faced by game companies worldwide, on top of the daily challenges to protect the security of user accounts, virtual properties, data, cloud gaming and to combat piracy. Leveraging our deep experience and know-how to tackle such threats, we launched Tencent Game Security solution in 2021 to help game companies deal with the full spectrum of security threats in game operations. We also published the "2021 Game Security White Paper, which included an depth analysis of threats and recommended solutions, to share our knowledge with peers and promote collaboration to fight against illegal industry practices.

FinTech

Our FinTech security team provide a variety of security solutions for enhancing users' account security. We continue to conduct self-assessment, optimisation and standardisation of our financial products in accordance with applicable laws and regulations, including the Measures for the Supervision and Administration of Publicly-offered Securities Investment Fund Distributors, the Circular on Standardising the Retrospective Administration of Online Insurance Sales Practice, and the Measures for the Regulation of Internet Insurance Business. Our risk control system provides real-time monitoring 24/7 to ensure the safety of account funds. Users will be informed of any changes in the amount of funds immediately via mobile phone messages, email, and other means.

Security Empowerment

Tencent Security serves enterprise customers by offering holistic security solutions from four dimensions - security intelligence, offence and defence, security management and security planning. Our team of experts with deep experience in different types of security threats can help enterprises design comprehensive security solutions that fulfill the needs of current operations and future expansion.

- Leveraging capabilities of Tencent Security Threat Intelligence Centre, Tencent Security create customised solutions that enable enterprises promptly and effectively respond to different levels of threats.
- Through Tencent Cloud Security Operations Centre, Tencent Security and our security partners collaborated to function as an integrated smart management system which enables enterprises to detect and defend against any attacks 24/7.

Tencent Security serves over

80%

of key customers in the financial sector, supporting the safe lending of funds in banks and blocking suspicious transactions.

0 risks 0 incidents

In partnership with China Import and Export Fair, Tencent Security provided security services to participating online trading businesses from over 200 countries and regions, achieving zero risks and zero incidents during the fair.

Tencent Security has launched a Connected Driving solution to enhance the security performance for connected vehicles, supporting the development of automotive industry and protecting the safety of drivers and pedestrians.



Tencent Security

Building a Security Ecosystem

Tencent's security team has been participating in the formulation of industry standards and promoting the positive development of the security industry. We actively contribute to the following frontier areas:

- Zero-Trust Interface Application White Paper
- Information Security Technology - Data Security Requirements for Instant Messaging Services
- Guidelines for Continuous Protection of the Service Access Process
- Guide for Big Data Business Security Risk Assessment
- Technical Requirements for Business Security Risk Control Products Based on Cloud Computing
- Technical Requirements for Internet-based Trusted Digital Identity Services
- Information Security Technology - Data Security Guidelines for Instant Messaging Services
- Information Security Technology - Security Requirements of Vehicle Collected Data
- Requirements for Secure Use of Mobile Application Software Development Kits
- Application Software User Rights Protection Evaluation Specification
- Application Software User Personal Information Collection and Usage Minimization and Necessity Evaluation Specification
- Requirements for the Security Protection of the Interface for Sending SMS Verification Codes by Internet Information Service Providers

To make the system more trustworthy, the "Zero-trust Technology Standard" assumes that all activities cannot be trusted

In 2019

Tencent Security was an early sponsor for the development of zero-trust technology standard.

In 2020

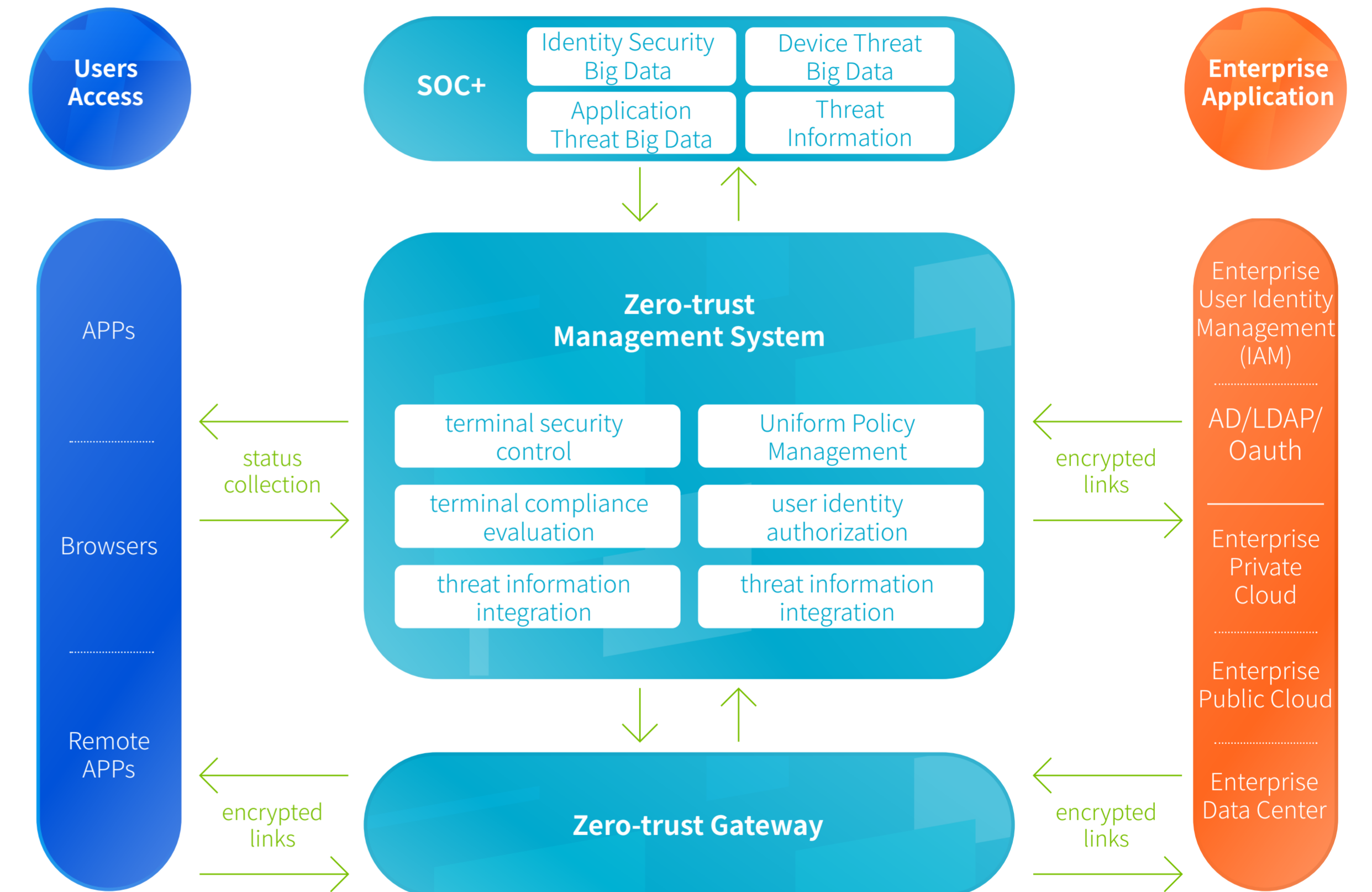
We established the first "Zero-Trust Industry Standards Working Group" and the "Zero-Trust Product Compatibility Certification Program" in China, paving the foundation for adoption and implementation of zero-trust security standards.

In June 2021

China's first "Technical Specification for Zero-Trust Systems" was officially released. The draft of the specification was initiated by Tencent Security, and jointly crafted by 16 key stakeholders in the industry. They include key industry peers, professional evaluation agencies and users. The specification provides valuable reference for the industry in the development and upgrading of security technologies, service quality enhancement and reduction of deployment costs.

In November 2021

ITU's Telecommunication Standardization Sector (ITU-T) officially released "Guidelines for Continuous Protection of the Service Access Process", which was the world's first international standard in the zero-trust and sponsored by Tencent. The guidelines represented a meaningful step forward from "continuous verification" to "continuous protection", and has promoted wider industry adoption.



User Protection

Support the Growth of Minors

The Internet has become an important channel for acquiring new knowledge, enhancing communication, and conveying emotions. However, its vast volume of data also poses challenges for minors when they select, process, and interpret information via various media. Tencent has always attached great importance to protecting and promoting the healthy development of children and teenagers when they use our products and services. We deploy innovative technologies to continuously upgrade our Minor protection system and create a series of projects to support their growth.

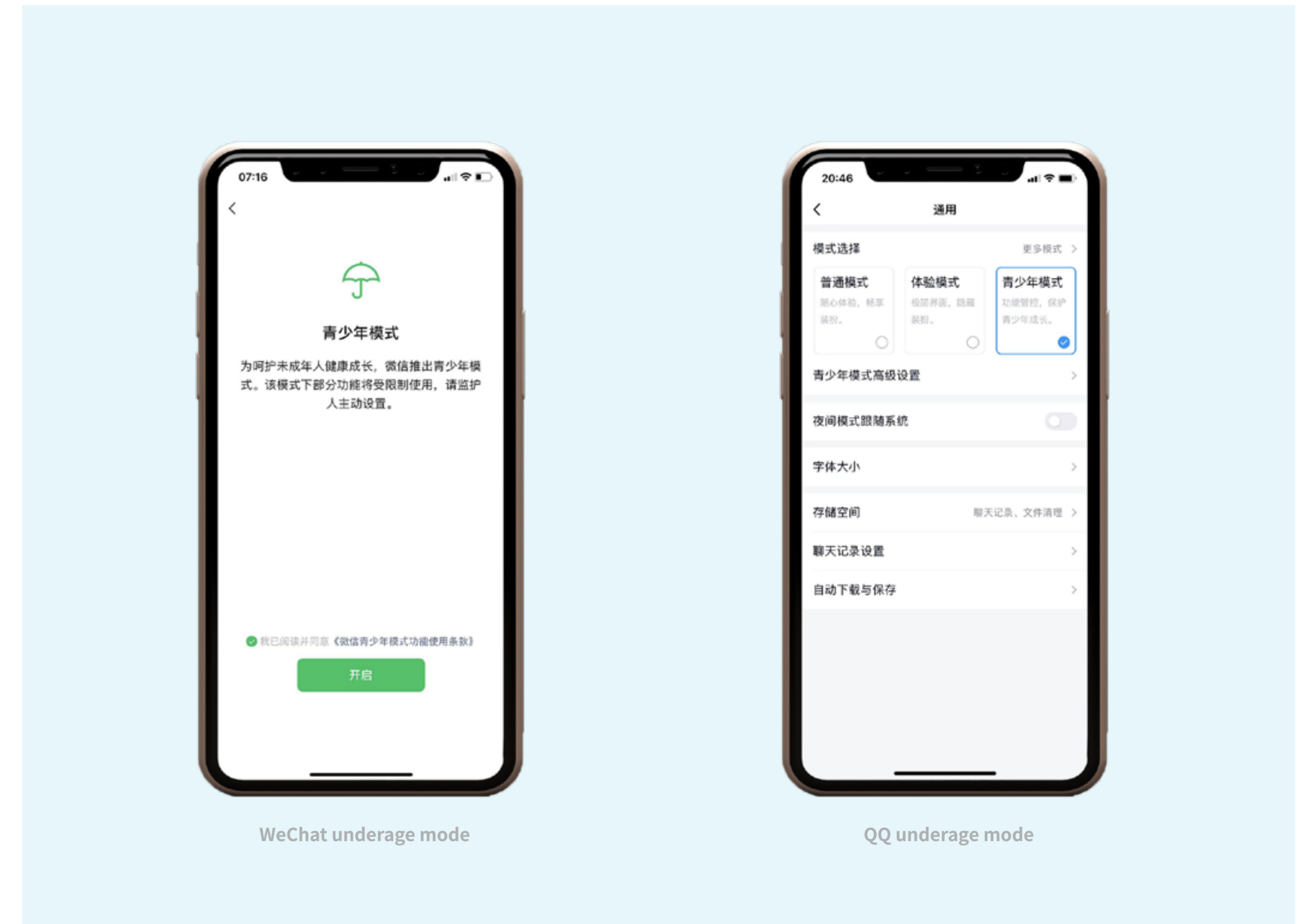
With the updated *Law of the People's Republic of China on the Protection of Minors* that came into effect in June 2021, which stipulates the responsibilities and obligations of Internet service providers, Tencent has been actively implementing relevant laws and regulations and incorporating the required measures into our products to build a comprehensive system that fully protects minors. Tencent aims to work closely with stakeholders to ensure that these measures are appropriate, thereby contributing to their long-term protection.

Enhance Minor Protection with Quality Products

Launch of the "Underage Mode"

Tencent has been working on solutions for minors to surf the Internet safely. We pay close attention to their usage habits on our entertainment and social products, and have launched the "underage mode" on a number of products, including but not limited to Tencent Video, Weishi, and Weixin, or developed alternative versions of these products suitable for minors. When the "underage mode" is activated by the guardian or Minor on Tencent Video and Weishi, viewers will have a set screen time limit and reminded to take breaks. In addition, we updated Weixin in 2021 with a variety of functions to protect minors, including (1) parental control over their children's access to videos, subscriptions and Mini Programmes; (2) curated content for teenagers in Weixin Video Accounts; (3) closed functions in live broadcast portal to Minors, where they are not allowed to initiate a live broadcast or use the tipping function within; and (4) disabled access to Q coins top-up, credit card repayment and other services that are not suitable for minors.

In addition to implementing the "underage mode" in our products, we have also provided a healthy and safe online environment for minors through a series of measures, such as raising the age-gating threshold for certain content, incubating high-quality content as well as strengthening the classification and tagging system in our content library. For more information, please refer to "[Safeguarding Digital Civilisation and Rights - Content Protection of Minors](#)".



WeChat underage mode

QQ underage mode

Promote Healthy Games

As one of the leading companies in the game industry, Tencent has been committed to creating a healthy game-playing environment for many years. In China, we work with the industry to explore various measures for building a healthy game-playing environment for minors and have implemented the real-name system and anti-addiction system in accordance with the regulatory requirements of the PRC. We have also leveraged various advanced technologies to further enhance our Minor protection system and introduced the following measures in recent years:

So far, Tencent has established a "before – during – after event" system focuses on protecting minors in games and managing related disputes.

Tencent Games Protection System for Minors

Ex ante

Guardian Portal

A comprehensive platform built for "Family Guardians" provides functions pertaining to the management of gaming activities, except for refund requests.

Minor's Parent Portal

A game activity management platform built for "refund requests".

Interim

Tencent Games Health System

The activity management platform for implementing real-name authentication, assigning and executing the age-based limits on game time and spending for players registered with Tencent. The system covers all games operated in Tencent platforms, except web games.

Ex post

Dispute Resolution

Dedicated hundreds of trained customer service personnel to handle complaints related to minors' consumption online.

Incident Management

Joint team comprised of representatives from customer service, game projects, public relations and legal designated for the management of extreme incidents involving minors.

Nearly **60** million

Nearly 60 million families use Tencent's Guardian Portal.

88%

In the fourth quarter of 2021, Total time spent by minors reduced by 88% year-on-year and contributed 0.9% of the total time spent on our domestic games.

73%

Total grossing receipts from minors reduced by 73% year-on-year and contributed 1.5% of the total grossing receipts of our domestic games.

Develop the positive impact of games

"Serious Games" is a cultural and creative product that closely interacts with players to promote learning through gaming and provides in-game scenarios to guide user behavior. By focusing on key themes, including traditional culture, science popularisation and social harmony, Tencent can use "Serious Games" to unlock the positive social value of games. Recently, we upgraded "Serious Games" to "Dreamcatchers Project" with the aim to make games a powerful carrier to preserve culture, promote talent development, and propagate positive social values.



Steven Ma, Senior Vice President of Tencent, was sharing his understanding and expectation of game's positive value in 2021 Tencent Games Annual Conference

In February 2017

Pioneered a system for parents to manage their children's playtime

In September 2018

Introduced the strictest measures in the industry, with mandatory real-name verification and limits on game time and spending

Since August 2021

Prevented in-game spending by players aged under 12

Since 1 September 2021

Minors can only play games between 8-9 pm on Fridays, Saturdays, Sundays, and statutory holidays since 1 September 2021. Industry-leading measures were taken to prevent Minors from using adult accounts. For example, we (1) upgraded our screening system to identify misused adult accounts; and (2) proactively cracked down on illegal transactions of adult accounts.

Products for Minors

To create an online environment that matches the physical, mental, and cognitive development level of minors, Tencent has developed Tencent Video for Kids, Tencent News for Kids, Serious Games and other products. We will continue to help spread knowledge, increase aptitude and disseminate positive values.

As a video application dedicated solely for children, "The Adventures of Little Penguin" created by Tencent Video for Kids adheres to the principles of safety first, happy guidance, and education companionship while focusing on their hands-on participation and parent-child interaction. It comes with the parental control feature to limit their screen time to prevent over-indulgence, serving as a useful reference for the industry when creating applications catered to minors. Weixin Channels launched the "Content Pool for Minors" in June 2021, with the objective of providing positive in-depth video content in the areas of news and information, curriculum teaching, parent-child education, history and humanities, traditional culture, and natural sciences.



Improving Teenagers' Digital Literacy

Teenagers' digital literacy has a significant impact on network operation, problem solving, and even the development of the entire society. Tencent attaches great importance to the cultivation of digital literacy and has established a workstation for child protection. We launched the Protecting Children: Courses for Minors, Parents and Teachers; Tencent Mini E InnoCamp; DN.A (Digital Native Action); Future Classroom; and Spark Plan, to build out a healthy and harmonious cyberspace. For more information, please refer to "[Inclusive Technological Achievements – Skill Training](#)" and "[Innovative Community Investment - Digitalization of Rural Production and Life](#)".



Protecting Children: Courses for Minors, Parents, and Teachers

By bringing together the "Minor Care Alliance," which unites the society, schools, families and enterprises, Protecting Children: Courses for Minors, Parents, and Teachers was able to use "Online Theory + Offline Practice" to advocate scientific, civilized, safe and reasonable Internet access; and enhance safety knowledge, sense of responsibility, and legal awareness for minors, parents, and teachers. On 1 June 2021, Protecting Children: Courses for Minors, Parents, and Teachers released three digital literacy classes for students and parents to watch, receiving a total view count of over 3.55 million. In addition, the programme was also featured during the Guangdong Cybersecurity Publicity Week Youth Day event.

Protection of minors is a subject that requires long-term development, in-depth exploration, and continuous innovation. In the future, Tencent will continue to upgrade its protection measures in accordance with regulatory requirements, industry trends and social needs while actively collaborating with the industry and other stakeholders to create a healthier online environment for minors.



Safeguarding Digital Civilisation and Rights

Content Responsibilities

According to the relevant national laws and regulations, and agreements, such as Weixin Software License and Service Agreement, Weixin Official Accounts Platform Service Agreement and QQ Software License and Service Agreement, if users spread unlawful information through Weixin personal account, Weixin Official Accounts, QQ and Qzone, once found and proven, the platform will remove the unlawful content and take actions upon the relevant accounts (such as warning, blocking and limiting some functions of the account). We continue to optimise the pre-launch audit requirements standards and inspection mechanism of Mini Programs and Mini Games access. We conduct reviews and tests in accordance with legal and regulatory requirements on the developers and their submitted application for granting access to the Mini Programs and Mini Games platforms. Developers who offer services that involve special industries, such as medical, finance and games, shall provide corresponding qualifications and approval documents. If the developers fail to provide the relevant certificates, their request to launch publish their Mini Programmes and Mini Games onto the platform will be consequently denied. We manage the platform in accordance with the above-mentioned relevant agreements and platform rules, and take timely actions upon receiving users' complaints and reports, as well as corresponding measures for developers who fail to operate legally.

We attach great importance to educating our users on various risk prevention topics, such as Internet pornography and fraud through "Weixin Safety Centre", "QQ Security Centre" official accounts and other official channels. Weixin

and QQ each provides a mechanism for users to report any false or improper content published on their platforms. We continue to improve the efficiency of handling users' complaints regarding infringement and promote access to the reporting channels. We also provide guidance to users on filing complaints and reports on any violations of laws and regulations, or violations of their legitimate rights and interests through the dedicated prescribed channels on our platforms.

False Information Governance

To improve the efficiency of our risk control in digital content security, we have utilised advanced technologies when reviewing all forms of digital content including audio, video, text, and images. Tencent Channels conducts technical exchange and business cooperation in the fields of AI security applications, hacking, security offence and defence, data annotation, and artificial identification, and provides reference samples for those who want to construct content ecology for the live broadcast community. Tencent Guard has established a rigorous handling process "user reporting - platform identification - crackdown on illegal accounts - group clue mining - connecting with the police to crack down", and has cooperated with the police in many areas to expand anti-fraud education and awareness.

Tencent Guard won the "Anti-fraud Innovation Project Award" issued by the China Academy of Information and Communications Technology and the Internet Society of China

310 million

In 2021, Tencent released 3,189 articles on dispelling misinformation, which has been viewed more than 310 million times.

Content Protection for Minors

Relying on cutting-edge visual intelligence technology, big data security, and black and grey market intelligence platform, Tencent optimises and upgrades its content risk control capabilities with scientific and technological strengths to establish a comprehensive youth-related online content governance mechanism on multiple channels. This results in the creation of healthier and greener network environment for minors. In 2021, Tencent YouTu optimised its smart content identification capability with the addition of visual AI technologies, including action recognition, OCR (optical character recognition), and analysis of images and text. Tencent YouTu has also enhanced its protection features for minors by strengthening its filter for indecent and violent content.

In July 2021, Tencent launched a special two-month campaign "Special Governance Action on the Online Environment for Minors", strengthening ecological governance in an effort to crack down on soft child pornography and other inappropriate content involving minors in Weixin Official Account articles, Channels, Mini Programs, and Sticker Gallery.

Child Protection Initiative

Tencent has taken full advantage of its research and governance capabilities concerning the black and grey markets and launched the "Child Protection Initiative" to protect of minors from inappropriate content on the Internet. Based on the original content threat control capabilities of Tencent Tianyu, the initiative introduced Tencent YouTu's AI content recognition capabilities, which helped to create a content security identification solution 2.0 for Minors, and crack down on inappropriate content regarding minors via short videos, instant messaging tools, and games. The accuracy rate of this action amounted to 80-90%.

Using AI to Protect Children

In June 2021, an online Minor protection seminar with the theme of "E Road Protection Empowering Growth" was held in Ningbo, Zhejiang Province. The seminar introduced the *Artificial Intelligence for Kids - Research Report on Artificial Intelligence Applications for Kids*. The three AI applications of Tencent YouTu, namely "Intelligent Content Identification Empowers Filtering of Inappropriate Information for Minors", "OCR (Optical Character Recognition) Intelligent Education Solution" and "AI-based Content Recommendation and Healthcare System" were featured in the report, and we strive to harness the power of AI to build a solid shield to protect minors online.

Responsible Advertising

According to the *Advertising Law of the People's Republic of China and the Interim Measures for Administration of Internet Advertising*, advertising operators and advertising publishers shall verify all relevant business documents pursuant to laws and administrative regulations and its advertising contents. We review the advertising contents strictly in accordance with the above laws and regulations and require clients who intend to use the Tencent Marketing Solution platform to publish advertisements to ensure the legality its content. They must also show that they have valid qualifications to publish relevant advertisements and that the advertising contents are proven to be genuine. After the review is approved, we conduct checks on the advertising content to ensure its compliance through our automatic inspection system, which is equipped with multiple capabilities along with our professional inspectors. Once violations of laws and regulations or relevant rules of Tencent Marketing Solution are found, we will take measures, such as refusing the release of illegal advertising materials, removing illegal advertisements from the platforms, requiring the violator to bear liability for breach of contract. Meanwhile, we strive to better protect the rights and interests of users and comply with the requirements of current laws and regulations; for that, we continue to establish and improve the compliance assessment regarding the advertising business, promote training and advocacy for employees and partners, enhance system capabilities so as to continuously strengthen our compliance with the relevant laws for the advertising business. In 2021, the Group strictly complied with the applicable laws and regulations.

Since the issuance of the *Interim Provisions on the Development and Management of Public Information Services for Instant Messaging Tools* in 2014, Tencent has been strengthening its scrutiny and management

of Weixin Official Accounts and has taken action against Official Accounts that committed violations, such as impersonating public agencies and media, publishing false ads, and creating and spreading misinformation. In 2021, Tencent implemented regulatory guidelines to increase its efforts around cracking down on excessive marketing and induced consumption through incentivizing advertising content in order to maintain the normal operation of the Internet advertising market.

Protecting Platform Users' Intellectual Property Rights

The vigorous development of the Internet business has brought new challenges to the industry pertaining to the protection of users' original content and virtual assets. Tencent has deployed a dedicated legal team to explore new ways of protecting and managing users' copyrights and assets while safeguarding their legitimate rights and interests.

Respecting and Protecting the Originality

While Tencent provides many platforms for creators to produce high-quality original content, we also aim to provide a creative space with protection. In 2021, Tencent updated its We Media e-authorization-monitoring-rights protection platform to better monitor piracy and sponsor the "one-click support" service to protect the rights of original content creators. Tencent further promoted the "Copyright Owner Partner" programme and implemented an infringement compensation policy to return 100% of the infringement proceeds to the copyright owner. In addition, Tencent took severe actions against violations, such as plagiarism, text rewriting, impersonation, and incentivising fake likes, to effectively protect the work and legitimate rights and interests of original content creators.

Protecting Users' Intellectual Property Rights

Tencent has developed comprehensive IP protection guidelines for various content platforms and provided dedicated IP rights protection platforms and channels for filing complaints. We also cooperated with partners to explore the best way to protect users' IP rights online.

Tencent helps users increase their awareness and capabilities around IP protection by launching a platform for disseminating relevant policies and information and offering easy-to-access channels for submitting complaints pertaining to infringement. The Weixin team has also offered platforms and channels for submitting and dealing with complaints, such as the Weixin Online Infringement Complaint System and the Weixin Brand Rights Protection Platform. Thanks to its search, investigation, evidence collection, notification for content deletion, and aggregation capabilities, Tencent's technical

detection system enables us to efficiently deal with infringement. We work with law firms to establish evidence collection centres in major cities across the country to ensure timely and multi-level collection of evidence, and that infringement is combatted with sufficient evidence. Through user agreements, product pages, announcements and other means, Tencent reminds users to respect the originality of others' work and to not commit any acts that infringe on the rights and interests of other users. Tencent actively handles all complaints against infringement according to applicable laws and regulations, and takes action against such violation, such as deleting or blocking the content, or disabling its website link. In addition, Tencent works closely with Internet peers, film and TV production companies, and right-holders to launch campaigns on IP rights.

Tencent also developed IP protection guidelines that cover a wide variety of usage scenarios.



Customer-Centric Services

Tencent continuously optimises products and services to meet user demands in a timely manner by relying on its cutting-edge online technology, professional service teams, and diversified channels.

Internet Services

Tencent has put an effective mechanism in place to improve the quality of our online services. Product Departments of the Company learn about users' opinions through online surveys, questionnaires, social media platforms, phone calls with users and regular product research. Our Customer Service Department is responsible for handling and answering customers' complaints and inquiries, as well as coming up with satisfactory solutions. Tencent Customer Service offers a wide variety of service channels, including but not limited to our official website, interactive voice response system hotlines, self-service tools, real-time online services, Weixin, and in-person meetings, to ensure timely responses are provided for users in need of assistance.

To enhance the customer service experience, Tencent Customer Service has built and upgraded its smart multi-service hotline which relies on intelligent algorithms, voice recognition, and intelligent big data to quickly identify user issues and offer targeted solutions. Users who want to contact customer service representatives can now be directly transferred to one without having to press any buttons, thus optimising the service process and reducing the consultation time for users.

Besides the service hotline, smart online customer service is also an integral part of our customer service system. The entire services centres around solving user's problems, and we have built a number of entry channels for submitting inquiries via Weixin official account, Mini Program and help centre of related products. Through this, we have been able to provide 24/7 support and deliver trusted solutions tailored to users' specific questions, including answer recommendations and instructional videos. For more complex issues, users may resolve their queries easily by directly clicking on the desired instruction video in the smart chat box, and performing the operations as suggested.

- A total of 2,009,210 user complaints were received. In terms of the business types, there were 1,238,395 complaints related to games, accounting for 61.6%, 171,955 complaints related to payment, accounting for 8.6%, 289,661 complaints related to social networks, accounting for 14.4%, and 309,199 complaints related to other businesses, accounting for 15.4%.
- 72.7% of problems were solved through smart customer service.

Tencent Customer Service provided

2.28

services approximately

99%

of the complaints were handled within three working days.

Cloud Services

Tencent provides global leading cloud computing, big data, AI and other technological products and services to support enterprises, organisations and individual developers. The Cloud Technology Operation Service Department is responsible for clients' pre-sales, after-sales, technical delivery consultation and complaint handling. To protect clients' interests, Tencent Cloud takes the following approaches to handle their complaints and inquiries.

- Establish optimise technical support teams around the globe to provide clients with targeted and efficient services;
 - Continuously optimize client service processes based on best practices to ensure issues are handled in a timely and standardised manner;
 - Provide diversified service channels (such as service hotlines, online clients service, exclusive IM groups, and ticket services) through building the ITSM & ITOM platform to form a closed-loop problem solving process;
- Build Tencent Cloud Voice of Users and Tencent Cloud Reporting platforms to listen to users' needs and demand, and optimise products accordingly;
- Build smart client service, smart risk control, smart operation platform, and complaint pre-warning and handling platforms to solve clients' problems promptly.

4.76 million

4.76 million times of services (the number of times clients have reached out our services team)

320

complaints were received from clients

85%

of the complaints were handled within seven days

Tencent Cloud Voice of Users received approximately

3,500 pieces of advice on product optimisation

contributing to the optimisation of more than

100 Tencent Cloud products

AI for Good

In the pursuit of 'Tech for Good', it is essential to focus on 'AI for Good' and make AI 'comprehensible, controllable, available, and reliable'. We must ensure the wisdom of using AI is dominant over the increasingly powerful technologies of AI.

—Pony Ma

Artificial Intelligence (AI) technologies has experienced rapid growth over the past decade and have become the driving force behind digital enterprises and smart industries. While AI is used to improve production efficiencies, we must ensure that it is ultimately used to serve humans and the well-being of humankind.

Strengthening the Governance on the Ethical Use of Technologies

In line with our vision of "Tech for Good", Tencent has formulated appropriate standards and guidelines and strengthened our governance to ensure artificial intelligence is serving the social good, preventing abuse and misuse which may lead to ethical problems.

For many years, Tencent has abided by the "Four AI Principles", which are *comprehensible, controllable, available, and reliable*, in AI R&D and application. We have also developed tools and solutions to bring governance principles from theory to practice for spectrum of governance tools and solutions for AI ethics. For example, for

the AI-based deep synthesis technology that can be easily used to create deepfakes, Tencent YouTu Lab, together with other AI teams, has remained staunchly committed to using and promoting the positive application of deep synthesis and content generation technologies. To detect images and videos that have been fabricated or and edited, they have developed face synthesis detection technology and launched the face synthesis detection platform – FaceIn, which can detect a variety of face-changing scenarios.

As creators of AI products and applications, our R&D staff personnel must possess a high awareness of ethics and a strong sense of righteousness to remain well aware of ethics in science and technological implementation when striving to achieve the goal of "Tech for Good". Tencent requires our R&D staff to periodically join training courses designed by the Company. Through frequent dialogues, we ensure that AI ethics have been integrated into the whole development cycle and have designed a series of training courses targeted at AI ethics. By doing so, R&D personnel are provided with regular training and communication opportunities, thus ensuring that governance of ethics in science and technology is applied throughout the whole life cycle of technology R&D and applications.

Seeking Balanced and Explainable AI to Achieve "Tech for Good"

Explainable AI is an important means of increasing responsibility, accountability, and boosting users' trust and confidence. It has been recognised as a key factor in determining whether AI can be widely applied.

Release of the First Explainable AI Report in China

With the joint efforts of Tencent AI Lab, Tencent Jarvis Lab, Tencent YouTu Lab and Tencent Research Institute, the Explainable AI Development Report 2022 – Concept and Practice of Opening Algorithm's Black Box was released at the "Transparent and Explainable AI Forum" during the Tencent Tech for Good Innovation Week held in January 2021. The report discusses the concept, regulatory policies, development trends, and industry practices of explainable AI in great detail, and puts forward suggestions for its future development. The report was the first of its kind in China, and a key driver of the advancement of explainable AI.



Tencent's Practice in Explainable AI

Tencent fully incorporates its comprehension and practice of explainable AI into product R&D. Tencent YouTu increases the explainability of face recognition technology in two respects: face quality score and recognition confidence. The former evaluates quality of face images in terms of the recognition system, forming a basis for screening facial images; the latter models facial features based on nondeterministic probability distributions to provide additional confidence information for recognition. The document, Tencent Miying Assisted CT Image Triage and Evaluation Software for Pneumonia clearly defines user qualifications and security levels, provides a detailed description of how the product works, and analyses the source, quantity, and multidimensional distribution of training and testing data in detail. This helps AI professionals and product users understand the model features of the software and alleviate their concerns about model output deviations due to deviations in training data.

Explainable AI and transparent AI currently need to be addressed urgently. This report took the ground-breaking step in this regard in China, and is of great significance and value.

—Zhu Jing, Dean of the College of Humanities, Xiamen University

AI-Based Innovative Solutions

Tencent actively explores the application of cutting-edge AI technologies in different industries. We provide a wide range of innovative AI-based solutions for industries, such as retail, tourism, financial services, Internet, public welfare, entertainment and social networking, and travel, in an attempt to benefit society with AI technology that is comprehensible, controllable, available and reliable.

AI + Health Care

Tencent's AI medical solution, Tencent Miying, undertakes the task of building a new generation of AI-driven open innovation platform for medical imaging in China that can effectively assist physicians in diagnosing diseases. In 2021, Miying Assisted CT Image Triage and Evaluation Software for Pneumonia was approved for registration by the China's National Medical Products Administration, enabling the solution to be used in clinical diagnosis.



AI + Industry

With Tencent Cloud's AI technology, we developed the industrial quality inspection instrument. This instrument which companies to complete 360-degree image acquisition, analysis, and classification of target parts in just a few seconds, is 10 times faster than human inspections. The machine can work around the clock and be programmed to do specific checks, thereby ensuring consistency in quality, increasing productivity and reducing operating costs.



Exploring AI Applications

Guided by our vision and mission of "Value for Users, Tech for Good", Tencent has advanced our research in artificial intelligence with "tech for good" and "sustainability" in mind and supported industry growth in many ways.

In early 2017, Tencent put forward the "Six Principles of AI" at a seminar held in collaboration with the Institutes of Science and Development at the Chinese Academy of Sciences. These six principles of freedom, justice, well-

being, ethics, safety, and responsibility were used to guide and drive the positive development of AI. In December 2021, two AI standards spearheaded by Tencent were officially published by Shenzhen Artificial Intelligence Industry Association. These standards aim to render cybersecurity technology for minors and ensure face recognition technology can be applied in a safe, orderly, and responsible way.

AI + Art

In March 2021, Tencent entered into a new three-year strategic cooperation agreement with Dunhuang Academy. This joint effort was aimed at identifying damage to cultural relics through AI damage identification and immersive remote diagnostics technologies, thus contributing to preservation and restoration of the Dunhuang murals. In addition, Tencent strengthened exchanges with Dunhuang cultural relics collection institutions overseas and used digital technologies to "reunite" these collections with the Buddhist scripture cave, furthering our goal of preservation and restoration.



AI + Astronomy

Tencent has teamed up with the National Astronomical Observatories of China to release the "Star Exploration Program". Leveraging the cutting-edge computer vision technology of Tencent YouTu Lab and the computing and storage capabilities of Tencent Cloud, we help China FAST process large amounts of data every day. The "Cloud + AI" enables FAST to cut data processing time from what used to be done manually in one year to just three days. The pulsar clues can be found through visual AI analysis, which significantly improves search efficiency.



The United Nations
Sustainable Development Goals (SDGs)



Tencent is committed to using "Tech for Good" and will continuously enhance our research and development capabilities by investing in our people, platforms and technologies. Our strong technical foundation allows us to develop products and services to enhance the quality of life and drive sustainable social development while supporting various industries to digitally upgrade and increase their productivity.

Driving the Development of Cutting-Edge Technologies

Supporting the Development of the Industrial Internet

Nurturing the Industry for Future Growth

Promoting Digital Accessibility

BENEFICIAL TECHNOLOGIES

Driving the Development of Cutting-Edge Technologies

Joint Efforts to Build an Open Digital Ecosystem

Technological advancement is the driving force behind social progress and productivity enhancement. Tencent has invested heavily in our platforms and technologies to facilitate the expansion of our core businesses, and at the same time, shared our knowledge base by participating in open-source collaboration and standard formulations to support industry growth.

Invest in Research and Development

We continued to increase investments in research and development, particularly frontier technologies in the areas of artificial intelligence, robotics, and quantum computing. To kickstart the engine that drives technological advancement, we have established six key research labs with a primary focus in AI, robotics, quantum computing, 5G-based applications, edge computing, Internet of Things, and multimedia technologies. These labs are based in

different locations around the world, allowing us to recruit the best talents for each type of research. We are bringing together outstanding scientists and engineers, including a number of IEEE fellows and tenured professors.



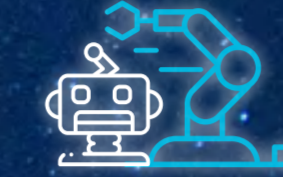
R&D Results

Cloud Computing



Tencent has been developing a robust computing foundation through actively advancing its research around software and hardware development. Our AI computing chip Zixiao, video processing chip Canghai, and high-performance network chip Xuanling, performs 100%, 30%, and 400% better than other products in the market, respectively. We also recently announced Orca, the cloud operating system for global governance, which can manage 100 million CPU cores and support 100,000 servers in a single cluster. In terms of server, we recently released the first domestic cloud server product series with up to 100G network bandwidth and an increased transmission efficiency of up to 400%. The reliability of Star Lake servers has improved by 100%.

Robot



Following the launch of the quadruped robot Jamoca in 2020, Tencent unveiled another three robots in 2021, including the multimodal quadruped robot Max, the wheel-legged robot Ollie, and the IDC operation and maintenance robot. With each upgrade, the mobility of these robots has improved and will be applied to more industrial scenarios.

5G



To unlock the capabilities of this technology, we recently released the 2021 5G Ecology Plan which brought together 35 innovation partners from 12 different specialty areas, including industrial Internet, intelligent interaction, and virtual and augmented reality. In addition, we were also deeply involved with the 3rd Generation Partnership Project(3GPP) 5G standardisation and was ranked among the world's top ten contributors to 5G architecture. Furthermore, Tencent has been recognized as the Deputy Head of the *Personal Application Under the 5G Application Matrix* established by the Ministry of Industry and Information Technology of China.

AI



AI Lab, YouTu Lab, and WeChat AI are the main AI research labs at Tencent. They are the driving engines in exploring the possible application of frontier AI technologies. AI Lab has been one of the top producers of research papers and has published more than 780 journal articles by the end of 2021, with seven of them being accepted by the ICLR-2021, a renowned conference on deep learning.

Digital Character



Tencent unveiled a new series of digital characters based on a new generation of multimodal human-computer interaction technology. The five digital characters can serve as cultural and tourism guides, finance customer service, multilingual anchors, and sign language anchors. With underlying AI capabilities, such as NLP, knowledge graph, and vision, they are able to recognize more than 34 languages and dialects, and provide translations for over 11 languages, involving 460,000 industry-related keywords. The AI sign language digital interpreter, Lingyu and the 3D sign language digital character, Xiaocong provided commentaries for the Beijing Winter Olympics.

Audio/Video



Tencent Cloud has taken the first step to commercialise a new generation of international video codec standard H.266/VVC, filling the gap in this field for global cloud vendors, and The market share of Tencent Cloud audio and video solutions has ranked first in the domestic industry for consecutive years. With advanced technologies, Tencent Cloud carried 90% of the entire network traffic during the 2021 League of Legends World Championship and had a transoceanic transmission delay of no more than 400ms.

Contributing to Open-Source Collaboration

Contributing to the open-source community is one of the defining elements and spirit of the Internet industry. Tencent has developed a distinctive mechanism to manage open-source projects internally and externally. To further push the development within this field, Tencent will not only continue to focus its efforts on building open-source projects, community governance, and robust ecosystems, but will also promote collaboration among global developers while facilitating industry-focused technological innovations.

According to the "OpenJDK Global Contributors List," Tencent was named as the **fifth** largest contributor and was ranked **first within** China in 2021. Additionally, it was the first time for a Chinese tech company to earn the recognition of "Notable" contributor, which was appreciated by the community.

Regular Operations

Tencent has been actively promoting open-source collaborations. By the end of 2021, we have built and incubated 117 open-source teams that cover various pivotal Internet technologies, including computing and storage, as well as data for our core business segments, such as Tencent Cloud, Weixin, and QQ. Tencent has open-sourced 85% of internal codes.

Key Technologies

The majority of open-source projects come from our core business segments and involve codes that were both internally used and tested. Breakthroughs have been made in multiple core technologies, such as OS, database, big data, AI, and cloud native.

Diverse Contributions

Besides Tencent's contributions to 30+ mainstream open-source communities and membership to 10+ international open-source foundations, such as Linux and Apache, it also engages closely with several famous cloud native projects. WeOpen has also been established to help bring projects to fruition, facilitate communication between enthusiasts, and unleash the potential of leaders.

Young Talents

In 2021, Tencent launched the Rhino-Bird Open-Source Training Program together with universities to help students learn about open source. To help boost their understanding around this topic, we have provided them with real business case studies of varying levels of difficulty. Through this program, which aims to build an ecosystem of open-source talent, we were able to enrol more than 3,000 students across 420 universities in China and overseas during its first session.

Tencent actively leverages its ecosystem and advantages in technology and connectivity to help construct industrial technology standards within various fields, such as food, finance, energy, smart cities, audio and video, smart carbon neutrality, and many more. Referring to the standards that were developed, Tencent is committed to helping industries in digital transformation.

Since 2019, Tencent has released the Tencent Standardisation White Paper for three consecutive years. The white paper focuses on the development of industry standards in key areas, as well as the upgrading of infrastructure capabilities and modern industrial chains.



300

By the end of 2021, Tencent has organized and participated in the development of more than 300 industrial standards.

Protect Corporate IP

Tencent has always emphasized the importance to protect intellectual property. With a dedicated team that is responsible for the daily legal affairs of trademarks, patents, copyrights, domain names, and other IP rights, Tencent has introduced integrated programs and policies for IP management at an early stage.

Tencent attaches importance to the intellectual property of others and requires all business units are required to respond to any cases pertaining to infringement in a timely manner. Specific measures to handle such issues include issuing warnings, handling complaints and improving employee and users' awareness.

Tencent puts a lot of effort into protecting its own intellectual property rights, and our global intellectual property product portfolio has expanded to more than 100 countries and regions. Coupled with our creation of a vast amount of copyrighted content, we have accumulated IP assets of

considerable value. Our intellectual property (IP) team has established a comprehensive database for our patents, trademarks and copyrights, which enables us to manage and monitor IPs precisely and efficiently with its powerful data analysis capabilities. In order to combat IP infringement, our IP team has set up an all-around efficient monitoring and maintenance system and has formulated various policies and measures to protect our IPs.

We actively participate in relevant public organisations and regulatory consultations and strive to promote awareness of IP protection in the Internet industry. As a member of China National Information Technology Standardisation Network, China Intellectual Property Society, the Patent Protection Association of China, the World Wide Web Consortium, the International Trademark Association, and China Trademark Association, we have provided consultation services pertaining to the legislative amendments to China's patent and trademark laws and regulations and have provided input on the development of industry standards. Besides regulations and industry standards, we have also been boosting the development of relevant technical standards

as well. In particular, the accumulation in audio and video technology has helped drive the standardisation of new-generation audio and video codec technology and the protection of relevant intellectual property rights.

To demonstrate our contribution to the development of independent innovation in China, over the past decade, we have won the China Patent Gold Award for multiple times, which was jointly issued by the World Intellectual Property Organization (WIPO) and the China National Intellectual Property Administration; the Trademark Innovation Award by the WIPO and the State Administration for Industry and Commerce; and the China Copyright Gold Award by the National Copyright Administration of China and the WIPO. In addition, in recognition of our outstanding performance in intellectual property management and protection, we have been awarded the titles of "National Intellectual Property Model Enterprise" and "National Copyright Model Unit".

Major laws and regulations we follow include:

Trademark Law of the People's Republic of China last amended on 23 April 2019,
Patent Law of the People's Republic of China last amended on 17 October 2020,
Copyright Law of the People's Republic of China last amended on 11 November 2020; and
The Administrative Measures for Internet Domain Names issued on 24 August 2017 and implemented on 1 November 2017, which specifies rules on the ownership, protection period, registration method and legal responsibility of trademark, patent, copyright and domain names.

36,000

By the end of 2021, Tencent has obtained more than 36,000 registered patents

24,000

more than 24,000 authorised patents

Protecting Intellectual Property

Our team of intellectual property enforcement attorneys is dedicated to protecting intellectual property via monitoring of infringement and enforcement.

Automated Monitoring System

Our automated monitoring and integrated intellectual property protection system monitors for infringement 24/7, investigates and collects evidence of infringement, serves takedown notices, and produces infringement reports.

Combining Strengths of Different Parties

We work closely with other Internet companies, media companies, and intellectual property rights holders to combine our strengths to combat infringement.

Far Reaching Evidence Collection

We work with law firms throughout China to document, collect, and preserve evidence of infringement on all major Internet and mobile platforms in support of our enforcement actions.

Varied Enforcement Methods

We enforce intellectual property rights through a multi-pronged approach including civil litigation, administrative actions, criminal prosecution, and industry alliances.

Tencent

Tencent's IP Protection Policy

Respecting Third Party Intellectual Property

We respect third party intellectual property rights and remove infringing content from our platforms

Education and Awareness

We remind our users to respect intellectual property and not to post infringing content through our agreements with users as well as through notifications and announcements through our products.

Building Respect for Intellectual Property

WeChat has added the "Official Account Public Originality Statement" to further highlight original content shared on WeChat.

Responding to Infringement Notices

We have a team dedicated to addressing notices of alleged infringement on our platforms in accordance with relevant laws and regulations. We take necessary measures to address infringing content on our platforms, such as deletion, filtering, and removal of URLs.

Platform Features to Fight Piracy

WeChat has convenient systems for reporting infringing content and established the WeChat Brand Enforcement Platform, allowing brand owners and WeChat users alike to report and combat counterfeit goods.

Supporting the Development of the Industrial Internet

Manufacturing

Tencent actively embraces the industrial Internet. Backed by digital technologies and platform capabilities, we provided services and technical solutions to assist industries in their digital transformation. By the end of 2021, Tencent has teamed up with 9,000 partners to develop more than 400 solutions for over 30 industries.

Tencent promotes intelligent manufacturing by replacing repetitive manual labour with AI. For example, Tencent has co-developed Tenghui Feitong with enterprises, an AI quality inspection instrument that relies on advanced algorithms, such as photometric stereo, transfer learning and powerful cloud computing capabilities. The instrument is able to carry out a comprehensive inspection of targeted areas in just a few seconds. This technology has an inspection efficiency 10 times higher than manual labour, enabling the company to save 56% on cost every year.

In terms of supply chain, Tencent Cloud has launched the Cloud Intelligent Manufacturing Collaboration Platform (CIMCP). With real-time and accurate data transfer, CIMCP can help factories address problems, including delayed deliveries, overstock inventory, and lack of manufacturing transparency. Through this Platform, not only could it improve efficiency and lower cost, but it could also overcome data silos and unleash the potential of data-driven manufacturing.

Smart City

Tencent's WeCityOS has been launched in several cities to increase the efficiency of the construction of smart cities. More specifically, through improving the interoperability of data and information systems, multiple stakeholders can better identify infrastructure issues and consequently, allocate investment and implement construction projects accordingly. The six intelligent applications we created for Wuhan, including the "City Management on an Integrated Platform", have won the Innovation Recovery Award at the Smart City Expo World Congress 2021 (SCEWC), allowing Wuhan to stand out among 421 cities.

The "Panoramic Digital Government Solution" has accelerated the digital government development. Within the realm of social security, Tencent has created an integrated information portal for Jiangsu Province, which has coordinated the operation of its management systems for public employment, social insurance, personnel management, and labour relations. The portal provided services to over 80 million permanent residents in the Jiangsu province, 30 million non-residents, and nearly 3 million enterprises and public institutions with total business transactions exceeding 12 million.



Retail

To help retailers develop their private traffic pool and grow their business, Tencent has launched rich product tools, traffic matrices, and support programmes, including Tencent YOUMA, Four Dimension Growth Platform, and Partners Empowering Project by Tencent Smart Retail.

To support small merchants during the pandemic, Weixin Pay launched a nation-wide subsidy program in 2020, which included a waiver on withdrawal fees, free printers and megaphones, to help them reduce operational costs.

Finance

Tencent Financial Cloud developed an iterative version of "Solutions for the Future of Finance 2.0" to assist the financial industry in managing digital transformation and has served more than 10,000 financial clients by the end of 2021. Tencent Cloud Enterprise(TCE) provides cloud solutions for banks, insurance companies, securities companies, and other financial institutions in China, among other key customers to use its safe and compliant full-stack private cloud services.

Tencent Cloud also has an AI solution for invoice processing cycles that aid enterprises to tackle challenges in issuing billing and receipts, and managing financial and taxation affairs digitally. By the end of 2021, it has processed over 1 billion electronic receipts from various types of invoices approved by government authorities. The solution also has a built-in compliance audit and risk warning function, which can be plugged into mainstream financial systems seamlessly, enabling enterprises to integrate their financial and taxation systems and enhance the efficiency of their offline operations.

Health Care

The Four "Bridges" for Healthcare

Electronic Health Card

Facilitate health record management

The Electronic Health Card, which is available in over 2,400 hospitals across 21 provinces, has enabled the public to conveniently access medical treatment and healthcare management.

Medical Aids

Improve diagnosis and treatment efficiency

Tencent's AI Precise Appointment (AIPA) can allow precise patient triage and increase appointment utilisation. Tencent Miying allow patients to keep their CT MRI files to themselves or authorize doctors to view them for referral purposes.

Electronic Medicare Voucher

Facilitate smart decision-making

Citizens can activate and use electronic Medicare vouchers at more than 600,000 designated hospitals and pharmacies across 31 provinces and cities, making medical insurance settlement more convenient. Tencent has also contributed to the informatisation and construction of the National Healthcare Security Administration, 13 provincial medical insurance platforms, and a network for medical insurance management.

Medical Information and Knowledge

Promote public health management

Tencent Medipedia has partnered up with over 5,000 academicians and specialists to present healthcare content covering over 10,000 diseases. By raising awareness throughout the entire diagnosis and treatment process, we were able to improve the health literacy among the public.



Culture & Tourism

We helped the industry to digitally upgrade by leveraging our technological capabilities, cultural creativity, and connection with consumers. For example, the various applications that we have developed for the Beijing Universal Studios can cater to more than 20 kinds of tourists' need before, during, and after their time at the theme park. Our services will not only allow them to experience the cinematic world with one click of a button but will also guarantee the success of the opening of the Universal Studios.

In the field of conventions and exhibitions, Tencent has utilized its cloud technologies to build a model, which has enabled several exhibitions to be held simultaneously. Having hosted more than 100 large-scale exhibitions across 15 cities, including Beijing, Shanghai, Guangzhou, and Shenzhen, it has proven to be a feasible and reliable solution for the industry that has been affected by the pandemic.

By the end of 2021, Tencent has provided services to more than 200 digital culture and tourism projects, including all-for-one tourism, scenic spots and parks, digital cultural expos, cultural real estate projects, and digital conventions.

Agriculture

Tencent's AIoT iGrow is a smart-farming technology that can design the best agricultural solutions through capturing, calculating and simulating various environmental data (soil moisture, soil PH value, and photosynthesis) via IoT sensors. With its ability to directly control agricultural facilities, such as lighting conditions, drip irrigation, fertilisation and ventilation, it is capable to effectively and precisely allocate resources and improve crop yields.

For agricultural product marketing, Tencent designed the "Safe Agricultural Products Plan" by leveraging its "One Product One Code" and blockchain technology. From production to consumption, from farmland to consumer's dining table, the Plan which covers the entire lifecycle, has brought the digital operation experience to rural areas. It is through this technology that farmers can better trace and drive high quality agricultural products into various cities across China.

Our Smart Agriculture Solution has been implemented in several provinces and cities, including Dingxi, the "Chinese capital of potatoes" in Gansu and Shenxian, "the land of vegetables" in Shandong.



Education

In April 2021, Tencent unveiled a new solution that increases the efficiency of primary education system by integrating AI into areas, such as teaching, assessment, after-school services, and quality education. Within the context of teaching, for example, our Precise Homework Management System can analyse student's assignments from various angles, including the duration, progress, and quality. These elements are critical in determining whether the activities are reasonable and effective, and can facilitate teachers in developing effective teaching strategies.

For higher education, Tencent Industrial Internet Academy aims to cultivate quality digital talents through the integration of industry and education, industry-academia cooperation, and collaborative education models.

Smart Campus Program

To tackle urban-rural educational imbalance and the shortage of digital talents, Tencent launched the "Smart Campus Program" together with domestic universities and educational institutions in November 2021. On one hand, we will build 100,000 cloud classrooms on XiaoE Cloud Classroom and offer high-quality courses as well as diverse teaching tools for schools in rural and remote areas.

On the other hand, we will further cultivate talent for industrial Internet innovation by establishing 100 industrial colleges, fostering 100,000 innovative talents for the industrial internet industry, and providing Tencent Cloud experimental resources for one million university students.



Transportation

Tencent recognises that traffic has always been a pressing problem for urban transportation and has developed a solution that can better facilitate the coordination between people and vehicles on the road. Because helping local citizens enjoy a more rapid and punctual travel experience is important to us, we have designed China's first batch of customised intelligent buses for Changsha. During the test run, these buses were able to reduce their travel time by 33.3% and increase their on-time arrival rate by at least 50% as compared to common buses.

In September 2021, Tencent and Guangzhou Metro jointly unveiled the next generation of rail transit operating system, Suiteng OS 2.0, which offers precision, in passenger flow diversion, station management, operations management and smart security. The system is operating on Line 18 and Line 22 of the Guangzhou Metro, the "fastest subway in the Greater Bay Area".

Nurturing the Industry for Future Growth

Skill Training

Tencent is an advocate of maximising the potential of technology to better serve its people and is committed to share its knowledge base to groom the future coding engineers, game designers, Mini Program and application developers.



Tencent Coding is a dedicated coding program for kids and teens, and is based on our in-house programming tools which covers various core topics, such as graphical programming and Python. In 2021, Tencent Coding organised the third Teenage Coding Camp, attracting nearly 10,000 student applicants from 49 cities in 23 provinces, inspiring the coding interest of youth.



The Tencent MiniE series, which includes MiniE Online Internship, MiniE InnoCamp, and MiniE Creativity Institute, is a public welfare program for kids and teens to develop Internet literacy and interdisciplinary problem-solving abilities. Since its inception in 2017, the program has provided online and offline training classes to approximately 40,000 teenagers and incubated over 1,000 creative proposals that use technologies to improve the quality of life.



On 10 May 2021, Tencent joined hands with Madame Soong Ching Ling Foundation in China to launch the first Tencent Youth Week, Chasing the Stars, which encourages teenagers to follow contemporary role models in the fields of science and arts. A hundred scientists and tech professionals were invited to share their words of encouragement and communicate with the kids directly through activities, such as "Scientists Live Studio" and "Face-to-Face with Scientists". The finale event brought approximately 180 children from rural areas in 11 provinces and cities to perform on national stage with top artists from China and abroad.

Adolescent Development

We believe in investing in the long-term development of adolescent by collaborating with various stakeholders, while expecting nothing in return. By exploring the potential of youth education, research, science, and arts with our charity partners, we aim to cultivate a new generation of all-rounded talents.

On-The-Job Training

In addition to invest in adolescent's development, Tencent attaches great importance to cultivating talents for the Industrial Internet.

Tencent Academy provides knowledge and training for not just our employees, but also for industry partners and the public through our online platform and offline activities. It is part of our endeavour to build an open Internet that benefits everybody. Tencent Institute of Games was founded in 2016, and aims to become the prime platform for sharing gaming knowledge and promoting communication within the industry, through cultivating professional talents, building IUR collaboration, promoting communication, and enhancing industrial ecology. Through persistent effort, TIG has built a series of strategic partnership with 23 key universities. On cultivating talents for game industry, TIG received the Global Most Innovative Knowledge Enterprise Award 2021 (top prize).

As the largest online education platform in China, Tencent Classroom has served 400 million users by the end of 2021, with over 10 million learners per week and more than 350,000 courses covering more than 100 categories. In January 2021, Tencent Classroom officially became the strategic partner of the Guangdong Provincial Department of Human Resources and Social Security, and created a platform namely "Yue Zhi Tong," which provides workers in Guangdong a comprehensive series of vocational training, certification and assessment.

UP Vocation Program

"UP Vocation Program" is a vocational education public welfare alliance project launched by Tencent and its partners in November 2021. Within the next year, the program aims to enhance the professional competitiveness of 10,000 working individuals and full-time housewives in rural areas by offering a series of free online vocational training courses pertaining to short video operation, introductory financial accounting, maternal and infant care. Offering vocational training is one way in which we can help them overcome career development challenges.



Inspire Creativity

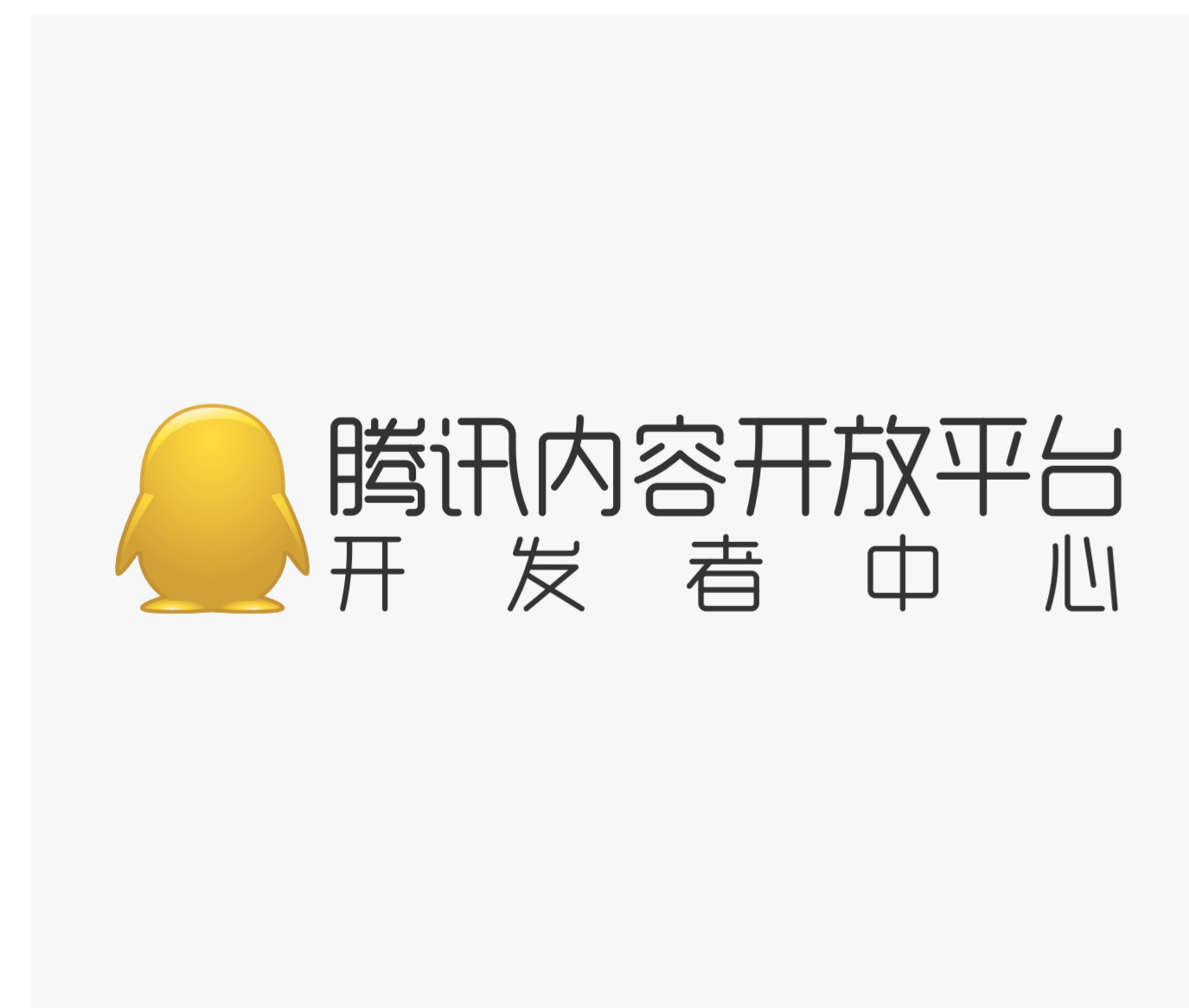
On our platforms, namely Tencent Content Open Platform, Tencent News, Tencent Kandan, Tencent Weishi, and Tencent Video, we empowered creators by providing them with a wide range of technologies and tools to build a healthy content ecosystem.

Supportive policies have been introduced across our platforms. For example, Tencent News has continued to upgrade its system to support original and credible creators while avoiding and punishing clickbait content. Guided by the principle of "trending news, knowledge, and aesthetics", Tencent News has also unveiled nine programs, including the Investigator and Messenger, to encourage outstanding content creators to produce rich and interesting information for our users.

Tencent Content Open Platform also works with multi-channel networks (MCNs) to attract more content creators to use our platforms. In 2021, our platform tightened the requirements for MCN's access and collaboration, strengthened management and standardisation as well as upgraded relationship management with content creators to encourage them to produce more content of high quality and value for our users.

"The Rising Tide"

Tencent Content Platform has launched "The Rising Tide" for creators who are new to the platform. We have invested in resources, including funds, mentors and training courses to create this comprehensive, multi-level training system. By incorporating creative incentives, honour lists, novice traffic support, brand operation into the platform, we are optimistic that we can continue to foster artistic development and creative growth and deliver more content to the industry.



In 2021, Tencent Content Open Platform focused on the upstream and downstream services of its supply chain. We have been safeguarding the healthy development of the content ecosystem in four main ways:

Develop an industry-leading smart editing kit that allow creators to deliver quality content more efficiently.

Create an industry-leading service platform for content creation and trading by providing one-stop service for content creation, building a massive library for copyright materials, and opening up network distribution channels.

Rely on platform resources and industrialisation capabilities to optimise content delivery and distribution, help more creators push the boundaries of their creation, and offer popular content more efficiently.

Continue to crack down on low-quality and counterfeit content, black market products, infringement and other violations.



Promoting Digital Accessibility

Digital Accessibility for the Silver Generation

The silver generation represents an increasingly large segment of the global population, however, not many are familiar with the Internet and using mobile applications that have been deeply entrenched in our everyday lives. In China, the proportion of the population aged 60 and above is 18.7%, and the proportion of the population aged 65 and above is 13.50%. Compared with 2010, the proportion of the two age groups have increased by 5.44% and 4.63%,

respectively To help the silver generation bridge the digital divide, we are investing in technologies to develop senior-friendly tools that can help them onboard easily. We have also identified some use cases that can enhance their lifestyle through the provision of hassle-free, digitalised services on our platforms.

According to the results of the Sixth National Population Census of the People's Republic of China, in 2010, the proportion of the population aged 60 and above was 13.26%, and the proportion of the population aged 65 and above was 8.87%.

Infrastructure

In 2021, Tencent established an open-source coordination group targeting "elderly-oriented and barrier-free technologies". We have created automated assessment tools, anonymised samples, applied research service, and technical support as well as standardised guidelines to assist developers in creating products for the elderly.

Product Upgrade

Our products, which have incorporated senior-friendly and accessibility features, have advanced our objective to create a digitally inclusive environment. To help them navigate the digital world, Weixin rolled out "Easy Mode" to offers big text fonts, large icons and high contrast colours to enhance their product experience in September 2021, and launched a hotline, namely "Worry-Free Special Line for the Elderly". Whenever they want to check cost details, add a bank card to their account, or transfer money, users aged 60 and above can call 95017, and will be given priority access to receive personal, one-on-one help.

"Silver Generation Assistant"



The "Silver Generation Assistant" Mini Program provides an array of tutorials to enable senior users to grasp a better understanding of how to use various features on their smartphones, such as video chat and Mini Programs that offers services, such as news, entertainment, travel, and medical care. For tech savvy seniors, they can click on the "Buddy Toolbox" tab via the "Silver Generation Assistant" Mini Program to access a list of their commonly used services pertaining to news, navigation, Health Code, medical appointment booking and online pharmacy, first aid information, Trip Code, utility bills payment, exercise and dance tutorials, take-out and delivery among many others. So far, the Assistant has provided access to 51 popular mobile applications and over 350 tutorials. The project has earned the recognition from China Academy of Information and Communications Technology and will continue to expand its offerings suitable for the elderly.

"Senior Program"

In September 2021, Tencent signed a cooperation agreement with the China National Committee on Ageing to launch the "Senior Program," which aims to help 10 million elderly people master digital skills and integrate into the digital world within three years. The "Academy for the Aged" has made short films to teach seniors how to use mobile applications in a number of daily scenarios, including booking taxis, making medical appointments, and paying for groceries via QR codes. These teach-in videos, which are easy to use and can be replayed many times, thereby helping them learn mobile apps functions conveniently.



Academy for the Aged actors demonstrate how to use mobile payment and buy groceries online

Breakingdown the "Barriers"

AI, Make All Hear Clearly

According to the World Health Organization's 2021 report, more than 1.5 billion people worldwide suffer from hearing loss, and a large proportion of them are categorized as "hearing impaired". In China, there are 27.8 million hearing-impaired individuals, which accounts for 1.99% of the total population, ranking first among the five major disabilities. Among them, less than 5% of them have recovered with the help of cochlear implants, but still experiences some hearing difficulties due to noise interference.

The "Ethereal Audio Campaign", unveiled on the World Day of The Deaf in 2020, significantly improved the audio clarity of cochlear implants by applying the Ethereal Audio

AI technology used for Tencent Meeting to hearing-aid devices, making high quality hearing-aid devices more affordable for hearing-impaired individuals in China. In addition, the technology was opened up to developers, manufacturers and partners with social responsibility for free, so as to enhance the noise reduction effect of cochlear implants and improve the experience for cochlear implant wearers. Over the past two years, the Ethereal Audio Campaign has implemented relevant measures to provide accessible information services to various hearing-impaired groups through digital technology, and increased the public's awareness around their physical and mental health recovery.



- By working with MED-EL, a global leader in cochlear implant, the campaign launched Meixun Tingbao, the world's first app that integrates hearing testing, AI-assisted hearing enhancement and remote hearing. With an increase monosyllabic recognition rate of 66%, it has enabled them to better hear their surroundings.
- In addition, the campaign cooperated with NUROTRON, a cochlear implant manufacturer in China to roll out the third-generation cochlear implant powered by AI Ethereal Audio. The solution which has unlocked a better hearing experience improved the audio clarity and intelligibility by 40%, while reducing the communication delay to within 150 milliseconds.
- To further assist the hearing-impaired individuals, the "Ear for You" public welfare project was launched by the campaign and its partners to provide services, including assistance for cochlear implant surgery, rehabilitation training support, and vocational training.
- Since its launch, the "Ethereal Audio Campaign" has received positive feedback from the community and won various awards, including the "Guiyang Digital Expo - Leading Science and Technology Achievement Award", "China Internet Conference - Innovation Star", "New Weekly Annual Welfare Conference - Beautiful Sound".

Through the Ethereal Audio Campaign, online hearing tests and other projects, we have been able to actively breakdown the public's misunderstanding around hearing disabilities by increasing their understanding and awareness around the challenges faced by hearing-impaired individuals.

—Yang Yang, Director of the China Disabled Persons' Federation and Chairman of China Association of the Deaf and Hard of Hearing

As a medical device company, NUROTRON recognises that it does not have world-leading technologies in scene recognition and noise reduction procedures. Ethereal Audio Lab, on the contrary, is equipped with such tools and has generously shared the technology with us so that we may upgrade our products.

—Huang Sui, Vice President of NUROTRON Institute of Neurostimulation Science

Our Additional Efforts

Hear the Movies

For the visually impaired, watching movies at home can be particularly difficult as they lack assistive devices. Tencent has partnered with Xinmu Cinema to precisely describe the scenes in the movie. By accurately matching the scenes of the movie to the audio description, visually impaired viewers can simply "listen" and enjoy the barrier-free experience on QQ.



The movie narrator describes the movie "The Wandering Earth" for the visually impaired audience

Barrier-Free First Aid

Hearing-impaired individuals often experience difficulties when dialling emergency number, China's emergency number. Tencent's Emergency Open Platform launched the "Barrier-free First Aid," a text-to-speech conversion function on the International Day of Persons with Disabilities. To

communicate and seek help from emergency centres, users can upload their text messages. With a voice recognition rate exceeding 98% within laboratory environments, and 90% in complex real-life scenarios, hearing impaired individuals can now make emergency call independently and efficiently.

Voice Recognition Rate

98%

The voice recognition rate exceeding 98% within laboratory environments

90%

A voice recognition rate of 90% in complex real-life scenarios



Tencent has been actively participating in providing feedback and constructing standards for China's elderly-oriented and barrier-free groups. So far, 30 of them have been adopted. With the support of China's Ministry of Industry and Information Technology, seven technology companies, including Tencent have initiated the establishment of the "Accessibility Technology and Intellectual Property Rights Working Group" on 9 November 2021. It aims to increase accessibility in the society via opening their accessibility patents to the public for free while continuing to collaborate with various parties.

The United Nations Sustainable Development Goals (SDGs)



For Tencent, "creating social value" is the foundation that drives our company's development and is also precisely how we build "a community with a shared future in cyberspace." Enabled by our mission, "Tech for Good," we aim to continue to explore robust and sustainable solutions that promote social value and enhance social well-being.

Social Value Strategy and Vision

Digital Philanthropy

Rural Revitalisation and Common Prosperity

Preserving Cultural Heritage

Public Emergency Response

The Xplorer Prize

Volunteer Work



COMMUNITY INVESTMENT

Social Value Strategy and Vision

On 19 April 2021, Tencent announced its fourth strategic upgrade, proposing the central strategy of "taking root in the consumer Internet, embracing the industrial Internet, and promoting sustainable social value innovation". The Company established the Sustainable Social Value ("SSV") organisation, which is the new core engine that drives sustainable innovation for social value. With the initial funding of RMB50 billion, SSV will promote social value innovation in areas, including (1) research in basic sciences, (2) education innovation, (3) rural revitalisation, (4) carbon neutrality, (5) basic healthcare, (6) philanthropic platform, (7) assisting with public emergencies, (8) technologies enabling the silver-haired generation, (9) enhanced accessibility for communities with activity limitation, and (10) digitisation of culture. The company is to initiate cross-departmental collaborative groups in aid of the work.

In August, Tencent further dedicated another RMB50 billion to fund the "Common Prosperity" initiative in China. This will be mainly used to support low-income communities, improve health care coverage, help rural economic development, and promote grassroots education, all in effort to provide sustainable support that practically benefit the impoverished regions.

To ensure that our community investments carry a long-term impact, we engage with experts on various social or environmental topics to better understand the needs of different communities. We have explored and developed various social investment tools and systems to guide and manage our investment and evaluate impacts in the following ways: (1) identify opportunities target unaddressed issues within key areas; (2) design solutions and partner with the right stakeholders; (3) monitor and evaluate performance to ensure outcome and impact; and (4) advocate and scale evidence-based solutions to enable system change.

In 2021, Tencent spent RMB 695 million on SSV projects and the "Common Prosperity" initiative, and have also donated RMB 1.6 billion to the Tencent Charity Foundation (including Mainland China and Hong Kong), totalling RMB 2.295 billion.

Tencent Advancing the Progress of SSV



Digital Philanthropy

In 2021, Tencent Charity upgraded its platform and saw a substantial increase in the participation rate, receiving positive feedback from both users and charitable organisations. In addition to the platform overhaul, the "99 Giving Day" also guided more users to participate in the formation of a voluntary, spontaneous and automatic charity system.

Building a Digital Charity Ecology

Tencent uses technology as a vehicle to drive the development of the charity industry and has been leading the exploration of the digital paradigm. In pursuit of this, we have been actively encouraging cross-sectors to join forces to create a public charity ecology that is both inclusive and sustainable. On 20 May 2021, at the 2021 Internet Good Summit, Tencent Charity Foundation launched the "Thousand Hundred Programme", a plan based on the Tencent Charity platform to subsidize "1,000 digital personnel of charitable organisation" and sponsor "100 industry activities that assist digital philanthropy". It intends to

help charities build innovative sustainable social value projects via online charity platforms. On 7 December 2021, we launched the "Technology Venture Philanthropy Programme", with a focus on supporting enterprises and charitable organisations that are in need of funds, technical assistance, operations guidance, communication channels, and volunteers.

An Upgraded Mechanism to Bring Down the Threshold for Charities

Tencent has been able to offer significant resources to support the running of charity programmes by using digital technologies and tools to upgrade its operational efficiency. In 2021, Tencent Charity upgraded the "Little Red Flower" mechanism to provide donors with more convenient ways to give online. To further encourage greater participation, our enhanced mechanism has also been designed to be more transparent and efficient, while recognising donors' contribution. Throughout the year, 91.18 million users across the platform participated in charitable events, collecting 490 million red flowers.



RMB
3,569 million

Total user donations on the "99 Giving Day" amounted to RMB3,569 million with the total number of donations reaching 68.7 million in 2021

RMB
1.513 billion

The Group has donated a total of RMB1.513 billion, in cash and materials, to Tencent Charity Foundation (the Mainland of China) in 2021

Rural Revitalisation and Common Prosperity

"Cultivator" Programme

Rural revitalisation is imperative to achieving Common Prosperity. Tencent is committed to leveraging the power of digital tools to help rural areas improve its grassroots governance capabilities, labour productivity and public infrastructure services.

Talents and grassroots organisations are essential to the revitalisation of rural industry, culture, and ecology. Tencent and the Ministry of Agriculture and Rural Affairs have signed a strategic cooperation agreement, known as the "Cultivator" programme, to train rural officers and new agricultural business leaders. It is anticipated that a total of RMB500 million will be invested in talent development within three years, with 100,000 participants expected offline and 1 million online.

By relying on the market potential, the help of the society as well as returning rural residents, the "Cultivator" programme aims to turn participants into professionals in rural governance and agricultural development. The ultimate goal is to train them so that they may be able to lead the village.

—Director, Cooperative Economic Guidance Department at the Ministry of Agriculture and Rural Affairs



Digitalisation of Rural Production and Life

Tencent uses big data as well as artificial intelligence to drive rural revitalization. Through focusing our efforts on developing digital tools and capabilities, they have assisted businesses in rural areas to embrace the market. A pilot project for the "Common Prosperity" initiative has been launched in Youyang County in Chongqing, one of China's 160 revitalisation counties.

Safe Agricultural Products

We have launched the "Safe Agricultural Products" initiative, which is backed by the "Tencent Reassurance Platform", to support the branding of geographically indicated (GI) agricultural products. It hopes to fully support 100 counties and cities in funding, technology, solutions, expert services, traffic support, and brand building within three years. Through code-based supply chain traceability, premium agricultural products can be brought out of villages and onto the tables of many households.

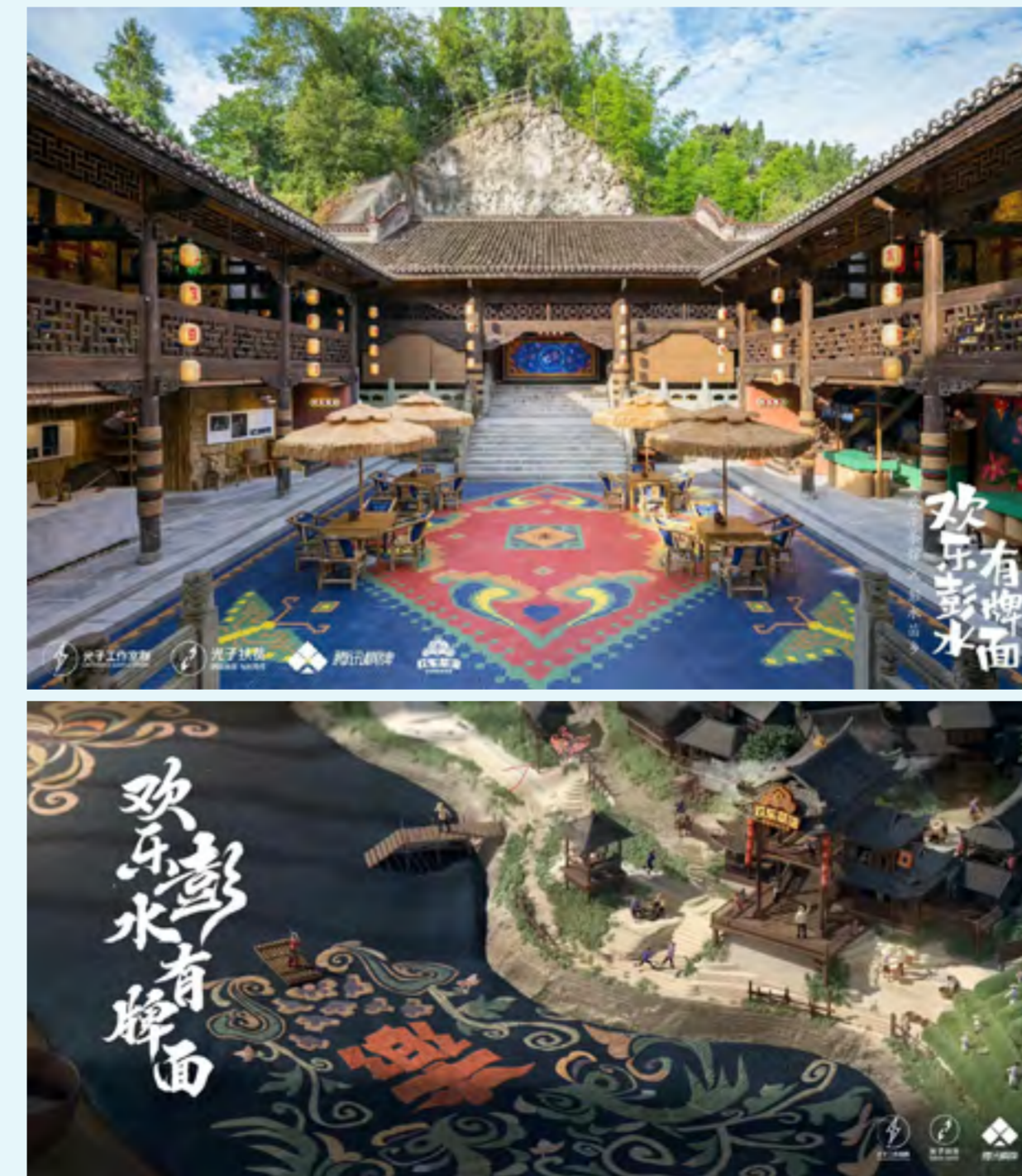


Empower Cultural Tourism

Developing digital tourism is one of the vehicles which helps preserve cultural heritage in rural areas. Cultural products with incorporated elements, such as games, animations, films and music, are the window for the young generation to gain exposure to the region's distinctive history, tradition, and natural beauty. We believe tourism may be fuelled by culture, which in turn helps to mobilise local industry and agriculture.

IP Authorisation to Fuel the Development of Cultural Tourism in Pengshui

Pengshui County is remotely located in the hinterland of the Wuling Mountains in Chongqing. Tencent has utilized its extensive platforms to help Pengshui explore its ethnic, cultural, and ecological assets. It also created Chongqing's first IP-themed tourism route authorised by Tencent Games, which connected scenic places in Pengshui County with Miao culture, leading to a closed-loop business model empowered by IP. The long-lasting value of IP can provide a new momentum for local cultural inheritance and industrial development, thereby stimulating the sustainable economic development.



Future Classroom

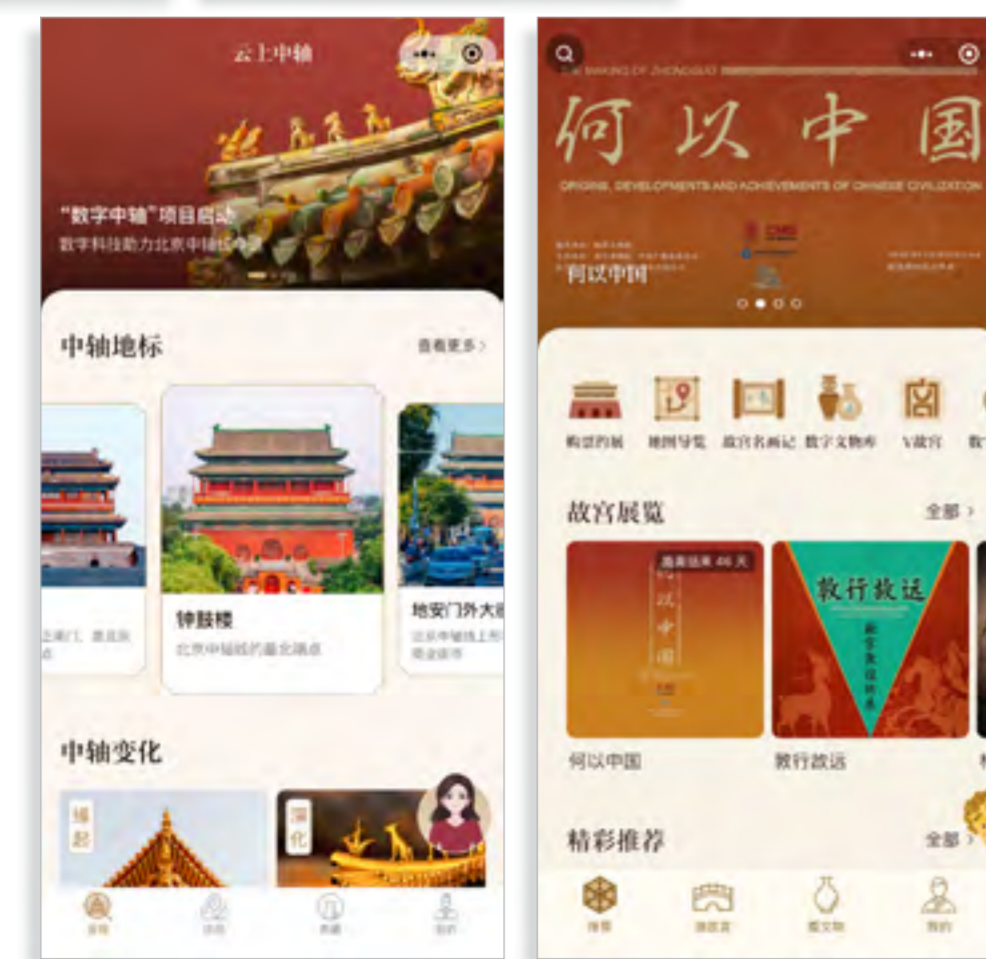
Tencent has rolled out the "Future Classroom" programme in less economically developed areas. It aims to train youngsters to become "little teachers" in hardware programming and 3D printing while encouraging them to share what they have learned with their classmates and adults. The programme aims to reduce the education inequality between the urban and rural areas, enabling more youngsters to broaden their horizons.

Caring for the Old and the Young

The "Caring Service Station for Villages" was built in collaboration with Tencent and the China Social Welfare Foundation to provide day care, health care, and mental health counselling for the elderly, children, and other vulnerable groups in impoverished rural areas.

Preserving Cultural Heritage

Through digital technologies, Tencent has made traditional culture more pronounced in our daily lives. We have been working to combine 3D high-definition image capture and processing, advanced VR360 immersion, and artificial intelligence to better protect and preserve cultural heritage and historical relics digitally.



"Global Digital Museums for National Treasures"

Nearly 300 Chinese relics from prominent museums worldwide are on display as part of the project. Users can immerse themselves in viewing these traditional cultural relics without leaving their homes.

"Digital Axis"

The project aspires to explore various innovative models to preserve the rich historical and cultural heritage that runs through the Central Axis of Beijing by leveraging emerging Internet technologies, including big data and cloud computing.

"Digital Grotto"

Tencent has experimented with an innovative approach to digitally preserve and reproduce the priceless relics from the famous Dunhuang Mogao Grottoes. In our interactive game, players are invited to appreciate the Dunhuang art together as they take on the role of a digital supporter.

"Digital Palace Museum"

"The Way in Patterns", an immersive digital exhibition co-hosted by the Palace Museum and Tencent T-Museum, showcased patterns from ancient buildings and collections. The exhibition leverages technologies, such as immersive content production, Dolby Atmos, and YouTu search by image.

New Strategic Cooperation with "Sanxingdui" on Creative Works

In 2021, Tencent and the Sanxingdui Museum announced a strategic collaboration to revitalise and develop Sanxingdui cultural IP through games, online literature and music, in order to show the allure of the ancient Shu civilisation to a wider audience.

Passing Down Intangible Heritage

Tencent has explored various ways to leverage its platform to display and protect intangible cultural assets.

Genius Moms to Pass Down Intangible Heritage

In the first half of 2021, the "Genius Moms" programme funded nine embroiderers from remote areas to travel to Shanghai. During this event, they worked with fashion designers and celebrities to create a fashion show using traditional craftsmanship. To create a colourful, flamboyant, and original fashion style, the designers merged peasant painting, tie-dye, and other intangible cultural assets with modern computerised printing. Women from remote mountainous and rural areas in China can also demonstrate their traditional skills via the "Genius Moms" programme. The programme has not only improved their lives, but has also passed down valuable cultural practices and intangible cultural assets.

Guizhou Libo tie dyeing



Public Emergency Disaster Response

By creating an open emergency platform that links the entire value chain, including cloud dispatch response, technology sharing and empowerment, and emergency science popularization and training, Tencent strives to explore feasible, efficient social emergency response models in effort to enhance our public emergency response capabilities.

RMB **100** million
Tencent donated RMB100 million for the Henan flood disaster

RMB **60** million
Tencent donated RMB60 million for the Shanxi flood disaster

During natural calamities, Tencent products have been a pivotal tool in gathering collective public effort and disseminating accurate information quickly. As more people congregate on our platform, it has enabled us to unleash the platform's full potential in emergency rescue and disaster relief.

During the Zhengzhou flood in 2021, a netizen (alias Manto) created a spreadsheet on Tencent Docs to document disaster relief resources, successfully connecting disaster victims to relief workers. With over 2.5 million visits in 24 hours, the decentralised file allowed volunteers to update the file with new information, becoming a critical online information service hub during the devastating flood.



Tencent Charity: Support Henan



Tencent File: Template for Rescue and Mutual



Tencent Map: Zhengzhou Rescue Map



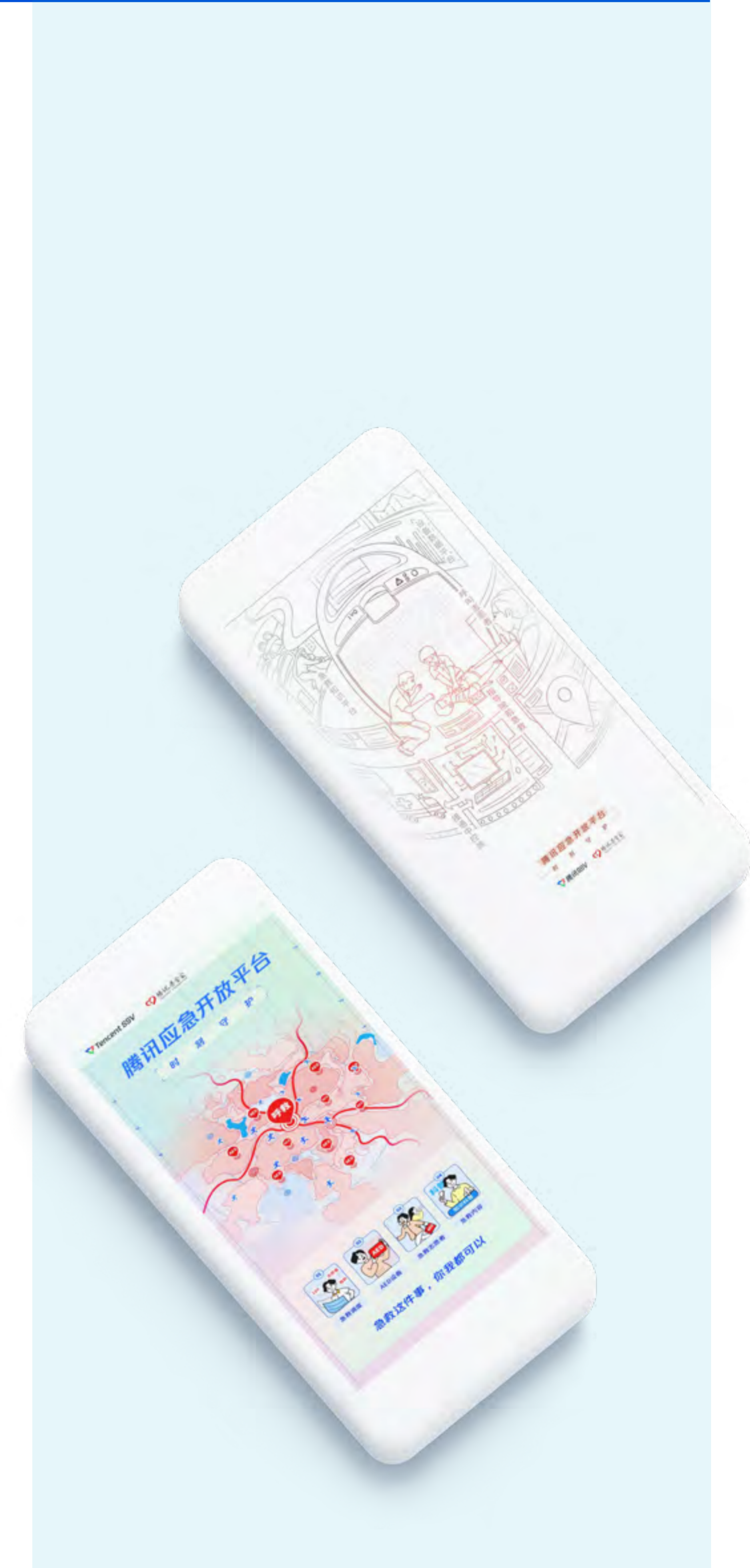
Tencent Medipedia: Self-help Guide for Floods and Rainy Seasons

Public Health Emergency Response and Support

Since the COVID-19 outbreak, Tencent has continued to keep a close eye on the pandemic and joined hands with people from all walks of life to fight the disease. In February 2021, Tencent's anti-pandemic fund granted nearly RMB100 million to the "Spring Action" that was initiated by over ten charitable organisations, helping the afflicted people in the fresh-out-of-poverty areas, historic revolutionary bases, and hardest-hit rural areas.

Tencent also recognises the importance of public health. On 23 December 2021, we held the signing ceremony for the "Public Health Specialists Cultivation Programme" under the leadership of the National Health Commission, the Ministry of Education, and the National Administration of Disease Prevention and Control. Tencent pledged an RMB100 million donation at the ceremony to support the country's long-term, systematic cultivation of public health specialists. With five initial projects, the programme will focus on supporting chief experts and young elites in disease prevention and control, specialists interested in improving public health literacy, administrators in the healthcare system and village doctors.

Tencent has participated in the promotion to deploy automated external defibrillators ("AEDs") in public spaces, citing the millions of emergency cardiac arrest cases that occur in China each year. In 2021, we partnered with Chinese Red Cross Foundation to donate AEDs to primary and secondary schools in Beijing as well as the Nanjing University to build a pilot public emergency response system.



The Xplorer Prize Volunteer Work

The Xplorer Prize was founded in 2018 by Pony MA, Chairman of the Board and CEO of Tencent, alongside 14 renowned scientists, including Chen Ning Yang, Rao Yi, Shi Yigong, Pan Jianwei, Xie Xiaoliang and many others. The Xplorer Prize encourages young scientists to push the boundaries of research in nine fields: (i) mathematics and physics, (ii) chemistry and new materials, (iii) astronomy and geoscience, (iv) life sciences, (v) information and electronics technologies, (vi) energy and environmental sciences, (vii) advanced manufacturing, (viii) transportation and architecture, and (ix) advanced interdisciplinary studies. Medical sciences will be included in 2022.

By the end of 2021, the Xplorer Prize had funded 150 promising young scientists with each receiving an RMB3 million stipend within 5 years. Many of them are dedicated to research in vital areas and are leading the country's scientific and technological endeavours.

Guided by the principle of "expressing our love with actions," Tencent Volunteer's Association continues to combine internal resources and collaborate with all business groups to promote our volunteer activities.

Since April 2012, volunteers were granted one day of fully-paid leave per year. From 1 January 2022, a new matching donation programme will come into effect. For every donation our employee makes, the Company will match a donation to the same amount. For every qualified hour of voluntary work our employee serves, the Company will donate RMB100 correspondingly.

As of 31 December 2021, the Tencent Volunteers' Association has participated in approximately 200,000 hours of voluntary services from approximately 18,000 volunteers.



"I+T Education for Kids"

On International Volunteer Day, 5 December 2021, Tencent Volunteers and IBM jointly hosted the "I+T Education for Kids" event to promote the 2021 list of popular science books. From 6 to 11 December, Tencent and IBM volunteers delivered ten unique online science classes for children in areas with scarce educational resources, thereby sparking children's curiosity and promoting education equality.

Major projects of the Tencent Volunteer's Association



Tencent Micro Love Employee Charity Project Innovation Competition

All Tencent employees are invited to submit innovative charity proposals, which are then subject to a process of selection, optimisation, and funding. The competition incubates a large number of innovative public welfare projects to promote public welfare.



Charity Lecturer Programme

Tencent Volunteers are invited to record charity teaching videos at the Tencent Academy. The programme encourages Tencent employees to share their knowledge and experience with those in need.



Business ethics help the economy thrive soundly and sustainably by serving as the code of conduct for enterprises and creating a harmonious business order founded on the principles of fairness and good faith. Tencent embraces the value of integrity, proactivity, cooperation and creativity in business management and operations, and requires every employee to bolster the bottom line and jointly create a transparent business ecosystem.

Anti-Corruption

Anti-Trust

Anti-Money Laundering

Supply Chain Management

BUSINESS ETHICS

Anti-Corruption

Tencent has taken a zero-tolerance approach to fraud, which has become a long-term principle and bottom line that must be adhered to in business development. In accordance with the *Criminal Law of the People's Republic of China*, the *Anti-Unfair Competition Law of the People's Republic of China* and other relevant laws and regulations, Tencent has incorporated anti-fraud into its corporate culture and values, and a relatively perfect system and response measures have been formulated to prevent, detect and prevent corruption, bribery and any other fraudulent acts.

Updated Management Principles

Tencent reviews the anti-fraud system each year and makes revisions as appropriate to ensure that it complies with the applicable laws and regulations. The anti-fraud system caters to business development and captures all kinds of fraudulent activities in the Company. In June 2021, we revised the *Tencent Sunshine Code of Conduct* for the ninth time.

The main revisions to the *Tencent Sunshine Code of Conduct* included:

1 Reorganised the employee behaviour management system to ensure the appropriate handling of various violations depending on the circumstances and severity.

2 Strengthened the crackdown on commercial bribery.

3 Enhanced the protection of intellectual property rights.

4 Clarified the definition of "conflict of interest" and encourage employees to make proactive "conflict of interest declaration".

5 In response to recent frauds committed by external organisations in the guise of recruiting remote interns, a new clause was added to severely punish employees who engage in such fraudulent activities.

6 Enhanced the requirements for managers at various levels and stipulated their roles in teams' internal risk management and control. It also stipulated that the Company will pursue the liabilities of managers at various levels depending on the severity of the fraud, including notice of criticism, lowering the performance rating, demotion, dismissal, and termination of the labour contract.

Whistleblowing, Investigation, and Sensitive Position Management

To detect violations on a broader scale, Tencent has formulated the Anti-fraud *Whistleblowing* Policy, which clearly conveys the message of our zero-tolerance in relation to fraudulent activities to all the employees and suppliers/business partners. The Group encourages employees and suppliers/business partners to report any concerns that they may have regarding any non-compliant or potentially fraudulent activities. We provide various whistleblowing channels, such as email, mailing address, phone number, and the Weixin official account-Sunshine Tencent. We encourage informants to leave their contact information so that we can conduct follow-up investigations and provide them with updates on the progress. We guarantee that anonymous reports that provide adequate information will be dealt with seriously. We guarantee the confidentiality of the submitted information and the informant's identity and take measures to protect the informant from retaliation.

Tencent cautiously deals with the effective whistleblowing information and entrusts the Anti-fraud Investigation Department to carry out investigations independently. Employees who are found and proven to have violated Tencent's "high voltage line" will be dismissed according to the regulations and will never be hired again. If any supplier or business partners are found have engaged in serious corruption or fraudulent activities, we will terminate the contract immediately and never conduct business with them. In the event that any fraudulent activity violates any relevant laws or regulations, such cases shall be reported to appropriate government authorities. In response to the business risks or loopholes identified during the investigation, relevant departments in question

must take corrective measures with the assistance of the Risk Management and Internal Control Departments to prevent similar cases from recurring. In 2021, our Anti-Fraud Investigation Department found more than 50 cases in violation of Tencent's "high voltage line". Approximately 70 people have been dismissed, amongst which more than 10 people suspected of crimes have been reported to relevant government authorities in accordance with applicable laws and regulations.

In 2021, we received the results of the four corruption-related cases (including cases we transferred in previous years) that we have transferred to the authorities. Six employees who were involved were dismissed and have faced criminal punishments. Because these cases were discovered and handled in time, they did not incur much impact on the Company's business. After the occurrence of these cases,

according to the Tencent Sunshine Code of Conduct, if the case is related to negligence of the management, the direct and indirect managers of the employees involved will bear the management responsibilities and consequences, including notice of criticism, lowering the performance rating, demotion, dismissal, and termination of the labour contract.





We formulated the Management *Policy for Sensitive Positions*, stipulating the management measures for sensitive positions with high-risk duties, such as requiring regular job rotation, stripping sensitive responsibilities, and participating in various risk management training. It also stipulates that the Internal Audit Department reserves the right to audit all sensitive personnel positions and may conduct audits on current or former personnel in sensitive positions at any time.

Increase Awareness of Anti-Corruption

Tencent provides continuous anti-corruption education and training to all employees throughout their time at the Company. Tencent prioritises "integrity" in its corporate culture. Each employee is informed about the six provisions of "high voltage line" and our "zero-tolerance" attitude towards violating "high voltage line" on their first day of employment, so that they are aware of the severe consequences arising from non-compliant activities from the beginning. Meanwhile, Tencent conducts annual anti-fraud education training for board members and all employees in the form of videos, posters, cultural events, online compulsory courses, and in-person training courses, emphasizing the strict prohibition of bribery and other unethical behaviours.

Anti-fraud training
100% employee participation

Whistleblowing Channels:

-  **Email:**
jubao@tencent.com
-  **Tel:**
+86-755-86013470 (voicemail)
-  **Mailing Address:**
Tencent Binhai Towers, No. 33 Haitian 2nd Road, Nanshan District, Shenzhen, Guangdong Province, PRC
-  **Weixin Official Account:**
Sunshine Tencent (tencentsunshine)



In 2021, the Company provided a series of anti-fraud training and education programmes for all employees and the 100% coverage. The content covered the following:

- Five directors participated in either the audit committee meeting, internal audit committee meeting, other internal meetings, or studied the Sunshine Code related online video courses to learn about related laws and regulations, the Company's anti-fraud related policy, as well as internal corruption cases.
- We have produced more than 20 videos themed on anti-fraud, which are played in the elevator and office buildings on a monthly basis. We have also created thematic posters and articles that are shared on the Company's internal platforms, through emails, and displayed around workplace.
- We produced a new online compulsory course (duration: 50 min) regarding the Sunshine Code of Conduct, and required all new employees and existing employees to complete within a specified period of time.
- We carried out 76 anti-fraud training sessions for personnel in sensitive positions from each BG as well as new employees, with a cumulative number of over 10,000 participants.
- We held the annual anti-fraud advocacy activities (online + offline) on the day of the summer solstice, attracting a cumulative number of more than 12,000 participants.

Anti-Trust

Tencent is committed to operating in accordance with relevant laws and regulations on fair competition and anti-trust when doing business in China and abroad. Tencent aims to enhance regulatory compliance and maintain a fair and competitive environment with other market players.

Advocate Fair Competition and Compliant Development

Tencent has always advocated fair competition and has placed great emphasis on anti-trust compliance. In 2016, Tencent published the *Corporate Fair Competition Guidelines* for internal use. It contains a comprehensive introduction to the *Anti-monopoly Law of the People's Republic of China*, the implementing regulations, and the enforcement practices. It also sets out the compliance requirements corresponding to our business practices.

It serves as the basic guide to assist relevant employees in following the rules of fair competition and conducting business activities in conformity with these laws and regulations. In 2016, we established a Competition Policy Office, a specialised department with professional lawyers in charge of anti-trust compliance matters. To the best of our knowledge, we are among the first in the industry to establish such a specialised department.



Cooperate With Regulatory Requirements and Improve Compliance Management

Since 2007, China has published and implemented the *Anti-monopoly Law of the People's Republic of China*, the *Anti-Monopoly Guidelines for the Platform Economy* issued by the Anti-Monopoly Commission of State Council and other laws, regulations and guidelines in succession. We are committed to compliance of these regulations and regulatory requirements and strive to improve our compliance in order to ensure Tencent's long-term business success.

Our stance during the current trend of supervision and regulation is that we are willing to embrace this new environment fully, and establish ourselves as fully compliant, which can positively drive benign development of the Company and the whole industry as well.

— Martin Lau, President of Tencent Holdings

In terms of organisational structure

In 2021, we set up a specialized Anti-Monopoly Compliance Department (AMCD) that reports regularly to the senior management. The AMCD is responsible for researching anti-monopoly-related laws, regulations, and regulatory policies, and strengthening the Company's anti-monopoly compliance system, and coordinates with relevant teams and resources to strengthen our anti-trust compliance. The AMCD's work scope includes

- 1 Providing anti-monopoly compliance advice on daily operation
- 2 Conducting merger filings
- 3 Following up with the domestic and global anti-monopoly legislation, rule-making progress, enforcement and judicial initiatives and analysing impacts on the operation
- 4 Training on anti-trust compliance, and
- 5 Actively cooperating with anti-trust regulators' requirements, if any

In terms of policy-making

Tencent updated the Corporate Fair Competition Guidelines in 2021, drawing on the most recent anti-trust legislations, enforcement, and judicial practices to formulate the Group's Anti-Trust Compliance Guidelines. The updated guidelines provide more specific compliance guidance for different business scenarios by referring to typical cases published by the authorities. In addition, our AMCD works closely with legal teams, different business groups and other stakeholders to continuously improve the formulation and implementation of the relevant compliance policies and mechanisms (including but not limited to daily compliance initiatives and merger filings) to strengthen our anti-trust compliance.

In terms of compliance training

Tencent has launched anti-trust compliance training across the Company to enhance its employees' awareness and capabilities, based on the regulatory priorities in China and abroad as well as our internal needs. Video tutorials on anti-trust compliance are also provided to lecture employees in an easy-to-understand manner.

In terms of industry promotion

Tencent proposed recommendations on the *Rules on Anti-monopoly Compliance Management for Platform Operator* under rule-making process in November 2021, with the goal of jointly advocating and promoting the regulated, orderly, innovative and healthy development of the platform economy. The Rules specify the planning, operation, evaluation and improvement process with respect to anti-trust compliance management of platform operators and aim to maintain fair competition in the market, prevent and reduce the anti-trust compliance risk establish and improve anti-trust compliance management system, and enhance the anti-trust compliance capability.

In the future, Tencent will continue to actively engage with relevant regulatory authorities and comply with relevant anti-trust laws and regulations.

Anti-Money Laundering

Tencent adheres to the risk-based principle in preventing anti-money laundering activities and endeavours to improve the Company's Anti-Money Laundering (AML) and sanctions risk management capabilities in adapting to the ever-evolving financial crime compliance landscape. Tencent strictly abides by applicable laws and regulations related to anti-money laundering and counter-terrorist financing in the PRC and other countries and regions where we provide services. We fulfil all relevant regulatory obligations under such applicable rules and regulations, including but not limited to the *Anti-Money Laundering Law of the People's Republic of China* and the *Measures for Administration of Anti-money-Laundry and Anti-terrorism by Payment Institutions*. We monitor regulatory changes and respond in a timely manner by engaging in legal interpretation, gap analysis and training, as well as engaging external consultants where appropriate.

Policy Enhancements

We actively respond to new anti-money laundering regulations in compliance with the Chinese and international regulatory requirements. In 2021, we released the second version of *Tencent's Minimum Standards for Anti-Money Laundering and Sanctions Compliance*, further optimising and improving our internal anti-money laundering compliance and risk management framework.

Revisions in the second version of the *Minimum Standards for Anti-Money Laundering and Sanctions Compliance* included:

- 1 Closely following domestic and global regulatory trends and incorporating the latest legal regulations and core applicable requirements into internal standards to be met in order to comply with regulatory requirements.
- 2 Formulating risk control measures and processes for different business models in accordance with the management requirements for the corresponding business lines.

Well-Established Structure

The Group's Anti-Money Laundering and Sanctions Compliance Department is responsible for

- ① Coordinating the management of money laundering and sanctions risks for all businesses in various regions,
- ② Fulfilling anti-money laundering and sanction requirements under relevant laws and regulations, and
- ③ Managing and monitoring the implementation of various anti-money laundering and sanctions initiatives. We have also established risk management committees for the governance of money laundering and sanctions preventions in the Group and subsidiaries, including Tencent Group Anti-Money Laundering and Sanctions

Policy statement

We have published declared the [Tencent Anti-Money Laundering Policy Statement](#) and the [Tencent Sanctions Policy Statement](#) on the corporate governance page of the Tencent website.

Anti-fraud

We have established a long-term reporting mechanism with competent authorities and regulatory departments which has achieved remarkable results on cracking down on fraudulent activities. We have also carried out research on anti-fraud techniques and organised various forums together with relevant associations to enhance social influence.

Management Committee and the Professional Subsidiary Money Laundering Risk Management Committee, as well as appointing a dedicated compliance officer within each business group.

In 2021, Tencent carried out various tasks in accordance with the minimum standards for anti-money laundering and sanctions compliance. Leveraging Tencent's technical capabilities, we implemented innovative measures in the fields of wildlife preservation and prevention of fraud, contributing to PRC national anti-money laundering.

Wildlife protection

We have launched the "Tencent for the Planet" initiative in China since 2015 and established a reporting and feedback platform in Weixin and QQ. The initiative aims to bring together the societal efforts to monitor and report on money laundering crimes that are rampant in illegal wildlife trade.

Large and suspicious transaction reporting

We developed an automated monitoring model in detecting suspicious transactions using technologies such as big data mining and machine learning. Suspicious cases identified by the model are escalated to the compliance department after manual screening, and will take appropriate enforcement actions.

Supply Chain Management

Having a sustainable supply chain is one of the fundamental factors for ensuring long-term business growth. Based on the principles of openness, fairness and good faith, Tencent has formulated the Tencent Supplier Management Policy to provide standardised management of suppliers by implementing a strict control mechanism for the process of finding suppliers, verification, information maintenance, selection, engaging, and evaluation. Tencent has also built a supplier management system that covers the entire procurement life cycle in order to standardise and transparently streamline the process, so as to protect the interests of our business partners.

Supplier selection

The Procurement Department looks for qualified suppliers in the market and evaluates offers based on the duration of the cooperation, order volume, and nature of the request. In principle, Tencent generally asks for price quotations from at least three vendors to ensure fair competition among suppliers with transparent decision-making procedures, whilst considering factors, such as delivery time, operational and technical strengths, environmental and social responsibilities. If there is only one vendor available for selection as it dominates the relevant market, or it is the only available vendor with access to the required goods or services, a particular procurement arrangement will require special approval along with a sufficient and reasonable justification. Before engaging with a supplier, we will conduct due diligence, including qualification checks and on-site visits on the supplier to ensure that the supplier meets our procurement demands.

Supplier engagement

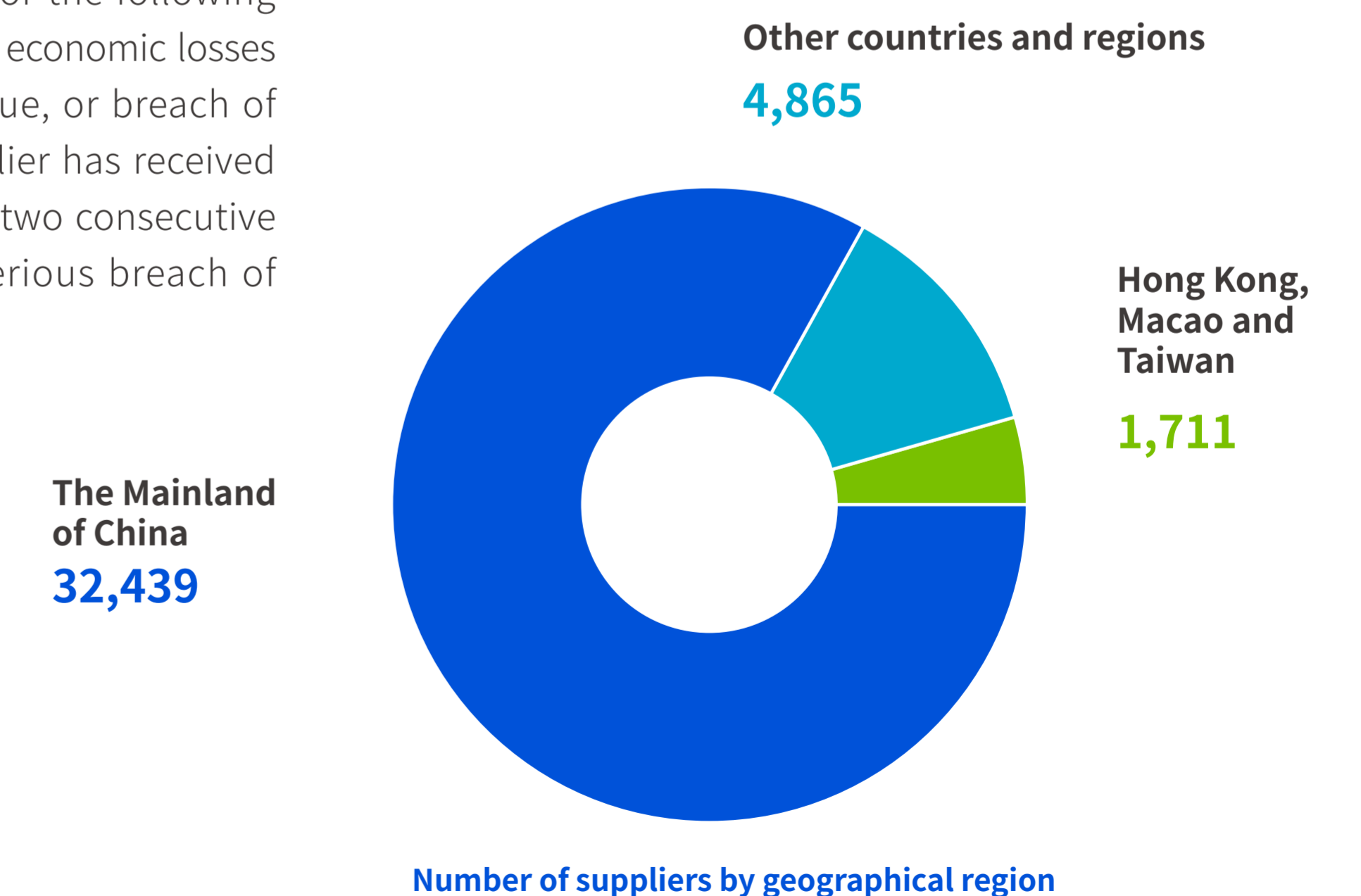
When engaging with a supplier, Tencent requires suppliers to sign the *Anti-Commercial Bribery Declaration*, which outlines the procurement code of ethics and the scope of cooperation with suppliers who have a conflict of interest with our current employees in accordance with *Tencent Sunshine Code of Conduct*. It further stipulates that suppliers with a conflict of interest with our former employees can only participate in the selection process upon the approval of our internal audit committee or after 18 months following the employee's resignation. Suppliers who have a conflict of interest with our existing and former

employees must make declaration truthfully, otherwise any false declarations will lead to immediate partnership termination, and suppliers in violation will be blacklisted. In 2021, Tencent required all suppliers in the Mainland of China to sign the *Anti-Commercial Bribery Declaration*.

Supplier evaluation

Tencent evaluates the performance of suppliers regularly through sample testing and walk-through testing. We take full considerations of factors concerning the quality of the supplier. For underperforming suppliers, subject to applicable contractual agreements, we may (1) discuss with them about their remedial plans, (2) suspend the cooperation, (3) reduce the order volume, (4) impose penalties, or (5) suspend payment. The Procurement Department may disqualify a supplier for the following events when (1) we suffer from material economic losses due to the delayed delivery, quality issue, or breach of contract by the supplier; (2) the supplier has received the lowest rating on the rating scale for two consecutive quarters, and (3) the supplier is in serious breach of business ethics.

The Group Procurement Department requires suppliers to sign the *Corporate Social Responsibility Commitment*, which encourages suppliers to adopt internationally recognised industry standards and benchmark best practices. With the *Corporate Social Responsibility Commitment*, we ensure a safe supply chain where workers are treated with respect and dignity; and companies are responsible for environmental protection and compliance with the code of ethics during their business operations. We prioritise environmentally friendly products and services when selecting suppliers related to office buildings. We have required all property management companies of our self-owned office buildings to obtain the ISO 14001 environmental management system certification.



Appendix

About This Report

This report is prepared in accordance with the *ESG Reporting Guide*. This report also references selected disclosures from the *GRI standards* and the *SASB standards*. It also applies the disclosure recommendations developed by the *TCFD* for climate-related disclosure in accordance with the Hong Kong Stock Exchange's recommendation.

PricewaterhouseCoopers has been commissioned by the Company to conduct a limited assurance on the selected ESG KPIs in accordance with *the International Standard on Assurance Engagements - Assurance Engagements Other than Audits or Reviews of Historical Financial Information (ISAE) 3000 (Revised)*. For more details regarding the level, scope, assurance process and the complete assurance report, please refer to the ["Assurance Report"](#) in the Appendix.

Materiality:

We have conducted a detailed materiality assessment to identify and evaluate key ESG issues that are most important to our business as well as our internal and external stakeholders. The information gathered from the materiality assessment was then used to determine the disclosure content of this report. For details of the materiality assessment, please refer to the sections titled ["Materiality Assessment"](#) and ["Stakeholder Communication Report"](#) in appendix for more details.

Quantitative:

We disclose measurable environmental and social KPIs and set quantitative performance targets where applicable. The measurement standards, methodologies, assumptions and/or calculation tools of the KPIs in this report, as well as the source of the conversion factors used, have been explained in the corresponding context (where applicable).

For better presentation and readability, "the Company" refers to "Tencent Holdings Limited", and "the Group" refers to "the Company and its subsidiaries".

During the process of identifying the scope of the reporting boundary, we ensure that this report reflects our ESG impact and performance. Unless otherwise specified, the report covers the ESG performance of the business activities directly operated and managed by the Company during the reporting period from 1 January 2021 to 31 December 2021.

This report is prepared in alignment with the reporting principles of "materiality", "quantitative", "balance" and "consistency" with further details set out below.

Balance:

This report aims to provide a balanced representation of the Group's ESG efforts around the environment, our people, operating principles and practices, product responsibility and community.

Consistency:

This year's report has been prepared with the same method used in previous years. Changes that may affect a meaningful comparison with previous reports have been explained in the corresponding section.

This standalone ESG report is to be read together with *Tencent 2021 Annual Report*, in particular the *"Corporate Governance Report"* section, as well as the section headed "ESG" on our Company's Website.

Should you have any questions, please contact us at ESG@tencent.com.

ESG Key Performance Tables

Environmental Performance

Environmental Performance

Indicator		As at 31 December 2021
Total GHG emissions (Scopes 1, 2, 3) ^{①②③}	million MtCO ₂ e	5.111
Scope 1 emissions ^{②③}	million MtCO ₂ e	0.019
Scope 2 emissions ^{②③④}	million MtCO ₂ e	2.349
Scope 3 emissions ^{②③⑤}	million MtCO ₂ e	2.743
Total GHG emissions per unit of revenue	MtCO ₂ e/RMB Million	9.12
Hazardous waste ^⑥	tonnes	324
Hazardous waste per unit of revenue	tonnes/RMB Million	0.00058
Non-hazardous waste ^⑦	tonnes	29,850
Non-hazardous waste per unit of revenue	tonnes/RMB Million	0.053
Total energy consumption ^{②⑧}	MWh	4,375,253
Direct energy consumption	MWh	66,293
Including: Gasoline	L	34,160
Diesel ^⑨	L	3,261,448
Natural gas	m ³	3,111,654
Indirect energy consumption: Purchased electricity ^{②⑩}	MWh	4,308,960
Total energy consumption per unit of revenue	MWh/RMB Million	7.81
Renewable energy purchased	MWh	63,000
On-site renewable energy	MWh	2,334
Average PUE in data centre ^⑪		1.32
Water consumption ^{②⑫}	tonnes	6,201,652
Water consumption per unit of revenue	tonnes/RMB Million	11.07
LEED certified office space	m ²	887,700
Number of LEED certified data centres		1

① Due to the nature of the business, the material air emissions of the Company are GHG emissions, arising from fuels and purchased electricity produced from fossil fuels.

② We expand the 2021 reporting scope of our environmental performance to cover all office buildings and data centres in the Mainland of China and Hong Kong within our operational control. Leased data centres that we do not have operational control are excluded. The reporting scope of 2020 covered only the main office buildings and main data centres in the Mainland of China. We adjusted the reporting scope to align with industry best practices; such an adjustment is the primary driver against the year-on-year increases of the environmental performance reported, while another key driver is the organic growth of our businesses.

③ GHG inventory includes carbon dioxide, methane and nitrous oxide. GHG emissions data as at 31 December 2021 is presented in carbon dioxide equivalent. The GHG calculation methodology has been updated based on the 2006 IPCC Guidelines for National Greenhouse Gas Inventories issued by the Intergovernmental Panel on Climate Change (IPCC), the IPCC Fifth Assessment Report, and the provincial electricity emission factors published by the Ministry of Ecology and Environment of China.

④ The adjusted Scope 2 emissions in 2020 is 1.71 million MtCO₂e by applying the 2021 reporting scope.

⑤ Scope 3 emissions are calculated based on broad-based assumptions with emission factors published in the UK Government GHG Conversion Factors for Company Reporting and EPA Emissions & Generation Resource Integrated Database. The carbon footprint of leased data centres both in China and international markets, where we do not have operational control, is included in Scope 3 accounting.

⑥ Hazardous wastes produced at office buildings mainly includes waste toner cartridges and waste ink cartridges from our printers. Hazardous wastes produced by data centres mainly includes waste lead-acid accumulators and destroyed hard drive components.

⑦ In 2021, we reported the actual weight of garbage collected at our office buildings and have enhanced waste accounting for non-hazardous wastes. The garbage in 2020 was estimated with reference to the Handbook on Domestic Discharge Coefficients for Towns in the First Nationwide Census on Contaminant Discharge published by the State Council of the People's Republic of China in 2008. Non-hazardous wastes produced by data centres mainly includes obsolete servers.

⑧ Total energy consumption is calculated based on the data of purchased electricity and fuel with reference to the coefficients in the National Standards of the PRC General Principles for Calculation of the Comprehensive Energy Consumption (GB/T 2589-2020).

⑨ Diesel is consumed by backup power generators.

⑩ The adjusted total indirect energy consumption in 2020 is 3,128,144 MWh by applying the 2021 reporting scope.

⑪ PUE of data centres is a ratio of the total energy consumption to the energy consumption of IT equipment. During the reporting period, the annual average PUE is calculated by considering all data centres within our operational control that have operated for more than 12 months with a minimum utilisation rate of 30%.

⑫ Water supply mainly comes from the municipal water supply and there is no issue in sourcing water. In January 2021, we upgraded our capability in water management at our office buildings with the introduction of the Tencent Facility Management system, which allowed us to track, record and analyse water consumption data every month. This upgrade will lay a solid foundation for our expanded reporting scope in the future. Comparable historical numbers are not available as we have only partly collected data at some of our leased sites, where the water usage was managed by third-party property management companies in 2020.

⑬ Data regarding packaging materials is not applicable to the Company.

Employment Performance

Indicators		As of 31 December 2021
Total number of employees ^①		68,226
Number of employees by gender	Male	48,406
	Female	19,820
Number of employees by age group	Under 30	28,608
	30 to 50	39,420
	Over 50	198
Number of employees by geographical region	The Mainland of China	66,906
	Hong Kong, Macao, and Taiwan	243
	Other countries and regions	1,077
Number of employees by management level	Management	6,119
	Non-management	62,107
Number of employees by employment type	Formal Employees	65,109
	Other categories ^②	3,117
Total turnover rate ^③		12.37%
Employee turnover rate by gender	Male	11.90%
	Female	13.53%
Employee turnover rate by age group	Under 30	14.59%
	30 to 50	10.89%
	Over 50	19.39%
Employee turnover rate by geographic region	The Mainland of China	12.32%
	Hong Kong, Macao, and Taiwan	15.61%
	Other countries and regions	15.00%

① The scope of employees includes the number of formal employees and employees of other categories in the businesses directly operated and managed by the Company.

② Other categories refer to consultants and interns engaged in the businesses directly operated and managed by the Company.

③ Employee turnover rate = (Number of permanent employees who left the Company during the reporting year/Number of employees at the end of the reporting year) * 100%. Employee turnover reflects the number of formal employees who have left (due to voluntary resignations, dismissals, retirement).

Health and Safety Performance^①

Indicators	2021	2020	2019
Number of work-related fatalities ^①	0	0	0
Work-related fatality rate (%) ^②	0	0	0
Number of injuries	32	28	18
Rate of work-related injuries (number of injuries / millions of hours worked) ^③	0.25	0.27	0.21
Working days lost due to work-related injuries (days)	480	281	1,058 ^④

① The data refers to the work-related deaths and injuries from accidents reported by Tencent's Human Resources team and verified by local relevant government authorities. In the Mainland of China, such cases, if any, are reported to the Human Resources Department and verified by the Human Resources and Social Security Bureau.

② 2. Work-related fatality rate = (Total number of work-related fatalities / Total number of employees) * 100%.

③ The rate of work-related injuries = (Number of recorded work-related injuries / Number of hours worked) * 1,000,000.

④ The relatively high number of lost working days in 2019 was mainly due to the significant recovery time that we had provided to the employees with fractures.

Training

Indicators	As at 31 December 2021	
Percentage of employees who received training (by gender)	Male	99.63%
	Female	99.59%
Percentage of employees who received training (by management level)	Management	99.79%
	Non-management	99.60%
Average hours of training received by employees (by gender)	Male	39.68
	Female	44.12
Average hours of training received by employees (by management level)	Management	55.52
	Non-managemen	39.53

Note: Training refers to in-person and online courses offered by the Company to employees.

Number of Suppliers

Indicators	As at 31 December 2021	
Number of suppliers by geographical region	The Mainland of China	32,439
	Hong Kong, Macao, and Taiwan	1,711
	Other countries and regions	4,865

Note: The "Number of suppliers" refers to the number of active suppliers in the supplier database during the reporting period, and "geographical region" refers to the place where the suppliers were registered.

Assurance Report



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Independent practitioner's limited assurance report To the board of directors of Tencent Holdings Limited

We have undertaken a limited assurance engagement in respect of the selected Environmental, Social and Governance ("ESG") information of Tencent Holdings Limited (the "Company") listed below in the Company's ESG report for the year ended 31 December 2021 ("the 2021 ESG report") (the "Selected ESG Information").

Selected ESG Information

The Selected ESG Information for the year ended 31 December 2021 is summarised below:

<p>Environmental Performance</p> <ul style="list-style-type: none"> • Scope 1 emissions (million MtCO₂e) • Scope 2 emissions (million MtCO₂e) • Hazardous waste (tonnes) • Hazardous waste per unit of revenue (tonnes/RMB million) • Non-hazardous waste (tonnes) • Non-hazardous waste per unit of revenue (tonnes/RMB million) • Total energy consumption (MWh) • Direct energy consumption (MWh) <ul style="list-style-type: none"> - Gasoline (L) - Diesel (L) - Natural gas (m³) • Indirect energy consumption: Purchased electricity (MWh) • Total energy consumption per unit of revenue (MWh/RMB million) • Renewable energy purchased (MWh) • On-Site renewable energy (MWh) • Average PUE in data centre • Water consumption (tonnes) • Water consumption per unit of revenue (tonnes/RMB million) • LEED certified office space (m²) • Number of LEED certified data centres 	<p>Workplace Performance</p> <p><u>Employment Performance</u></p> <ul style="list-style-type: none"> • Total number of employees • Number of employees by gender <ul style="list-style-type: none"> - Male - Female • Number of employees by age group <ul style="list-style-type: none"> - Under 30 - 30 to 50 - Above 50 • Number of employees by geographical region <ul style="list-style-type: none"> - The Mainland of China - Hong Kong, Macao and Taiwan - Other countries and regions • Number of employees by management level <ul style="list-style-type: none"> - Management - Non-management • Number of employees by employment type <ul style="list-style-type: none"> - Formal employees - Other categories • Total turnover rate • Employee turnover rate by gender <ul style="list-style-type: none"> - Male - Female • Employee turnover rate by age group <ul style="list-style-type: none"> - Under 30 - 30 to 50 - Above 50 • Employee turnover rate by geographical region <ul style="list-style-type: none"> - The Mainland of China - Hong Kong, Macao and Taiwan - Other countries and regions
<p>Supply chain management</p> <ul style="list-style-type: none"> • Number of suppliers by geographical region <ul style="list-style-type: none"> - The Mainland of China - Hong Kong, Macao and Taiwan - Other countries and regions 	

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<p>Customer-centric Services</p> <ul style="list-style-type: none"> • Number of <i>Internet service</i> user complaints received, covering the following categories <ul style="list-style-type: none"> - Games - Payment - Social networks - Other Businesses • Number of <i>Tencent Cloud</i> service user complaints received 	<p>Health and Safety Performance</p> <ul style="list-style-type: none"> • Number of work-related fatalities • Work-related fatality rate • Number of injuries • Rate of work-related injuries • Working days lost due to work-related injury <p>Training</p> <ul style="list-style-type: none"> • Percentage of employees trained by gender <ul style="list-style-type: none"> - Male - Female • Percentage of employees trained by management level <ul style="list-style-type: none"> - Management - Non-management • Average training hours of employees by gender <ul style="list-style-type: none"> - Male - Female • Average training hours of employees by management level <ul style="list-style-type: none"> - Management - Non-management
<p>Anti-corruption</p> <ul style="list-style-type: none"> • Number of concluded legal cases regarding corrupt practices 	
<p>Tech-driven Public Welfare</p> <ul style="list-style-type: none"> • Tencent's annual contributions to the Tencent Foundation (RMB billion) 	

Our assurance was with respect to the year ended 31 December 2021 information only and we have not performed any procedures with respect to earlier periods or any other elements included in the 2021 ESG report and, therefore, do not express any conclusion thereon.

Criteria

The criteria used by the Company to prepare the Selected ESG Information is set out in the section headed "About This Report" in the 2021 ESG report (the "Criteria").

The Company's Responsibility for the Selected ESG Information

The Company is responsible for the preparation of the Selected ESG Information in accordance with the Criteria. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation of Selected ESG Information that is free from material misstatement, whether due to fraud or error.

Inherent limitations

The absence of a significant body of established practice on which to draw to evaluate and measure non-financial information allows for different, but acceptable, measures and measurement techniques and can affect comparability between entities.

Our Independence and Quality Control

We have complied with the independence and other ethical requirements of the International Code of

Assurance Report



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Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

Our firm applies International Standard on Quality Control 1 and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Our Responsibility

Our responsibility is to express a limited assurance conclusion on the Selected ESG Information based on the procedures we have performed and the evidence we have obtained. We conducted our limited assurance engagement in accordance with International Standard on Assurance Engagements 3000 (Revised), *Assurance Engagements other than Audits or Reviews of Historical Financial Information* issued by the International Auditing and Assurance Standards Board. That standard requires that we plan and perform this engagement to obtain limited assurance about whether the Selected ESG Information is free from material misstatement.

A limited assurance engagement involves assessing the suitability in the circumstances of the Company's use of the Criteria as the basis for the preparation of the Selected ESG Information, assessing the risks of material misstatement of the Selected ESG Information whether due to fraud or error, responding to the assessed risks as necessary in the circumstances, and evaluating the overall presentation of the Selected ESG Information. A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks.

The procedures we performed were based on our professional judgment and included inquiries, observation of processes performed, inspection of documents, analytical procedures, evaluating the appropriateness of quantification methods and reporting policies, and agreeing or reconciling with underlying records.

Given the circumstances of the engagement, in performing the procedures listed above we :

- obtained an understanding of the ESG governance structure, ESG strategy and stakeholder engagement process;
- made inquiries of the personnel involved in the preparation of the ESG report regarding the preparation process and the internal control system relating to this process;
- understood the process for collecting and reporting the Selected ESG Information. This included visiting the Company's corporate head office in Shenzhen, 2 office buildings and 2 data centres, understanding the key data collection processes and controls at the selected sites and analysing the relevant data collected;
- performed limited substantive testing on a selective basis and analytical procedures of the Selected ESG Information at the Selected Sites to substantiate the data is appropriately measured, recorded, collated and reported; and
- considered the disclosure and presentation of the ESG report prepared in accordance with underlying records and the ESG Reporting Guide, Appendix 27 to the Main Board Listing Rules by The Stock Exchange of Hong Kong Limited.



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The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement. Accordingly, we do not express a reasonable assurance opinion about whether the Company's Selected ESG Information has been prepared, in all material respects, in accordance with the Criteria.

Limited Assurance Conclusion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the Company's Selected ESG Information for the year ended 31 December 2021 is not prepared, in all material respects, in accordance with the Criteria.

Our report has been prepared for and only for the board of directors of the Company and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the content of this report.

PricewaterhouseCoopers
Certified Public Accountants

Hong Kong, 11 April, 2022

Stakeholder Communication Report



STAKEHOLDER ENGAGEMENT AND MATERIALITY ASSESSMENT SUMMARY OF TENCENT HOLDINGS LIMITED'S ESG REPORT FOR 2021

INTRODUCTION

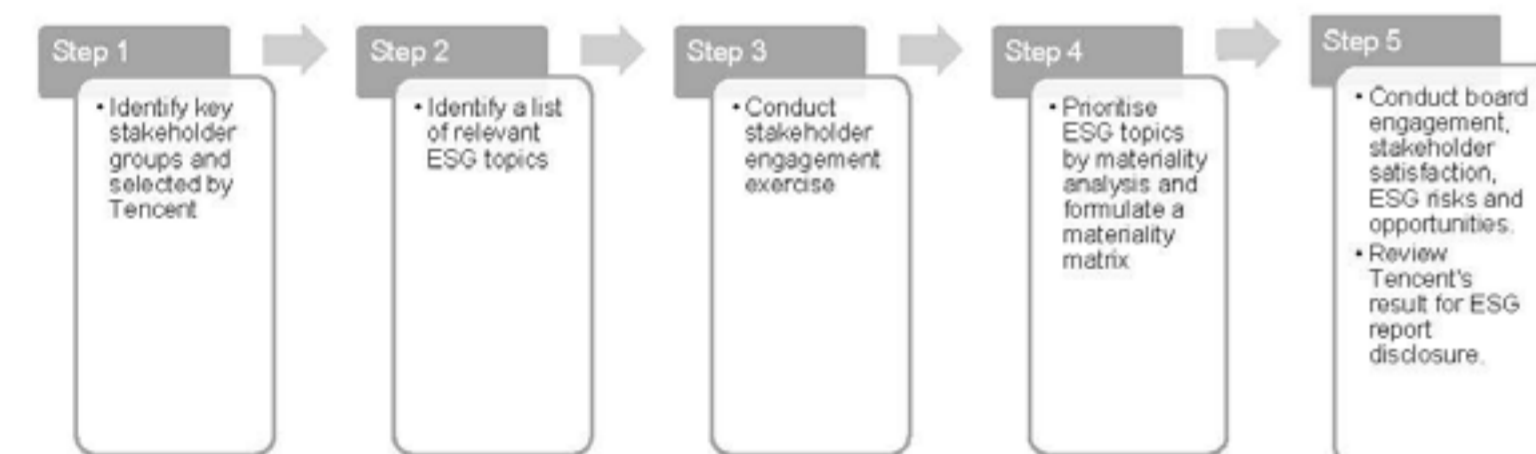
This report represents the shared Environmental, Social and Governance ("ESG") related values, insights and expectations held by Tencent and its stakeholders in 2021.

Tencent ("Group") has identified the need to provide a clear overview of its ESG commitments, and commissioned SGS IECC Limited, an external independent consultancy to conduct a materiality assessment in the form of online surveys and personal interviews to assist them in their ESG reporting.

METHODOLOGY

SGS IECC Limited has taken various regional and international reporting frameworks into consideration for relevant topic selection. These frameworks include the ESG Reporting Guide of the Main Board Listing Rules of the Hong Kong Exchanges and Clearing Limited (hereinafter: "Hong Kong Stock Exchange" or "HKEx"), Task Force on Climate-Related Financial Disclosures ("TCFD"), Global Reporting Initiative ("GRI") standards and Sustainability Accounting Standards Board ("SASB") standards. In addition to the reporting frameworks, we have also incorporated relevant topics that are of concern to their internal and external stakeholders. Towards the end of this initial step, twenty-three relevant material topics were successfully identified.

The Group's key stakeholders (i.e., board of directors, senior management, employees, customers, suppliers, media, scholars, non-governmental organizations, investors and shareholders) were invited to complete the interview or questionnaire. Stakeholders were invited to score the identified relevant topics by considering their importance to the Group's business operations and how they affect the stakeholders themselves. Our materiality assessment process is as follows:



During the stakeholder engagement process, an extra section was provided for them to rank their level of satisfaction.

STAKEHOLDER ENGAGEMENT

Tencent is committed to engaging with its stakeholders and respecting their interests, expectations, and feedback. The Group regularly engages with internal and external stakeholders to provide latest updates and the developments.

Given the breadth of Tencent's business reach, SGS IECC Limited and Tencent were interested in conducting a multi-step, thematic engagement process that would generate insights specific to the Group's current ESG performance and future strategy. SGS IECC Limited designed the engagement by taking GRI, TCFD disclosure guidelines, and SASB standards as technical guidance, and aligned with the requirements of the HKEx.

Using a principle-based and process-centred approach, SGS IECC Limited collected various internal and external stakeholders' opinions via the online stakeholder engagement survey. We guided the participants by utilising various interaction techniques to facilitate the process and providing them with relevant material topics to reflect on. Considering the wide variety and geographic spread of Tencent's stakeholders, we employed an explanatory sequential design, consisting of surveys and one-to-one interviews as our primary engagement format. This mixed-methods approach allowed our data collection team to contextualise

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Member of the SGS Group



responses at each engagement stage. By incorporating iterative questioning throughout a single engagement process, our data collection and analysis teams were consistently assured about the optimal ways to make representative stakeholders feel heard.

Several different stakeholders were asked about relevant topics. The internal and external stakeholder groups are as follows:

Internal Stakeholder Groups	External Stakeholder Groups
Directors and Senior Management	Suppliers
Employees	Customers
	(including Business Clients and Users)
	Investors and Shareholders
	Media
	Scholars
	Non-Governmental Organizations (NGOs)

In January 2022, SGS IECC Limited launched an online stakeholder engagement survey. A total of 1,770 responses were collected across the Group's eight stakeholder groups.

MATERIALITY ANALYSIS

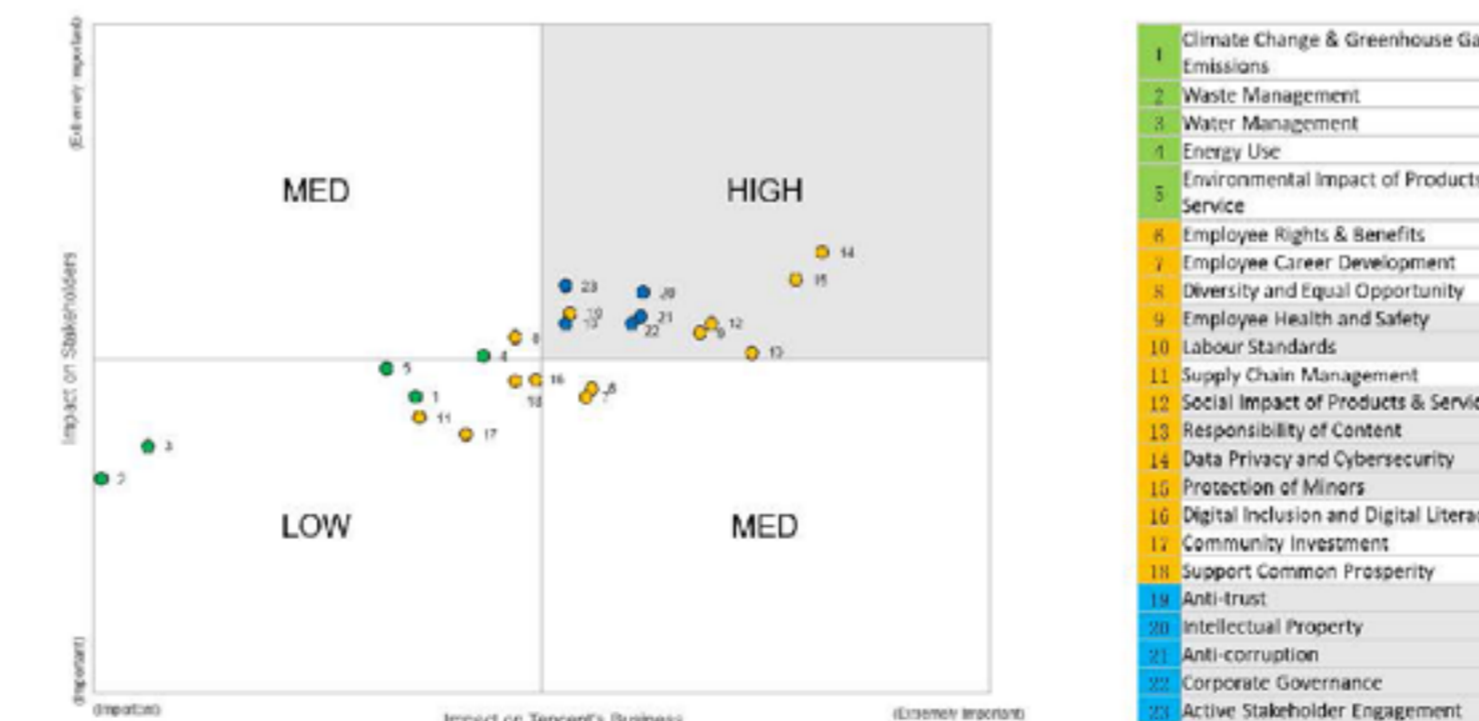
Material topics can have a major impact on the financial, economic, reputational, and legal aspects of the Group, as well as on the system of internal and external stakeholders of Tencent.

The materiality analysis is based on the information obtained from various stakeholders. Each topic was scored by taking a simple average method under each stakeholder group, combined, and indicated on a materiality matrix according to the HKEx guidance.

MATERIALITY MATRIX

The materiality analysis combines internal assessment and identification of external stakeholder interest. Adopting a materiality matrix as one of our assessment tools, the relevant topics that are of significant interest, either internally, externally, or both, have been taken into consideration as highly material topics to the Group.

We have chosen to represent the result of the materiality analysis with a two-dimension materiality matrix. The following materiality matrix visually shows the significance of the 23 relevant topics to internal and external stakeholders:



The material topics which fell in the upper right quadrant of the matrix were defined as highly material. Out of the 11 highly material topics identified, (i) Data Privacy and Cybersecurity, (ii) Protection of Minors, (iii) Responsibility of Content, (iv) Social Impact of Products and Services, as well as (v) Employee Health and



Safety were among the top-five topics. These highly material topics will be discussed in greater detail in the relevant sections of Tencent's ESG Report.

The aforementioned ESG topics are ranked as top 5 based on the sum of their total average scores from both internal and external stakeholders.

REVIEW OF STAKEHOLDER ENGAGEMENT PROCESS IN 2021

SGS IECC Limited reviewed the Group's 2020 and 2021 materiality matrix, and validated this year's approach based on historical comparison and statistical inference. It notes the similarities in engagement outcomes and checks for robustness and representative sampling in this year's method. Even after we expanded the list of relevant material topics from 19 to 23, we were able to see that both years shared similar highly material topics.

We have also included a climate-related risk and opportunity assessment and further studied the satisfactory level indicated by internal and external stakeholder groups.

ADDITIONAL VIEWS AND INSIGHTS

Recognition of Tencent's ESG Performance

Both internal and external stakeholders are satisfied with the Group's ESG performance. Overall, satisfaction has been good across the board in all ESG-related aspects, such as Tencent's efforts and achievements around community investment and product management. Tencent obtained the highest satisfaction on community investment, while we have identified the opportunity to further improve on climate action.

Evolving Investor Expectations

The Group engaged with various investors to understand their expectations related to corporate disclosure. More specifically, they were able to identify investors' preferred rating agency as well as method of communication and frequency.

Climate Change as a Focus




Based on our review, the Group has been actively managing environment and social risks and opportunities. This year, with the involvement of senior management, executives, and directors, we expanded risk assessment analysis to include a preliminary consideration of climate-related financial risks. Incorporating themes under the latest TCFD recommendations, the Group believes climate change is likely to affect their operations due to exposure to the following transitional risks: (i) reputation risk and (ii) policy and legal risk.

Under the recommendation of SGS IECC Limited, Tencent plans to strengthen the assessment and disclosure of climate-related impacts to the business with a more concrete thematic focus, while seeking to overcome underlying challenges and opportunities to demonstrate concrete ambitions and commitment to sustainability.







SGS IECC Limited
6th Apr, 2022

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1.4 Environmental Targets	A1.5; A1.6; A2.3; A2.4	Metrics and Targets- (c)		302-1; 302-2; 305-5	
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2.2 Rights and Benefits	B1; B4; B4.1; B4.2		TC-IM-330a.2	401-1; 401-2; 401-3; 407-1; 408-1; 409-1	
2.3 Talent Development	B3			404-1; 404-2; 404-3	
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3 Responsible Products					
3.1 Data Security	B6; B6.4; B6.5		TC-IM-220a.1; TC-IM-220a.2; TC-IM-230a.2	416-1; 418-1	
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Reporting Framework	HKEx ESG Guide ^①	TCFD	SASB	GRI Standard	SDGs
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5 Community Investment					
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Note: ① "KPI A2.5 Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced", "KPI B6.1 Percentage of total products sold or shipped subject to recalls for safety and health reasons" and "KPI B6.4 Recall procedures", are not closely relevant to the Company's main businesses.