Tencent — Carbon Neutrality Target and Roadmap: *Fact Sheet*
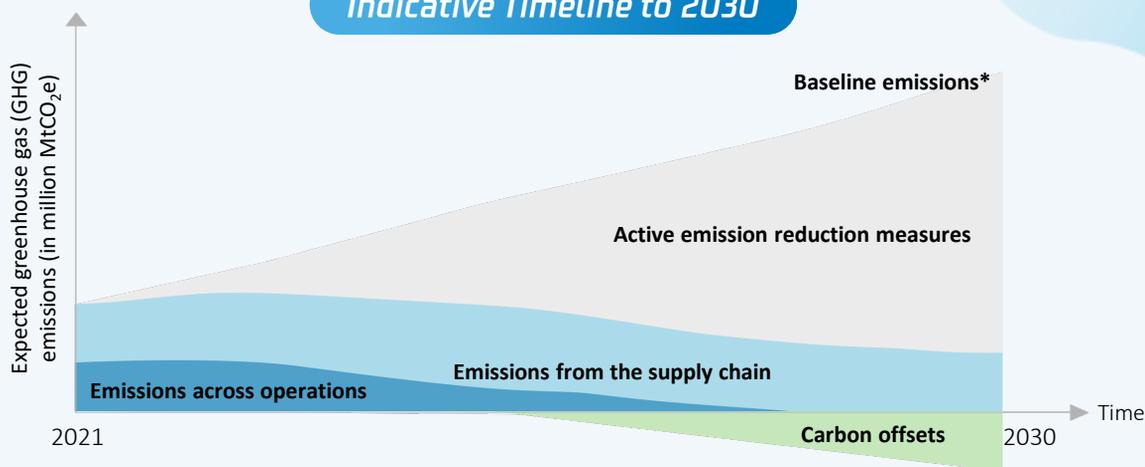
Tencent's Commitments

> **Tencent pledges to achieve carbon neutrality in its own operations and supply chain, and to use green power for 100% of all electricity consumed by 2030.**

Indicative Timeline to 2030

Expected greenhouse gas (GHG) emissions (in million $MtCO_2e$)

Baseline emissions*

Active emission reduction measures

Emissions from the supply chain

Emissions across operations

Carbon offsets

Time

2021 — 2030

Baseline emissions: Level of GHG emitted in the absence of any measures to reduce emissions

Tencent's Current Greenhouse Gas Emissions

In 2021, Tencent emitted the equivalent of 5.111 million tons of carbon dioxide across three main categories:

SCOPE 1
0.019

SCOPE 2
2.349

SCOPE 3
2.743

Figure: Tencent's total greenhouse gas emissions in 2021 (in million $MtCO_2e$)

SCOPE 1	SCOPE 2	SCOPE 3
Emissions from sources owned or directly controlled by Tencent, such as company-owned vehicles, fuel generators, and refrigerants, amounted to **0.019 million** $MtCO_2e$, or **0.4%** of the company's total emissions.	Emissions from the generation of power and other energy purchased for Tencent operations, for example, electricity consumed by company-owned or jointly constructed data centers and office buildings, amounted to **2.349 million** $MtCO_2e$, or **45.9%** of the company's total emissions.	Indirect emissions from the supply chain, such as infrastructure materials, purchased servers and energy use in company-leased data centers, amounted to **2.743 million** $MtCO_2e$, or **53.7%** of the company's total emissions.

Carbon Neutrality Across Operations and the Supply Chain

Tencent will prioritize the reduction of emissions and the adoption of renewable energy, which will be supplemented by a minimum use of carbon offsets, to achieve the goal of carbon neutrality.

3 KEY INITIATIVES

Tencent will achieve net zero emissions via

ENERGY EFFICIENCY

Improve resource efficiency by lowering energy consumption per unit of output throughout its operations.

Enhanced Energy Efficiency in Tencent Offices

Tencent has obtained several LEED Gold certifications and managed energy consumption for all its owned and rented office space in China.

Modular Data Centers and Improving PUE

Tencent's fourth-generation T-Block technology enables data centers to be modular and prefabricated, saving 250 million kWh of electricity a year for a campus with 300,000 servers.

T-Block can lower PUE to 1.3 and as much as 1.06.

Innovations in Heating and Cooling Technology

Explore energy-saving cooling technologies and upgrade heat recovery systems across Tencent's data centers.

Tnebula AI Platform

The new Tnebula carbon management platform, in use in more than 100 data centers globally, can automatically and accurately acquire energy data in real time and conduct refined classification, statistics and scientific modeling to provide emission reduction solutions.

RENEWABLE ENERGY

Significantly increase the proportion of renewable energy used, especially in electricity consumption; actively participate in green power trading; and explore investments in renewable energy projects.

Distributed Rooftop Photovoltaic Systems at Data Centers

More than 80 MW of new energy projects have been built, or are being built, in Tencent data centers. The expected annual power generation capacity will exceed 80 million kWh after completion.

Microgrid Technologies

Tencent is planning to connect energy storage power stations (e.g. in Qingyuan Qingxin Park and Shanghai Qingpu Park) to enable flexible and adjustable power utilization at data centers.

Renewable Energy Procurement

Tencent has committed to purchasing 504 million kWh of renewable energy in 2022 and secured 6 wind and solar projects' annual partial generation capacity.

Centralized Renewable Energy Power Plants

Exploration of centralized renewable energy power plants, with a focus on onshore wind and solar technologies, as well as emerging power generation methods such as offshore wind power.
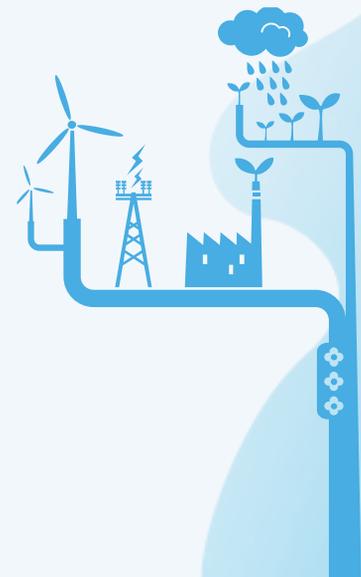
CARBON OFFSET

Adopt carbon offsets for the remaining segments which cannot be reduced otherwise.

Nature-Based Solutions (NBS)

Explore nature-based solutions (NBS) like forestry and ocean carbon sinks, as well as the development of emerging carbon sink technologies. Tencent is also exploring new ways to support sustainable agriculture.

Emerging Carbon Offset Technologies

Tencent will also support the development of emerging carbon offset technologies.

Helping Our Community Reach "Net Zero"

In addition to its own carbon neutrality goal, Tencent hopes to be a leader in encouraging society to adopt greener and lower-carbon consumption, facilitating a low-carbon transformation across industries, and promoting sustainable economic and social development, which is in line with its strategic goal to promote sustainable innovation for social value.

Tencent will focus on empowering three key stakeholders:

CONSUMERS

Promote low-carbon lifestyles and green consumption habits through the development of sustainability-themed mini programs inside its popular Weixin app and games.

- Launch a **Carbon Neutrality Quiz** Mini Program to promote awareness and build more knowledge about how to live a low-carbon lifestyle.
- Develop the **"Carbon Island"** Mini Game to guide the public towards carbon neutrality.
- Launch the **"Low Carbon Planet"** Mini Program to build a carbon inclusion platform.
- Tencent's TiMi Studio Group was invited by the United Nations Environment Programme (UNEP) to join the **"Playing for the Planet Alliance"**. Eco-friendly messages in TiMi's games have since reached 110 million players globally.

BUSINESSES

Facilitate a low-carbon transformation for the industrial sector by offering technologies to digitalize business operations and manage emissions reduction.

- Tencent's digital technologies help optimize energy efficiency to achieve zero carbon buildings and parks.
- Tencent's work and collaboration software suite, including **Tencent Meeting/VooV Meeting**, **WeCom**, **Tencent Docs**, and **Tencent WeCard**, has reduced carbon emissions by more than 15 million tons by reducing the need for business travel and facilitating business online.
- In 2019, Tencent took the lead in proposing the **"AI FOR FEW"** initiative, which uses artificial intelligence to address the three global challenges of food, energy and water security.
- Tencent Cloud will offer green computing power to businesses to help them build low-carbon digital infrastructure.

SOCIETY

Support the advancement of critical technologies for carbon neutrality by pursuing partnerships in areas including the carbon capture, utilization, and storage value chain.

- Focus on **disruptive innovative technologies** to help the development and industrialization of low-carbon, zero-carbon and carbon-negative technologies.
- Focus on **social issues** related to carbon neutrality, such as rural revitalization and scientific development, to create broader social value.
- Tencent's **SSV organization** will achieve sustainable social value through innovation, guided by the mission of using Tech for Good.

Partnerships and Initiatives

Tencent has joined the **Science-Based Carbon Targets initiative (SBTi)** and plans to join **RE100**.

Tencent will disclose its progress towards a reduction of emissions and its carbon neutrality goals in its **annual ESG reports**, which are available to the public on Tencent's website.

Tencent leads the carbon neutrality professional committee at the **Internet+ Development Association of China (IDAC),** which is establishing an open access patent technology organization to make it easier for enterprises to use low-carbon technologies for free.

Tencent Cloud established a **Carbon Neutrality Accelerator program** for disruptive start-up enterprises around the world. It focuses on three key areas including using AI to save energy and reduce emissions, carbon neutrality, and carbon trading.

The **Tencent SSV Carbon Neutrality Lab** is actively exploring various forms of collaboration with universities and research institutes, is continuously supporting carbon neutrality technology innovation and digital practices, and is promoting the transformation of industry, academia and research.