

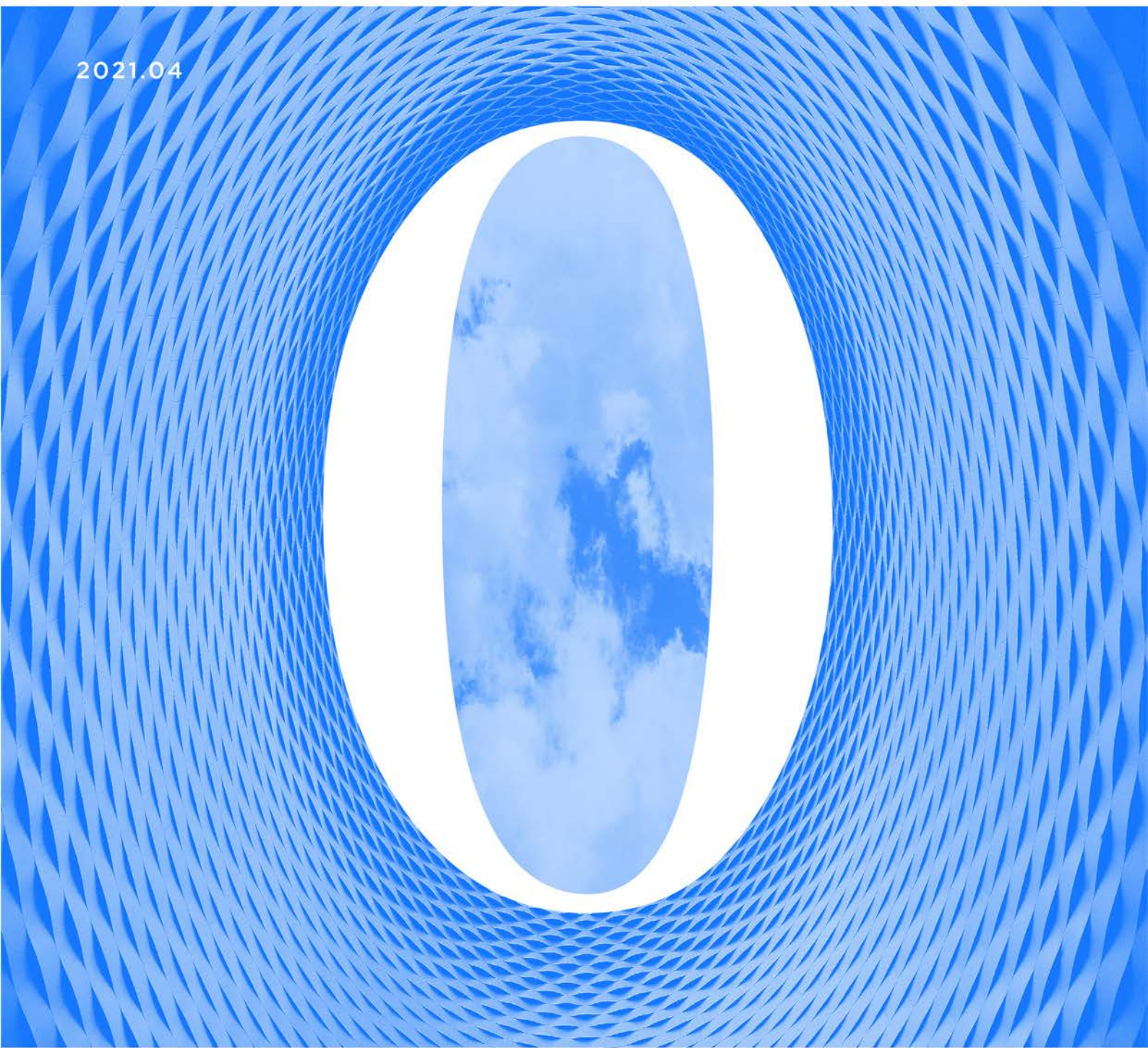
碳中和路线图

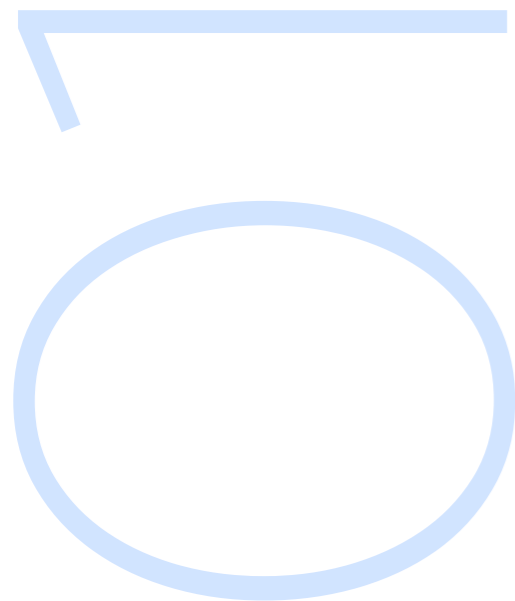
CARBON NEUTRALITY ROADMAP

ANT GROUP



2021.04





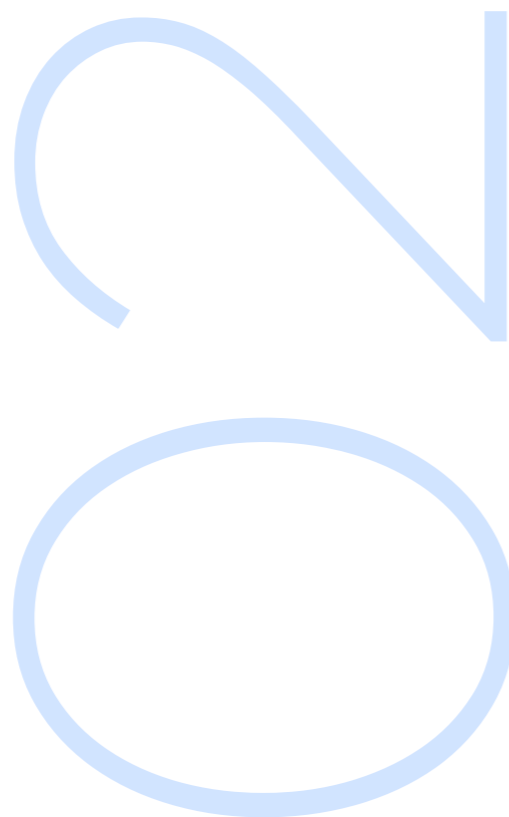
蚂蚁集团碳中和承诺

ANT GROUP'S
COMMITMENT TO CARBON
NEUTRALITY

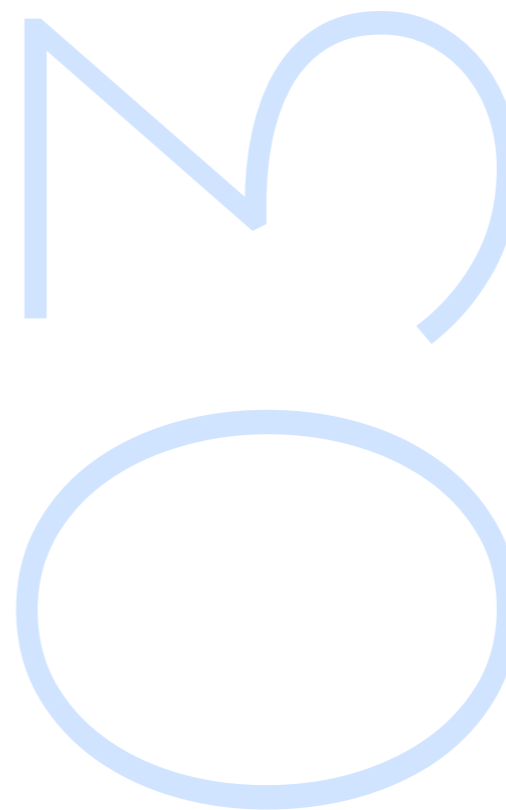
01-04

蚂蚁集团碳中和目标范围

ANT GROUP'S TARGET SCOPES
FOR CARBON NEUTRALITY



05-08



蚂蚁集团碳中和行动计划

ANT GROUP'S CARBON
NEUTRALITY ACTION PLANS

明确和不断优化碳中和路径

实现最大程度减排

Specify and continuously optimize the path to carbon
neutrality to minimize carbon emissions

加强温室气体排放科学管理

持续提升碳中和信息透明度

Strengthen the scientific management of
greenhouse gas emissions and improve the
transparency of carbon neutrality

审慎评估和使用碳抵消方案

Prudently evaluate and adopt carbon offset solutions

09-26

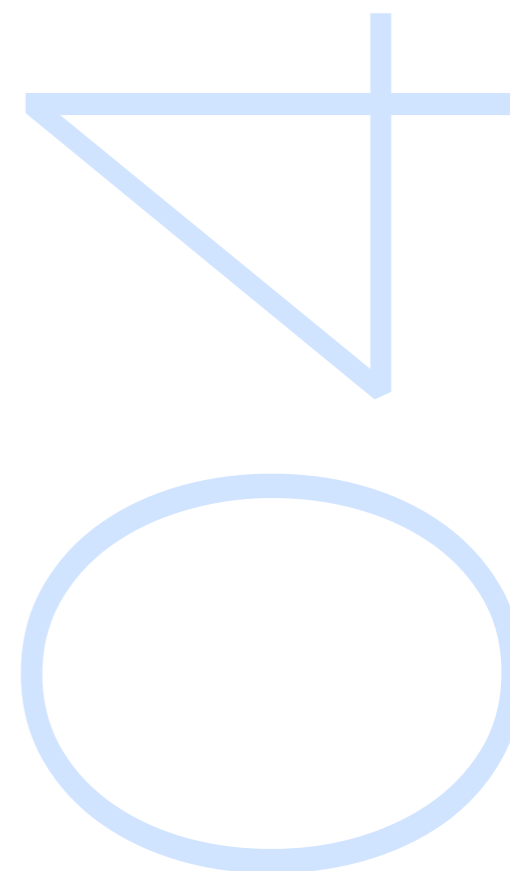
蚂蚁集团碳中和倡议

ANT GROUP CARBON
NEUTRALITY INITIATIVE

打造绿色数字经济平台

倡导全社会共同行动

Build a green digital economy platform
and call for joint action



27-32

蚂蚁集团碳中和承诺

ANT GROUP'S COMMITMENT TO CARBON NEUTRALITY

(范围一、二)

实现运营排放 碳中和

We will achieve carbon neutrality in operations (scopes 1 and 2) starting 2021.

2021 年起

(范围一、二、三)

净零排放

We will realize net-zero emissions (scopes 1, 2 and 3) by 2030.

2030 年

作为一家负责的互联网金融科技企业，蚂蚁集团致力于通过科技创新，推动互联网技术在生产、生活领域的应用，促进数字经济助力环境和社会高质量发展。

为响应国家“3060”碳中和目标，蚂蚁集团启动碳中和行动，邀请中环联合认证中心（简称：CEC）对2020年碳排放量进行盘查，多方论证制定蚂蚁集团碳中和方案，并邀请碳中和及相关领域行业专家进行方案评审及优化。

2021年3月12日，蚂蚁集团郑重承诺：

2021年起，实现运营排放的碳中和（范围一、二）；

2030年实现净零排放（范围一、二、三）；

定期披露碳中和进展。

Ant Group is dedicated to promoting the application of digital technologies in production and daily life through technological innovation. We also aims at advancing the digital economy as a way to achieve high-quality environmental and social development. As a responsible financial technology company and in alignment with China's overall carbon neutrality goal, Ant Group pledges that:

We will achieve carbon neutrality in operations (scope 1 and 2) starting 2021, realize net-zero emissions (scopes 1, 2 and 3) by 2030, and report on our progress toward reaching carbon neutrality on a regular basis.



蚂蚁集团
ANT GROUP

蚂蚁集团的碳中和目标范围

ANT GROUP'S TARGET SCOPES FOR CARBON NEUTRALITY

依据温室气体核算体系，蚂蚁集团碳中和行动将涵盖二氧化碳、甲烷、氧化亚氮、氢氟碳化物、全氟碳化物、六氟化硫和三氟化氮等七种主要温室气体。

Based on Greenhouse Gas Protocol, Ant Group's carbon neutrality actions will focus on seven major types of greenhouse gases, namely: CO₂, CH₄, N₂O, HFCs, PFCs, SF₆, NF₃.

蚂蚁集团碳中和将涵盖经营活动的所有相关温室气体排放，包括：

范围一：化石燃料燃烧所导致的直接排放以及逸散排放；

范围二：电力和热力等外购能源所导致的间接排放；

范围三：供应链上的相关间接排放，包括租用数据中心服务、员工商务旅行、员工集中通勤租用车辆等所导致的排放。

未来，蚂蚁集团将逐步提升识别和测量温室气体排放的能力，推动实现全供应链的碳中和。

Greenhouse gas emissions caused by the group's operations activities will be measured from three scopes:

Scope 1:the direct emissions from combustion of fossil fuel and fugitive emissions.

Scope 2:the indirect emissions from the consumption of purchased electricity and heat.

Scope 3:the indirect emissions in the supply chain, which includes emissions caused by the leasing of data center services, our employees' business travel, and their collective commuting.

In the future, Ant Group is set to improve its capabilities to monitor and measure greenhouse gas emissions, to help achieve carbon neutrality in the entire supply chain.



蚂蚁集团碳中和行动计划

ANT GROUP'S CARBON NEUTRALITY ACTION PLANS

蚂蚁集团将充分发挥互联网科技企业的优势，在推进自身减排的同时，带动供应链上下游共同实施降碳举措，力争尽早实现碳中和目标。

Ant Group will give full play to our advantages as an innovative technology company. We will not only strive to reduce carbon emissions within the group, but also join hands with the upstream and downstream companies of the supply chain to achieve carbon neutrality in a wider sense as soon as possible.

明确和不断优化碳中和路径 实现最大程度减排

SPECIFY AND CONTINUOUSLY
OPTIMIZE THE PATH TO CARBON
NEUTRALITY TO MINIMIZE CARBON
EMISSIONS



针对蚂蚁集团自身的碳减排行动

CARBON EMISSION REDUCTION ACTIONS
FOR ANT GROUP

▲ **积极推进绿色办公园区建设，降低建筑、运输等的排放**
2021年起，蚂蚁集团将不断推动自身减排行动和可再生能源的使用，至2025年，实现范围一、二的绝对温室气体排放量较2020年下降30%。

▲ **Push ahead with the construction of green campuses to reduce emissions from buildings and transportation**

Starting from 2021, Ant Group will keep pushing ahead with the use of renewable energy and carbon reduction efforts, to have a 30% reduction of absolute emissions in scopes 1 and 2 by 2025, compared with 2020.

(范围一、范围二)
(Scopes 1 and 2)

温室气体排放量

Greenhouse gas emissions

(第一阶段 First stage)
降低 to reduce 30%

30%

2020年

2025年

·现有办公园区进行节能减排改造，提高能效

一、逐步推行自建办公园区使用可再生能源电力。评估光伏发电、风光互补、太阳能供热等可再生能源供应的可行性，优化办公园区的能源供应结构。至 2030 年，集团已有自建办公园区，最大程度实现可再生能源电力供应。

二、采取多元化节能减排措施，对现有办公园区进行绿色化升级改造。比如：优化空调负荷及空调系统的冷、热源机组能效；使用节能设备等，从源头减少能源消耗；建设可视化、智能化的能源管控中心，对能源消耗实施精细化管理等。

·新建办公园区按照绿色建筑标准进行设计、建设与运营

严格按照绿色建筑标准设计、建设与运营新建办公园区。

比如：使用低碳水泥、环保涂料等绿色建材；关注建筑本身的性能，如节地、节水、节能、节材以及环境保护等，并通过绿色建筑专业认证。

·TO REMODEL EXISTING CAMPUSES TO BOOST EFFICIENCY, SAVE ENERGY, REDUCE EMISSIONS

First, Ant Group will gradually promote the use of renewable energy power in our self-built campuses. We will evaluate the feasibility of adopting renewable energy power generation solutions such as photovoltaic systems, wind-solar hybrid power systems, and solar heating systems, as well as optimize the energy supply structures of the campuses. By 2030, the self-built campuses will be powered by renewable energy to the largest extent. Vehicles leased for employee commuting and maintenance work will all be powered by electricity.

Second, Ant Group will take diversified energy conservation and emissions reduction measures to upgrade our existing campuses. For example, we will take measures to optimize the air conditioning load and improve the efficiency of the cold and heat source units of air conditioning systems. We will utilize energy-saving equipment to reduce energy consumption from the beginning. We will build a visible, intelligent energy management control center to precisely manage energy consumption.

·TO DESIGN, BUILD, AND OPERATE NEW CAMPUSES IN ACCORDANCE WITH GREEN BUILDING STANDARDS

Ant Group will design, build, and operate new campuses in strict accordance with green building standards. For example, we will adopt low-carbon cement and environmentally-friendly coatings, among other green building materials, and focus on the building performance, in terms of our land-saving, water-saving, energy-saving, material-saving, and environmentally friendly features, among others. We will also obtain green building certifications granted by professional agencies.



优化空调负荷
To optimize the air conditioning load



可视化、智能化
能源管控中心
A visible, intelligent energy management control center



节能设备
Utilize energy-saving equipment



新能源汽车
New energy vehicle



► 提升员工碳中和意识，鼓励员工积极参与

一、建立激励机制，倡导员工践行低碳办公行为。提升蚂蚁员工减碳意识，鼓励员工绿色办公、绿色出行。进一步优化激励机制，促进员工参与减排。

二、提升员工减碳意识。充分利用员工创意和员工公益，鼓励和邀请员工参与蚂蚁集团碳减排工作。

► TO RAISE EMPLOYEE'S AWARENESS OF CARBON NEUTRALITY AND ENCOURAGE THEM TO TAKE ACTIONS

First, Ant Group will establish an incentive mechanism to encourage employees to achieve low-carbon activities in the office. We will raise employees' carbon reduction awareness and encourage them to work and travel in a green way. We will also further optimize the incentive mechanism for employees to participate in carbon emissions reduction activities.

Second, Ant Group will further raise employees' carbon emissions reduction awareness and encourage them to contribute ideas. Ant Group will take full advantage of our employees' ideas and charitable campaigns to encourage and invite them to participate in the emissions reduction action.



针对供应链的碳减排行动

CARBON EMISSIONS REDUCTION ACTIONS FOR SUPPLY CHAIN

持续推动数据中心节能

蚂蚁集团将积极推动上游数据中心利用自然冷源、液冷技术等节能措施降低 PUE 值，选择 PUE 值低于行业平均水平的数据中心；至 2025 年，供应链数据中心整体实现可再生能源电力消费占比达到 30%。推动供应商数据中心充分发挥互联网科技企业优势，进行持续低碳创新。

一、通过优化选址、利用自然冷源、液冷技术等措施，降低数据中心的 PUE，建设示范型绿色低碳数据中心。

二、与供应链共同推进数据中心使用或通过电力市场化交易方式购买所在地区的可再生能源电力。在确保安全的前提下，优先使用可再生能源电力，打造高效可靠的绿色数据中心。

三、推进可再生能源投资，保障数据中心实现可再生能源替代。

TO CONSTANTLY PROMOTE ENERGY-SAVING DATA CENTERS

Ant Group will actively encourage upstream data centers to adopt natural cold sources, liquid cooling and other energy-saving measures to lower PUE (power usage effectiveness) and choose the data centers where the PUE value is lower than the industry average. Meanwhile, the group aims to raise the overall proportion of renewable energy power in total power consumption at our data centers to 30% by 2025.

Ant Group will give full play to our advantages as an innovative technology company to continuously promote low-carbon innovation in the supply chain. First, we will optimize location selection and encourage suppliers to adopt



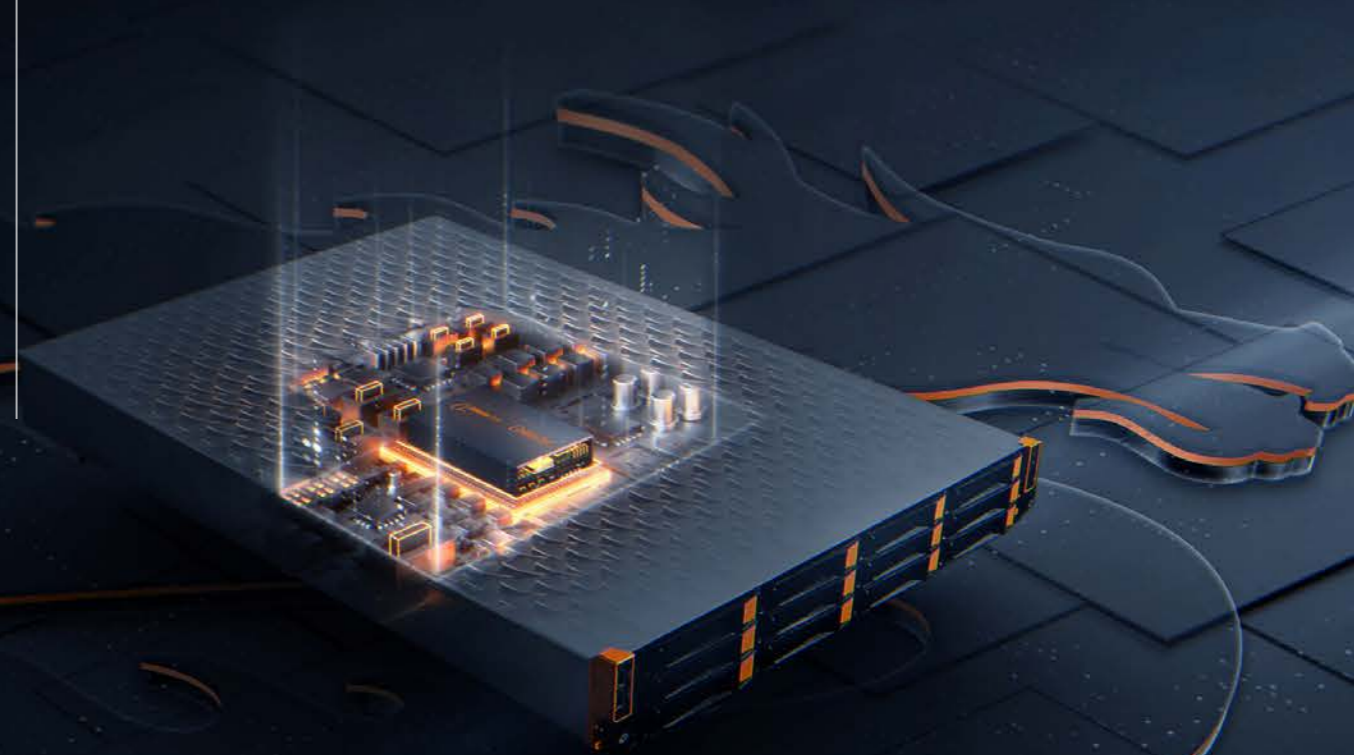
30%

The overall proportion of
renewable energy power

可再生能源电力消费占比

2025年

technologies including natural cold sources, liquid cooling to lower the PUE value of the data center services and build demonstrative green and low-carbon data centers. Second, we will team up with our supply chain partners to promote the use of renewable energy power in data centers or purchase renewable energy power in market-oriented ways. Taking safety as a premise, the group will prioritize the use of renewable energy power, to promote the construction of reliable green data centers. Third, Ant Group is willing to put more investment to ensure that the data center services we use can be powered by renewable energy to a greater extent.



► 推动其他供应环节减排

建设绿色采购机制，逐步推进供应链的碳中和。全面推进无纸化采购。持续提升环保产品的设计与应用，优先选择低碳高效生产 / 服务模式的供应商。2021 年起，将碳减排管理目标纳入供应商管理准则，逐步推动供应商制定碳中和目标并实施；2025 年前实现供应链碳排放全面盘查。

► TO PROMOTE ENERGY CONSERVATION AND EMISSIONS REDUCTION IN OTHER LINKS OF THE SUPPLY CHAIN

Ant Group will establish a green sourcing mechanism to pursue carbon neutrality in the supply chain, fully advance paperless sourcing, continuously improve the design and application of environmentally-friendly products, and give priority to suppliers with lower-carbon and high-efficiency production / service models. The group has included its carbon emissions reduction goals into its supplier management principles and gradually driven its suppliers to set and achieve carbon neutrality goals since 2021. In addition, we will complete a full assessment of greenhouse gas emissions in our entire supply chain by 2025.



推进绿色投资 引导资本向低碳领域流动

TO INCREASE GREEN INVESTMENTS
GUIDE CAPITAL TOWARD LOW-CARBON SECTORS

蚂蚁集团将稳步推进绿色投资，共建碳中和技术创新基金。在蚂蚁集团相关领域推动节能减排投资，积极寻求绿色科技的投资契机，引导资本向低碳领域流动。

Ant Group will gradually step up our green investments and set up a technology innovation fund for the carbon neutrality goal. We will promote investments in energy conservation and emission reduction in relevant fields, proactively seek opportunities for investments in green technologies, and direct investments to low-carbon fields to gradually improve capabilities and standards for achieving carbon neutrality.

加强温室气体排放科学管理 持续提升碳中和信息透明度

STRENGTHEN THE SCIENTIFIC MANAGEMENT OF GREENHOUSE GAS EMISSIONS AND IMPROVE THE TRANSPARENCY OF CARBON NEUTRALITY

温室气体科学管理是蚂蚁集团实现“净零排放”目标及落实减排路径的基础。蚂蚁集团将依据国际标准，与第三方专业机构一起以科学严谨的态度开展温室气体排放核算。同时，建立温室气体排放跟踪与监控机制，将率先把区块链技术应用在碳中和的过程中，利用区块链技术的防伪和防篡改的特点，将所有碳排放及碳减排数据上链，实现记录不可篡改，随时可追溯查证。并将进一步完善信息披露制度，定期披露碳中和成果，持续增强碳中和信息透明度。

The scientific management of greenhouse gases serves as the basis for the realization of "net-zero emissions" as well as the implementation of actions to reduce carbon emissions for Ant Group. In accordance with relevant international standards, the group will collaborate with a third-party organization to account for greenhouse gas emissions in a scientific and prudent way. Also, we will establish a greenhouse gas emissions tracking and monitoring mechanism to take the lead to apply blockchain to trace the carbon neutrality process. Taking advantage of blockchain technology's anti-counterfeiting and anti-tampering features, the group will move all of our carbon emissions and emissions reduction data onto the blockchain so records are traceable and tamper-proof. In addition, we will further improve our information disclosure mechanism to disclose carbon neutrality progress on a regular basis and gradually improve the transparency of carbon neutrality information.



审慎评估和使用碳抵消方案

PRUDENTLY EVALUATE AND ADOPT CARBON OFFSET SOLUTIONS

蚂蚁集团将尽最大努力减少自身的碳排放，并积极推动供应链的碳减排行动，达成碳中和目标，但基于条件限制，对于无法减排的部分，蚂蚁集团也将审慎评估和使用碳抵消方案。

一、投资森林及其他基于自然的解决方案。2021年起，蚂蚁集团将每年开展以员工名义种植碳汇林等方式，适时开发合格的碳抵消项目，用于抵消剩余排放量。

二、购买碳信用产品。对于抵消减排后的剩余排放量，蚂蚁集团将通过购买合格的碳信用产品进行中和，实现净零排放。

Ant Group will strive to reduce carbon emission, actively promote reduction efforts in our supply chain and achieve the carbon neutrality target. As for the portion that cannot be reduced due to certain restraints, Ant Group will prudently evaluate and adopt carbon offset solutions.

First, Ant Group will invest in forests and other nature-based solutions. In each year starting from 2021, Ant Group will plant trees in the name of our employees and develop eligible carbon offset credits at proper times to offset remaining carbon emissions.

Second, Ant Group will purchase eligible carbon credits to neutralize the emissions left after carbon offsetting, so as to realize net-zero emissions.



购买碳信用产品
Buy carbon credit products



投资森林
Invest in forest-planting



蚂蚁集团碳中和倡议

ANT GROUP'S CARBON NEUTRALITY INITIATIVE

打造绿色数字经济平台

倡导全社会共同行动

Build a green digital economy platform
and call for joint action

积极发挥互联网平台作用，打造绿色数字经济平台，倡导公众践行绿色生活方式，共同打造绿色低碳的未来。同时，带动行业深度参与，推动绿色数字经济发展。

一、继续通过“蚂蚁森林”等创新模式带动与激励公众参与个人行为减排，践行绿色生活方式，改善生态环境。蚂蚁森林的成绩归功于广大“种树人”，归功于全社会，而不归功于蚂蚁集团，不会用于蚂蚁集团自身的碳中和。

二、发挥金融科技平台能力，与合作伙伴一起推动绿色支付、绿色信贷、绿色消费、绿色保险、绿色基金等绿色金融的广泛应用，引导金融资源向绿色创新倾斜，促进经济社会可持续发展；

三、与专业机构展开合作，支持建立金融科技行业碳中和实施指南，推动行业的碳中和进程。

Ant Group will build on our strengths to create a green digital economy platform and encourage the public to lead greener lifestyles, so as to achieve a green and low-carbon future. In the meantime, we will work with industry players to together promote a green digital economy.

First, we will continue to drive and encourage individuals to participate in emission reduction, adopt green lifestyles, and improve the ecological environment through innovative models like "Alipay Ant Forest."

Second, we will take advantage of our capabilities as a fintech platform to promote the wide applications of green finance, including green payment, green credit, green consumption, green insurance, green funds, and green bonds. We will work with partners to guide financial resources toward green innovation, and to promote sustainable economic and social development.

Third, Ant Group will strive for a wider impact on the industry by cooperating with professional institutions to work out a carbon neutrality implementation guideline for the fintech industry to accelerate carbon neutrality in the industry.



截至 2020 年底
By the end of 2020

带动参与人数
More than 550 million participants

5.5⁺
亿人

荒漠化地区种植真树
More than 220 million real trees planted in arid areas

2.2⁺
亿棵

种植总面积
The total planting area is more than 3 million mu

300⁺
万亩

公益保护地
13 public protected area

13[↑]

保护地守护面积
Public protected area covers more than 420 square kilometers

420⁺
平方公里

生态系统生产总值 GEP
More than 11.3 billion yuan GEP of Ant Forest

113⁺
亿元

来自《蚂蚁森林 2016-2020 年造林项目 GEP 核算报告》
From Ant Forest 2016-2020 Afforestation Project Gross Ecosystem Product (GEP) Accounting Report



提供便民快捷的电子支付、扫码点餐、电子发票等服务，减少纸张浪费，提高效率。

Reduce paper waste and enhance efficiency through convenient and fast services like e-payment, QR code-based food ordering systems, and e-invoices, among others.



建立小微企业绿色评价体系和绿色供应链认证体系，构建“绿色采购贷”、“绿色 0 账期”等产品，助力绿色企业融资。

Help green enterprises raise funds by developing a green performance evaluation system for small and micro enterprises and a green supply chain certification system; provide services such as favorable loans for merchants purchasing from green enterprises and immediate payment to sellers of green products.



探索绿色金融支持绿色消费，倡导和鼓励用户选购绿色产品、节约资源和能源，转变消费理念。

Explore green finance to support green consumption; encourage consumers to buy green products, save resources and energy, and adjust their consumption habits to become more sustainable.



探索构建与节能减排行为相连接的创新车险模式，倡导公众减少出行，鼓励使用公共交通出行。

Explore an innovative car insurance model that suits the purposes of energy conservation and emissions reduction; urge commuters to reduce unnecessary trips and choose public transport instead.



发挥平台力量，搭建绿色基金主题专区，鼓励和倡导用户绿色责任投资。

Create a dedicated section for green funds through digital platforms to encourage green and responsible investment.



报告内容由中环联合认证中心提供科学论证与专业支持
Special thanks to our partner CEC for providing their professional support to this report