Baidu 2024 Environmental, Social and Governance (ESG) Report



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About This Report

This report is the sixth Environmental, Social and Governance (ESG) Report released by Baidu and provides a comprehensive overview of the company's ESG performance. This report has been verified by a third-party assurance in accordance with AA1000 standards.

Reporting Period

This report is an annual report covering work of the financial year from January 1, 2024 to December 31, 2024 ('reporting period'). Some information may extend beyond the reporting period. The data and information disclosed in this report are sourced from official documents and statistical reports of Baidu, covering all relevant key information of Baidu Core (excluding Baidu's holding company).

Basis of Preparation

This report was prepared in accordance with the *ESG Reporting Guide 2.0* issued by the NASDAQ Stock Exchange, the *Environmental, Social and Governance Reporting Guide* and the relevant consultation papers of the Listing Rules issued by Hong Kong Exchanges and Clearing Limited (HKEX), with reference to the "Ten Principles" of the United Nations Global Compact (UNGC), the *Sustainability Reporting Standards (GRI Standards)* issued by the Global Sustainability Standard Board (GSSB), the *SASB Standards* issued by the Sustainability Accounting Standards Board (SASB), International Financial Reporting Standards (IFRS) Sustainability Disclosure Standards issued by the International Sustainability Standards Board (ISSB), and the United Nations Sustainable Development Goals (UN SDGs).

The following disclosure principles have been followed in this report:

- **Materiality:**

Baidu conducted a double materiality assessment in the current reporting year to assess topics of material importance. We have responded to these material topics in this report.

- **Quantitative:**

We disclose quantitative KPIs and performance targets. Where applicable, we have provided comparative data for select KPIs.

- **Balance:**

The purpose of this report is to provide an objective account of Baidu's ESG initiatives during the reporting period, covering the environment, product quality, information security and privacy protection, employees, human rights, and community development.

- **Consistency:**

This report uses consistent disclosure and statistical methods to ensure data is comparable with that of previous years. Changes that may affect the comparability of the report are explained in the corresponding sections.

Availability of this Report

This report is available on our official ESG website (esg.baidu.com) in simplified Chinese, traditional Chinese, and English. For more information on our business ethics, human capital, and low-carbon initiatives, please visit the Baidu ESG website.

We welcome any questions or feedback you may have on the information presented in this report. Please email us at esg@baidu.com.

Forward-looking Statement

Some parts of this report contain forward-looking statements, which are subject to uncertainties and may cause actual results to differ materially from those presented. Baidu undertakes no obligation to update any forward-looking statements in this report.

Message from the CEO



This year marks Baidu's 25th anniversary. During this journey, we have stayed true to our mission of "make the complicated world simpler through technology." From the emergence of the internet to the rise of mobile connectivity, and now the dawn of the AI era, we have always been at the forefront of technological innovation. Today, artificial intelligence is reshaping our economy and society. We invest over 20% of our annual revenue in R&D and have built a full-stack AI technology ecosystem encompassing everything from chips and frameworks to models and applications, fully preparing ourselves to the lead the transformation unleashed by the AI era.

The value of technology ultimately lies in solving real-world problems. Over the past year, we have witnessed the benefits of artificial intelligence in a wide range of fields-Baidu's sign language "digital human" has facilitated communication for 20 million hearing-impaired people, our Comate coding tool has empowered visually impaired developers to write code, and our PaddlePaddle platform has helped identify illegal wildlife products to protect endangered species. We have helped workers employed in traditional industries acquire additional skills to enhance their value, while Baidu employees have joined volunteer initiatives, using their technical expertise to develop new solutions. In the future, as barriers to AI adoption continue to fall, we look forward to even more technological breakthroughs that will drive the creation of broader societal value.

With every technological advancement, there is a duty to ensure its responsible application. Over the past year, we have intensified our efforts in areas such as content governance, data security, and AI ethics, ensuring that every technological advancement benefits society. We have continuously enhanced our data security measures and improved the ethical performance of AI algorithms in order to provide users and customers with safe and trustworthy products and services. Our ESG practices have also garnered widespread recognition—our MSCI ESG rating was upgraded to A, and we were honored to be included in the S&P Global Sustainability Yearbook 2025. At the same time, we actively cultivate AI talent and empower people to acquire new skills—securing us a place on the Forbes World's Best Employers list. These recognitions not only affirm our efforts but also underscore our responsibilities, motivating us to continue on the path of sustainable development.

ESG is not only a concept, but also a guide to action, which ultimately speaks louder than words. Looking ahead, we are committed to ensuring effective ESG governance in order to enhance our resilience, overcome challenges, and accelerate progress. By leveraging the power of AI, we believe that all industries can transform productivity and make life better for everyone.



Co-founder, Chairman and
Chief Executive Officer

About Baidu

Baidu is a leading AI company with an extensive Internet ecosystem. Driven by our mission to "make the complicated world simpler through technology," we are committed to technological innovation and aim to be a top global technology company which best understands users' need and enables their growth.

Over the years, we have continued to acquire expertise in AI technologies such as deep learning, natural language processing, speech and vision, and have applied numerous technological achievements to our search engines and other products. In the past decade, Baidu has continuously invested in emerging AI technologies such as deep learning, large language models, autonomous driving, and AI chips, making us one of the few global AI companies with a full-stack layout encompassing chips, frameworks, models, and applications.

Every day, Baidu responds to

billions

of search requests from more than 100 countries and regions.

Baidu is the primary gateway for accessing Chinese language information and services.

1 billion

Number of Baidu users



Strategic Business Landscape

Baidu has developed an extensive range of cutting-edge proprietary technologies, from our high-spec Kunlun chip to our PaddlePaddle deep learning framework, Ernie pre-trained LLM, and applications such as Baidu Search, Baidu AI Cloud, autonomous driving, and Xiaodu. With our full-stack, four-layer IT technology stack, Baidu has established a multi-engine growth model encompassing mobile ecosystems, Baidu AI Cloud, intelligent driving, and other cutting-edge areas of artificial intelligence, providing powerful momentum to support our future growth.

Strategic Business Driven by Multiple Engines for Healthy and Sustained Performance Growth

Steadily-Growing Mature Business

Mobile Ecosystem

百度APP

679 million MAUs

Fast-Growing Emerging Business

AI Cloud

百度智能云

China NO.1

China's Top-Ranked AI Cloud Service Provider

- AI-Native Applications
- Baidu AI Cloud Qianfan Foundation Model Platform
- ModelBuilder | AppBuilder
- GPU Computing Power
- Baidu Baige · Heterogeneous Computing Platform

Integration of Cloud and AI with Deep Focus into Industry Robust Ecosystem & Artificial Intelligence for All

Industry-Leading Innovation Business

Intelligent Driving and Other Initiatives

apollo 小度 百度地图

Global NO.1	Global NO.1	China NO.1	China NO.1
World's Largest Autonomous Ride-Hailing Service Provider	Autonomous Driving Patent Portfolio Ranking First Globally in terms of Scale	Smart Display Shipments Ranking First in China	Smart Speaker Shipments Ranking First in China

Full Stack Deployment in AI, Leading at Every Level

Application Layer

New Baidu Search | Baidu Wenku | Baidu GBI | Baidu Drive YunYiduo | .....

Model Layer

文心大模型

Framework Layer

飞桨

Chip Layer

昆仑芯 KUNLUNXIN

ESG Management

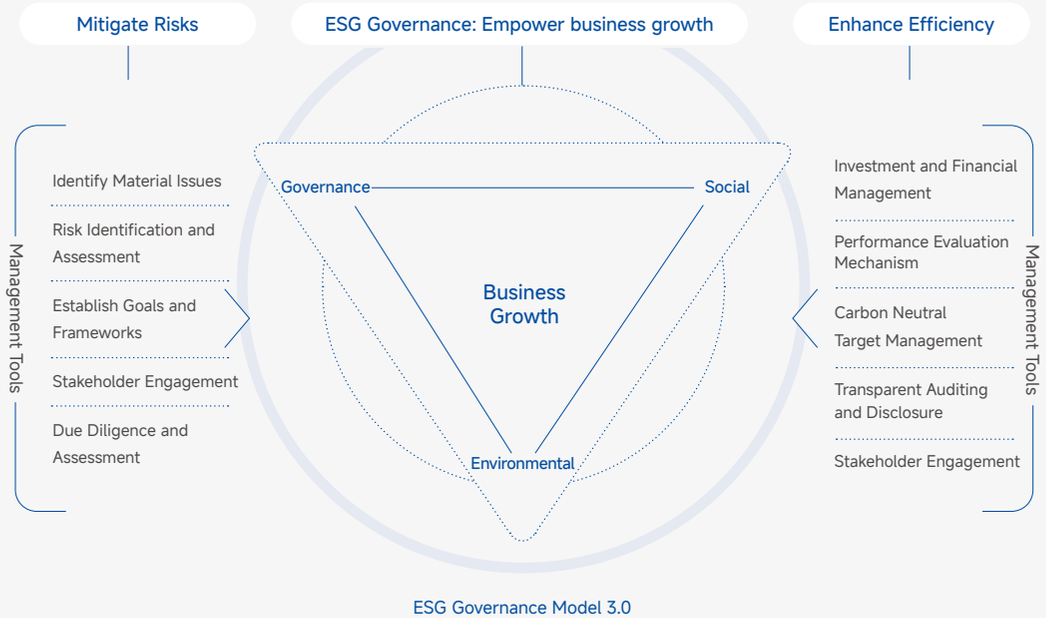
Statement From the Board of Directors

The Board of Directors is committed to integrating ESG principles into the company's development strategy, closely monitoring the company's performance in ESG governance, and continuously improving ESG management systems. While ensuring the company achieves its business objectives, we actively respond to the expectations of shareholders and stakeholders, earnestly fulfill our corporate social responsibilities, create long-term value for society, and safeguard the company's sustainable and successful growth.

ESG Concepts

Baidu upholds the company's core value of providing "simple and reliable" services. Our vision is to be a top global technology company which best understands users' needs and enables their growth. We integrate ESG concepts into our routine operations, and define the sustainable development of technology, services, and employees as long-term ESG objectives. With reference to developments in the macro environment and business practices, as well as stakeholder feedback, we strengthen our ESG governance capabilities and continuously optimize our ESG management systems and tools.

We have established a cross-disciplinary ESG working group responsible for implementing the company's ESG strategic goals in areas such as information security and privacy protection, climate change, product quality, human capital, and human rights protection. This enables us to generate continuous economic and social value, while giving back to shareholders, users, partners, and other stakeholders. Baidu regularly engages with all stakeholders, addressing their expectations and suggestions regarding our ESG performance from multiple perspectives. In doing so, we ensure the sustainability of our operations while also promoting the sustainable development of society as a whole.



ESG Governance Model 3.0

ESG Management System

The *Baidu Environmental, Social and Governance (ESG) Policy* forms the basis of our ESG management strategy. In recent years, in response to key topics such as information security and privacy protection, climate change, occupational health and safety, product quality and innovation, anti-corruption and business ethics, we have formulated corresponding management systems and continuously improved our ESG assurance system.

To improve the implementation of our ESG-related initiatives, Baidu has established a three-tier ESG management structure comprising the Board of Directors, an ESG Committee, and an ESG Working Group.

In order to embed ESG principles within our operations, the ESG Working Group collaborates with internal departments and holds regular meetings to drive the implementation of relevant initiatives. In addition, we offer ESG-themed workshops and courses to all employees, covering fields such as corporate social responsibility, professional ethics, and risk management. With a total duration of more than 20 hours and over 100,000 views, these courses aim to enhance employees' awareness of ESG topics and encourage them to actively practice ESG principles in their daily work in order to drive the company's sustainable development.

Baidu's ESG Management Structure	Responsibilities	Composition	Objectives
Board of Directors	Exercises the highest authority, with ultimate responsibility for ESG-related matters. ■ Holds the highest authority and ultimate responsibility for ESG-related matters. ■ Responsible for ESG governance objectives and strategies, guiding and approving Baidu's ESG implementation plan, and oversight of ESG risk assessments and mitigation measures.	Board members	■ Ensure the company's sustainable development.
ESG Committee	Responsible for co-ordinating and managing ESG-related matters. ■ Formulating ESG indicators in line with company and industry characteristics, with reference to universal indicators and international standards, and presenting a comprehensive overview of the company's ESG performance. ■ Establishing ESG performance assessment mechanisms and linking ESG performance to executive remuneration. ■ Formulating ESG objectives and action plans to address ESG concerns of stakeholders.	Senior managers from the company's legal, finance, and human resources, departments.	■ Establish, maintain, and continuously improve management systems and information systems for implementing the company's ESG commitments. ■ Establish department-level ESG targets and indicators.
ESG Working Group	Responsible for the implementation and execution of ESG-related initiatives by liaising with relevant business lines and functional departments.	Composed of professionals, with specialist teams responsible for emissions targets, data security and privacy protection, and other topics. Reports monthly to the ESG Committee.	■ Prepare and publish an annual ESG report and, if necessary, individuals reports on specific themes or topics. ■ Maintain communication, dialogue, and collaboration with stakeholders on ESG topics. ■ Continuously improve the company's position in mainstream ESG evaluation and ranking systems, as well as its scores or ratings on specific metrics, and use the results of such evaluations as an input for improving ESG systems, management systems and specific practices.

Double Materiality Assessment

Baidu conducts a materiality assessment once a year. We invite internal and external stakeholders to participate in our materiality assessment through interviews, surveys, and other feedback mechanisms. In 2024, we conducted our first double materiality assessment, adding a financial materiality assessment to the existing impact materiality assessment. We have also established a database of material ESG issues with reference to standards such as the GRI *Sustainability Reporting Standards, SASB Standards*, the framework of the Task Force on Climate-related Financial Disclosures (TCFD), and the International Financial Reporting Standards - Sustainability Disclosure Standards (IFRS) S1 requirements published by the International Sustainability Standards Board (ISSB). In 2024, we developed a materiality matrix following analysis and discussion of sustainability objectives and material ESG topics by the ESG Committee and senior management, as well as with reference to the opinions of internal and external stakeholders.

We rank issues based on "financial materiality" and "impact materiality" to determine their importance and priority. Baidu integrates materiality assessments into the company's risk management process and implements appropriate risk controls for priority issues. Our 2024 materiality assessment has been verified in accordance with AA1000 standards.

2024 Double Materiality Matrix



Baidu's 2024 Materiality Matrix

No.	Issue	Category	Report Section
1	Information Security and Privacy Protection	Social	User Trust and Service Excellence
2	Content Governance	Social	User Trust and Service Excellence
3	Responsible AI	Governance	Corporate Governance
4	Improving the User Experience	Social	User Trust and Service Excellence
5	Product Quality and Innovation	Social	User Trust and Service Excellence
6	Employee Rights and Benefits	Social	People and Talent
7	Intellectual Property Protection	Governance	User Trust and Service Excellence People and Talent
8	Anti-Corruption and Business Ethics	Governance	Corporate Governance
9	Talent Cultivation and Development	Social	People and Talent
10	Climate Change Adaptation	Environment	Environmental Stewardship
11	Talent Acquisition and Retention	Social	People and Talent
12	Human Rights Protection and Governance	Social	User Trust and Service Excellence Corporate Governance People and Talent
13	Corporate Governance	Governance	Corporate Governance
14	Diversity, Equality, and Inclusion	Social	People and Talent
15	Sustainable Supply Chain Management	Governance	Corporate Governance
16	Occupational Health and Safety	Social	People and Talent
17	Community Development and Contribution	Social	Community Engagement
18	Resource Recycling and Utilization	Environment	Environmental Stewardship
19	Emissions Management	Environment	Environmental Stewardship

According to our double materiality matrix, the top three topics are information security and privacy protection, content governance, and responsible AI. We regularly identify the risks and opportunities that these issues present for our company and focus on the impact of key issues by setting goals and tracking progress.

	Information Security and Privacy Protection	Content Governance	Responsible AI
Significant Risks or Opportunities	**Risks** ■ Risk of data breaches and failing to keep pace with the latest developments in security technology. ■ Risk of changes in laws and regulations and cross-border data transfers. ■ Risk of trust erosion and lack of user education.	**Risks** ■ Excessive management of platform content may result in infringement of users' right to freedom of expression, leading to a loss of users. ■ Lack of oversight may lead to the proliferation of violent or pornographic content or other undesirable content that promotes terrorism or fraud, resulting in user complaints and regulatory penalties.	**Opportunities** ■ Practicing responsible AI can help to enhance brand reputation and user trust. ■ Responsible AI can support Baidu's innovations in AI technology, optimize the interpretability, controllability, and fairness of AI algorithms, and attract more customers and partners. ■ Baidu's AI ethics and governance practices can serve as a reference for the development of industry standards and support the healthy development of AI technology.
Business Case	Information security and privacy protection are fundamental to Baidu's business, directly affecting user trust and brand reputation. Strengthening security measures and avoiding potential legal compensation and loss of users helps to save costs. Meanwhile, enhancing user trust can increase user stickiness and willingness to pay, generating additional revenue.	Content governance directly affects the user experience and platform reputation. By optimizing content audit mechanisms and reducing user complaints and regulatory penalties, operational risks can be reduced. At the same time, good content governance can attract more users and increase advertising revenue and users' willingness to pay.	By practicing responsible AI, Baidu can enhance its brand reputation and user trust. In addition, technological innovation can help to increase market share and revenue by attracting more customers. By optimizing the fairness and controllability of AI algorithms, Baidu can reduce potential legal risks and user complaints, thus lowering operating costs.
Business Impact	Risk of increased maintenance and operating costs.	Risk of increased maintenance and operating costs.	Greater levels of user and customer trust, as well as higher revenue.
Business Strategy	The company has implemented a series of response measures to mitigate potential risks. Specifically, these measures include: ■ Formulating a comprehensive information security and privacy protection policy. ■ Strengthening identity authentication and access control policies. ■ Deploying security technology such as data encryption, desensitization and data loss prevention. ■ Conducting regular security audits and vulnerability scans. ■ Enhancing security awareness training for employees. ■ Establishing an emergency response mechanism for security incidents, and conducting emergency drills on a regular basis. ■ Obtaining certification for information security and privacy protection systems.	To mitigate potential risks, Baidu has built a full life-cycle content governance system that leverages a combination of automated and manual reviews. We continuously improve our content governance processes, ensuring they cover all of Baidu's business lines. Specific measures include: ■ Introducing an advanced AI-powered content review system. ■ Establishing a user feedback mechanism to promptly deal with harmful content. ■ Regularly publishing content governance reports to enhance transparency.	To seize the opportunities of responsible AI, we have implemented the following measures: ■ Optimized AI ethical standards and practices to increase user trust in Baidu's AI products. ■ Increased R&D investment in AI interpretability, controllability and fairness technologies, and developed industry-leading AI products and services. ■ Baidu actively participates in the development of industry standards and shares its experiences in AI ethics and governance in order to inform the development of industry standards and encourage ethical practices within the industry.
Indicators and Targets	■ Ensure our information security and privacy protection systems cover all products and services. ■ Give users the right to make decisions about their personal data (including the right to access, change, delete, and remove their personal data). ■ Over the next three years, ensure that Baidu employees participate in an average of 10 security awareness training sessions per year (total attendance of 1.8 million).	■ In accordance with the relevant laws and regulations of our operating locations, promptly and effectively address harmful or dangerous content such as bias, harassment, cyber violence, pornography, and misinformation, ensuring a healthy online environment. ■ Create an open, inclusive, and respectful platform environment, and protect diversity of opinions and users' freedom of expression.	■ Reduce the black box risk of AI algorithms to enhance predictability in AI governance.
Progress in 2024	■ Ensure 100% of Baidu's products and businesses are covered by the *Baidu Privacy Policy* and *Baidu Data Security Strategies*. ■ 100% of Baidu's business groups have obtained certifications and qualifications related to information security and privacy protection. ■ Conduct regular training on information security and privacy protection, covering 100% of regular employees, outsourced staff, and interns.	■ Ensure Baidu's policies on content governance and respect for freedom of opinion and expression cover 100% of products. ■ In 2024, we held a total of 32 training sessions on content review policies and 196 training sessions on advertisement review policies, ensuring staff in relevant positions have the requisite skills for reviewing content. ■ In 2024, we responded to 100% of complaints about medical-related advertisements. ■ In 2024, we removed more than 91.182 million items of harmful content through manual reviews and targeted 59.57 billion instances of harmful content through big data mining.	■ Over 98% of content generated by Baidu's LLMs complies with ethical standards and contains no bias, discrimination, or harmful values. ■ In 2024, Baidu oversaw the development of 3 national standards and 10 industry standards on ethics and AI risks.

Overview of ESG Performance

MSCI ESG Ratings

A

CDP Climate Change Questionnaire Rating

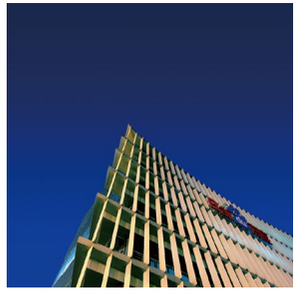
B

Selected for S&P Global's

Sustainability Yearbook 2025

Morningstar Sustainalytics ESG Risks Rating

Low Risk



Forbes China

"ESG50" Company

Selected as

Forbes World's Best Employers

Corporate Governance

Proportion of female directors

33.3%

Professional ethics training for new employees

29 sessions

Professional ethics refresher training

18 sessions

Obtained

ISO/IEC 42001 Information Technology Artificial Intelligence Management System



User Trust and Service Excellence

Percentage of business groups with certifications and qualifications in data security and privacy protection

100%

Number of information security drills conducted

22

Vulnerability resolution rate of Baidu Security Emergency Response Center

96.17%

Harmful content removed through manual reviews

91.182 million items

Percentage of commercial risks eliminated

99.90%

Leveraged LLMs for content governance,

reducing harmful content by 74%

during a pilot project targeting minors

Harmful content targeted through big data mining

59.57 billion items



People and Talent

Forbes China
"2024 Best Digital Employer"

Female representation in management
43.9 %

Gender pay gap
0.6 %

Obtained
ISO 45001 Occupational Health and Safety Management System

Percentage of employees providing positive feedback in satisfaction survey
91.2 %

Employees participating in training
100 %

Average training hours per employee
31.6 hours

Environmental Stewardship

Hosted a
zero-carbon
Baidu AI Cloud Intelligence Conference

Obtained
ISO 14001 Environmental Management System
ISO 50001 Energy Management System

Renewable energy consumption
62.32 million kWh

Annual electricity savings from installation of energy-saving lighting in office buildings
4.45 million kWh



Community Engagement

Number of scholars under Baidu Scholarship Program
106

Total scholarship funding for students in cutting-edge AI fields more than
RMB 10 million

Successfully completed the 5 Million AI Talent Program ahead of schedule, training a total of
5.92 million individuals in AI technology

Total charitable donations from 2022 to 2024
RMB 136 million

Launched
a Second-Skill Learning Platform for Workers
to enhance the AI literacy of workers in the tech sector



01 | Corporate Governance

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- Tax Transparency
- Business Ethics
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- Human Rights Due Diligence

Our contribution to UN SDGs:

1.1 Board Governance

Baidu strictly adheres to the relevant laws and regulations of its listing location and operating regions. We have formulated comprehensive corporate governance standards and established a systematic and efficient governance structure with clearly defined responsibilities. This includes an Audit Committee, Remuneration Committee, and Corporate Governance and Nomination Committee, which operate under the auspices of the Board of Directors in order to protect the interests of shareholders and ensure the company's sustainable development. The scope of authority of the Board and each committee, along with information about each director, can be accessed on the company's investor relations website[1].

Baidu's Board of Directors attaches great importance to ESG principles, which are embedded into strategic decision-making to ensure the company's long-term sustainability.

[1] For more details, please see the Baidu Investor Relations website.

Board Independence

- Baidu's Board of Directors is composed of six directors, five of whom are independent directors with no material connection to the controlling shareholder.
- Independent directors provide independent opinions and judgments on matters such as the company's business strategy, performance, risk prevention and control, and conflicts of interest, enjoying complete, equal, and independent voting rights.
- The appointment and performance of duties of committee members meet the requirements for independence.

Board Diversity

- Directors are appointed based on merit, ensuring they possess a balanced set of skills, experience, and diverse perspectives necessary to fulfill their responsibilities.
- When nominating and appointing Board members, thorough consideration is given to factors such as race, ethnicity, gender, age, nationality, cultural background, educational background, professional experience, skills, and other regulatory requirements. Implementation of our Board diversity is subject to regular review and oversight.
- Board members possess extensive industry experience and professional expertise in fields such as artificial intelligence, information technology, finance, economics, and management, ensuring they can provide comprehensive perspectives to safeguard the company's sustainable development.

Currently, the Board has

2

female directors

Who account for

33.3%

of the Board

Board Effectiveness

In 2024

Baidu held a total of

9

Board meetings

Attendance of directors

8 of which were attended by

100% of directors

1 director was absent from 1 meeting.

1.2 Risk Governance

Baidu attaches great importance to risk management and internal control, which we consider to be a core aspect of operational management. To this end, we have established a "Three Lines" risk management model, developed an innovative early-warning platform, and strengthened our risk culture to enhance our resilience.

Risk Management System

Baidu has established an Audit Committee under the Board of Directors, which consists of independent directors of the company and receives audit reports from the Internal Audit Department.

We have also formulated the *Baidu Internal Audit Charter*, conduct special risk management audits, and encourage collaboration between front, middle, and back-office teams in order to identify and manage risks and ensure the effectiveness of our risk management system.

These measures primarily include:

1. Conducting audit tests on relevant business operations in accordance with the regulatory compliance requirements of our listing and operating locations in order to identify and remedy deficiencies.
2. Conducting regular audits of operational data disclosed in financial reports to verify its accuracy and plausibility.
3. Regularly assessing and monitoring process design and execution in key areas in order to identify and rectify material defects.

In addition, through our "Three Lines" risk management model, we have developed a comprehensive, needs-tailored risk management system to ensure the effective implementation of the company's risk management measures.

	Composition	Responsibilities
First Line	Heads of Business Units	■ Identify, assess, control, and report risks in business operations. ■ Implement risk management and internal control measures.
Second Line	Heads of Risk Management, Finance, Internal Control, Legal, Security, Human Resources, and other related functions	■ Work closely with business units to coordinate risk management and internal control measures. ■ Collaborate with risk control, finance, legal, and internal control functions to assist business units in determining risk response strategies, implementing policies and procedures, and consolidating information.
Third Line	Internal Audit Department and Professional Ethics Department	■ Operate independently from the first and second lines of defense. ■ Independently evaluate the processes and internal controls established by the first and second lines of defense, and provide independent assurance to the Board of Directors.

Comprehensive Risk Governance Procedures

Risk Governance Procedures

In accordance with our risk governance procedures, we conduct regular risk assessments in order to identify and analyze risks to our operations (including traditional and emerging risks). After liaising with internal and external stakeholders, we formulate targeted risk response measures and continuously monitor potential risks.

Risk Identification

Identify internal and external risks that may impact organizational objectives, including identifying risk sources and potential risk events.

Risk Assessment

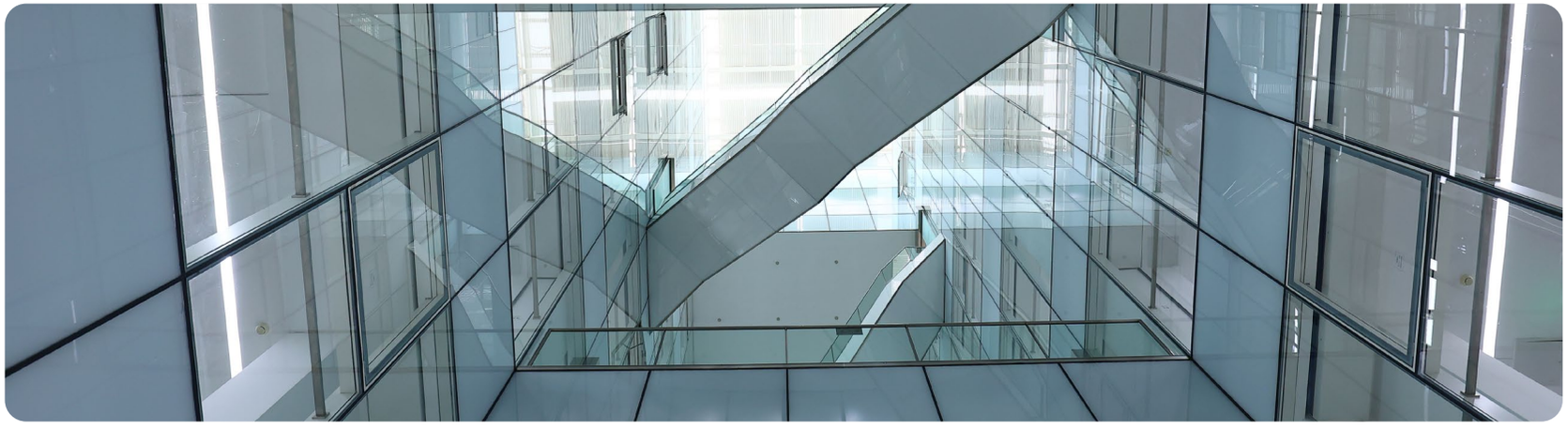
Analyze identified risks, assess their likelihood (probability of occurrence) and impact (potential losses), and prioritize risks.

Risk Response

Develop strategies and plans to address identified risks and establish risk response strategies such as risk avoidance, risk transfer, risk mitigation, or risk acceptance.

Risk Monitoring

Continuously monitor risks and the risk management process to ensure the effectiveness of risk management measures, including periodic reviews and updates to the risk management plan.



Internal and External Audits

In accordance with the regulatory requirements of Baidu's listing and operating locations, we engage internal and external auditors to conduct independent audits. Internal audits are designed to identify and rectify deficiencies, and are performed by members of Baidu's internal audit team, who possess internationally recognized internal audit qualifications. At the end of each year, the Internal Audit Department formulates an annual audit plan based on factors such as risk levels, management priorities, and rectification status, and evaluates the accuracy of data disclosed in financial reports, as well as the effectiveness of process design and execution in key areas.

Case | Leveraging AI technology to enhance efficiency of internal audits

In order to safeguard our operations, our Internal Audit Department uses artificial intelligence to optimize audit tools and methods. Leveraging our strong foundation in search technology and large language models, as well as our RAG architecture and AI Cloud Qianfan Platform, the Internal Audit Department has established its own AI-powered audit knowledge base. This effectively addresses challenges related to audit documentation—especially difficulties in organizing, retrieving, and summarizing unstructured data. In addition to improving access to audit documentation and driving the digitalization of audit processes, this approach has also created a new line of defense for risk governance, targeting high-frequency risks and laying a solid foundation for the company's long-term growth. In recognition of their efforts, we received an "Outstanding Case Study" award from the China Academy of Information and Communications Technology.



Baidu conducts regular external audits. We also commission comprehensive external audits to assess our performance in areas such as the environment, information security, anti-corruption, and occupational health and safety.

Building a Strong Risk Culture

Improving Risk Awareness

Baidu organizes regular risk awareness initiatives, using a combination of handouts, periodic reports, training, and communication campaigns to enhance the risk awareness and response capabilities of internal stakeholders (including employees, executives, and board members) and drive the company toward a more sustainable and responsible future.

The company exercises robust internal controls over its business operations by promptly identifying potential risks and generating risk assessment reports. All reports are communicated to the management of the respective business units to ensure they are fully aware of relevant risks.

Risk Management in Product and Service Development

Baidu integrates risk standards into every stage of product development, ensuring end-to-end risk control to guarantee product safety and reliability and effectively reduce potential risks.

Case | AI-based risk warning platform

When developing new products and services, we use our own AI-based risk warning platform to identify and visualize risks, improve risk insights, and ensure risks are mitigated at the earliest opportunity.

Specifically, in key areas of our business operations, we employ technology to automatically identify and flag potential risks, which are then categorized into various risk factors for classification and analysis. As of the end of 2024, the risk warning platform covered 82 indicators, and has supported risks assessments for a total of 8,700 projects, reducing the time spent on data collection and analysis by 80%.

The risk management platform has been deployed in several business groups, significantly enhancing both the efficiency and accuracy of risk management. In the future, we plan to expand the platform into supply chain management to enhance risk prevention and control and ensure the safety and stability of our supply chain.

Risk Management Training

We leverage our online learning platform "Duxuetang" (Online Baidu School) to provide all employees with comprehensive learning materials related to risk control and risk governance, including video tutorials and training documents.

Specifically, we have incorporated risk management and internal control principles and requirements into mandatory courses for middle and senior management to strengthen their risk awareness and response capabilities.

Incorporating Financial Incentives into Risk Management Indicators

To strengthen our risk management capabilities, we have implemented a range of targeted financial incentives, including risk management KPIs that establish a direct link between contributions of employees and managers in identifying, assessing, monitoring, and responding to risks, and their remuneration, bonuses, and long-term incentive plans.



Integrating ESG into Risk Governance

Baidu has integrated ESG principles such as anti-corruption, information security and privacy protection, product content governance, and climate change into the company's risk management processes. In this context, we have established a regular ESG risk identification and assessment mechanism, and have formulated corresponding risk response plans and tracking measures for identified risks. ESG risks are also incorporated into internal audits to monitor the implementation and effectiveness of these measures.

In 2024, we prioritized addressing risks related to data security and personal information protection. A dedicated IT audit team conducted comprehensive and in-depth compliance audits on key risk factors such as data leaks, illegal acquisition and sale, overcollection, illegal use, technical vulnerabilities, management deficiencies, and protection of minors' information. These audits aimed to enhance our data protection strategy, ensure lawful and compliant processing of personal information, reinforce the company's compliance defenses, safeguard user privacy and data security, and ensure the company's sustainable development.

1.3 Tax Transparency

Our tax policy adheres to the principles of honesty and transparency. Through systematic tax governance and risk management, we ensure the legality, compliance, and efficiency of the company's tax activities. This approach safeguards the company's continued development, enhances our reputation, supports compliant operations, and promotes high-quality growth.

Baidu recognizes that tax compliance is an integral part of our management strategy. By pursuing an honest tax policy, we ensure that our tax obligations reflect our revenue-generating activities. To fulfill our tax obligations, we strictly comply with the tax laws and regulations of all countries and regions where we operate and maintain transparent relationships with local tax authorities.

To improve tax transparency, Baidu regularly discloses tax-related information in financial reports in accordance with national laws and regulations, such as the Tax Collection Administration Law of the People's Republic of China. For detailed tax information, please refer to the "Financial Statements" section of Baidu's annual report[2].

[2] For more details, please see the Baidu Annual Report.

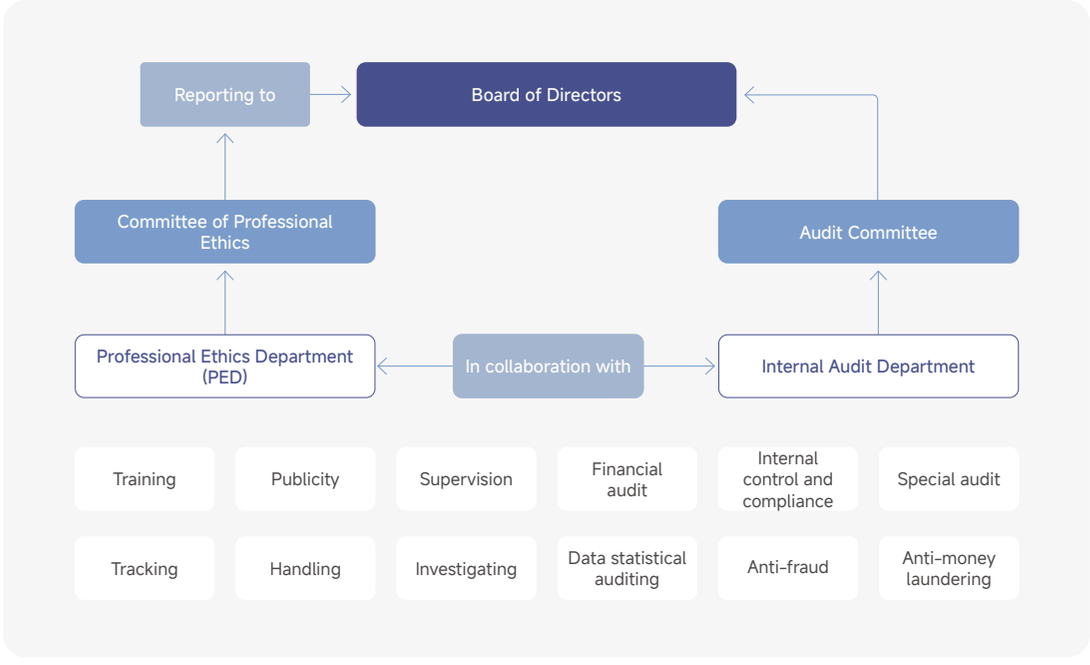
1.4 Business Ethics

Baidu understands that business ethics are the cornerstone of our long-term success. By building a robust governance system, setting strict ethical standards, strengthening employee awareness, and providing effective whistleblowing mechanisms, we promote ethical business practices and continuously optimize our business ethics policies to safeguard the company's sustainable development.

Business Ethics Governance System

Baidu has established a three-tier business ethics governance system composed of the Board of Directors, the Professional Ethics Committee, and the Business Ethics Department to manage and implement all business ethics-related measures.

	Responsibilities
Board of Directors	Ultimately responsible for business ethics, responsible for decision-making, guidance, oversight, and approval of the Company's business ethics policies.
Professional Ethics Committee	The highest decision-making body for business ethics, responsible for guiding, decision-making, monitoring, and inspecting the implementation of the Company's business ethics policies and code of conduct.
Professional Ethics Department	Responsible for implementing specific measures, including providing training on business ethics, revising business ethics policies, routine oversight of high-risk business segments, and investigating and handling fraud and violations.



Business Ethics Governance Framework and Reporting Mechanism

Baidu adopts a zero-tolerance approach to any unethical conduct, and clearly specifies all conduct and potential actions that violate our business ethics policies, as well as corresponding disciplinary measures. During the annual internal audit, we carry out checks on all major business segments to ensure compliance with our business ethics policies.

Baidu also audits its anti-bribery management system, for which we have obtained ISO 37001 certification. Each year, we invite external certification bodies to review our business ethics management system and standards, ensuring that we comply with relevant standards.

Business Ethics Initiatives

Internal Initiatives

Based on the requirements of Section 406 of the Sarbanes-Oxley Act and other related provisions, and by referencing advanced laws, regulations, and standards from around the world, including international initiatives such as the *United Nations Convention Against Corruption and Business Principles on Countering Bribery*, Baidu has developed a comprehensive range of internal policies on business ethics covering all employees (including full-time and part-time employees, contractors, and interns), institutional contractors, suppliers, subsidiaries, and Type A and B1 ecosystem companies. These policies address multiple aspects including bribery, fraud, corruption, discrimination, monopolies, unfair competition, conflicts of interest, insider trading, and whistleblowing, clarifying the responsibilities and obligations of employees' in upholding business ethics.

Baidu's employee compensation and performance evaluation system is closely linked to business ethics and compliance, ensuring that every employee, while pursuing performance, also strictly adheres to our ethical standards as well as legal requirements.

Baidu Management Regulation of Construction of Professional Ethics
Baidu Professional Ethics Reporting Management Regulations
Baidu Professional Ethics and Code of Conduct
Baidu Code of Business Conduct and Ethics
Baidu Avoiding Conflicts of Interest Policy
Baidu Management Regulations of Professional Ethics Redlines
Baidu Partner Blacklisting Regulations
Honesty and Integrity Agreement

Internal Business Ethics Policies[3]



Baidu Professional Ethics Awareness Poster

[3] For more details, please see the "Governance and Policy Documents" section on Baidu ESG website.

Issue	Goal	Measures
Anti-bribery	Uphold the principle of fair trade and prohibit the sale of products through bribery.	■ Appropriate disciplinary action for any covert acceptance of bribes or payment of kickbacks to companies or individuals.
Anti-fraud and Anti-corruption	Safeguard the company's interests and create a transparent workplace free from corruption.	■ Any conduct involving the abuse of work privileges or company resources for personal gain, embezzlement, or misappropriation of company or others' assets, or actions that cause serious harm to the interests of the company, employees, or users are investigated and addressed in accordance with the company's zero-tolerance policy.
Anti-monopoly and Anti-unfair Competition	Neither Baidu nor its employees shall use improper means to illegally exclude competitors, interfere with fair competition or legitimate business activities, deliberately fabricate and disseminate false information that damages the reputation of competitors, or infringe upon competitors' trade secrets.	■ Establish dedicated compliance systems to prevent monopolistic behavior (e.g. cartel agreements, abuse of market dominance, and illegal mergers). ■ Issue compliance guidelines based on business needs, conduct special compliance assessments, and provide internal and external compliance training to raise awareness and foster a proper competitive mindset.
Avoiding Conflicts of Interest	Prevent unnecessary conflicts of interest between the company and its employees in day-to-day operations, ensure impartial performance of duties at all levels, foster a culture of integrity, and safeguard the company's interests.	■ Employees are required to report any circumstances that may conflict with company interests or affect the performance of their regular duties. ■ Any external compensation earned by employees through the use of their Baidu identity or company resources must be donated to the Baidu Foundation. ■ Agents, customers, suppliers, and partners are required to sign our *Honesty and Integrity Agreement* and reconfirm their commitment to the terms of this agreement on a regular basis. ■ Employees receiving gifts from any parties who engage in direct business relations with Baidu (including agents, customers, suppliers, or partners) must report such gifts or hospitality to the company.

Business Ethics Issues, Goals, and Measures

External Communication

As a member of the China Enterprise Anti-Fraud Alliance and Trust and Integrity Enterprise Alliance, Baidu actively participates in industry exchanges and partnerships to build a culture of compliance, drive improvement in business ethics standards in the tech sector, and enhance compliance awareness.



Fostering a Culture of Integrity

All Baidu employees, including employees of our branches, subsidiaries, and Type A and B1 ecosystem companies are required to sign a the *Baidu Professional Ethics and Code of Conduct Commitment Letter* to our business ethics policies and code of conduct. We also foster a culture of integrity by providing regular ethics training and educational programs for all employees. In 2024, our business ethics education and training efforts reached over 93,000 employees through both online and offline channels.

- In 2024, our professional ethics training covered all of the company's workforce, with online and offline training reaching more than

93,000 employees



Targeted Training Programs

Our business ethics training covers all full-time employees, interns, suppliers, and partners, focusing on anti-corruption, anti-bribery, and other key areas.

- Onboarding training: All new employees are required to attend business ethics training when joining the company. In 2024, we organized 29 such training sessions, which were attended by 3,200 new employees as part of our onboarding program.
- Refresher training: In 2024, we organized a total of 18 online and offline training sessions on business ethics, which were attended by over 3,000 participants. More than 5,600 employees passed our assessment, with the satisfaction rate for our courses and instructors surpassing 90%. We also held four online training sessions, which were attended by over 5,300 participants. In total, our business ethics training reached over 11,000 participants, with a cumulative duration exceeding 50 hours.

Online Assessments

- All employees completed an online assessment on business ethics and code of conduct (including full-time employees, interns, and outsourced personnel). The pass rate for full-time employees was 100%, and the overall pass rate was 99.98%.

Internal Initiatives

- 2024 Baidu Business Ethics Promotion Week: Through a range of online and offline activities that reached over 12,000 employees, we raised awareness of our basic policies, support measures, industry partnerships, and training programs, reinforcing employees' knowledge of our commitment to ethical business practices.In 2024, our Business Ethics Promotion Week received the "Innovation in Business Ethics" award at the Corporate Anti-Fraud Litigation Forum.
- Sunshine Workplace Survey: We distributed questionnaires to deepen employees' understanding of our business ethics policies.
- Gift Reporting and Charity Auctions: In accordance with our gift reporting policy, employees must report any gifts received from partners to the Business Ethics Department. These gifts are then donated to the Baidu Foundation, which periodically auctions all collected gifts to employees and donates the proceeds to the "Hello World" charity project. In 2024, 3,097 participants took part in the auction, raising a total of RMB 327,825 in charitable donations.
- Internal Awareness Campaigns: We publish regular articles on business ethics on the company's intranet to emphasize the importance of ethics and foster an atmosphere of integrity.



Whistleblowing Mechanisms

To promote good governance, create a harmonious, transparent workplace underpinned by integrity, and protect the legitimate rights and interests of the company and its employees, Baidu has formulated the *Baidu Professional Ethics Reporting Management Regulations*[4], which apply to all Baidu employees, part-time staff, outsourced personnel, and external parties.

Company employees and external parties may report, via email, in-person, through our onsite business ethics mailbox, or by mail, any suspected violations, disciplinary breaches, illegal activities, or conduct that contravenes business ethics. All reports are processed within 24 hours of receipt by a designated officer in the Business Ethics Department. The Business Ethics Department is authorized to investigate these reports and issue investigation conclusions and handling recommendations. Additionally, the company discloses its handling of business ethics violations and disciplinary action on its intranet on a quarterly basis. Whistleblowers whose reports are substantiated, provide significant leads, or offer valuable assistance in investigations are duly rewarded.

Furthermore, Baidu strictly complies with relevant regulations to protect whistleblower rights and maintains strict confidentiality regarding all reported information, including the whistleblower's name and contact details, and prohibits any form of retaliation. In 2024, there were no instances of employees or external parties suffering unfair treatment (such as dismissal, demotion, suspension, intimidation, or harassment) or any retaliatory actions as a result of reporting through legal channels.

- In 2024, the Business Ethics Department recovered direct economic losses amounting to **RMB 13.4 million** through case investigations
- From 2020 to 2024, a total of **RMB 44.59 million** in direct economic losses were recovered

Reporting Channels

Email Address:
bdjb@baidu.com

In-person:
Staff may contact a designated person via Baidu's Ruliu service account "Yangguang Zhichang"

Business Ethics Onsite Mailbox:
Workstation F7-BC384, Baidu Building

Mailing Address:
Baidu Professional Ethics Department (Attn), Baidu Building, No. 10 Shangdi 10th Street, Haidian District, Beijing, 100085

Baidu Baijiahao (Yangguang Baidu):
Grievances may be reported to designated personnel via a private message on Baidu Baijiahao.



[4] For more details, please see the "Governance and Policy Documents" section on Baidu ESG website.

1.5

Supply Chain Management

Baidu is committed to robust supply chain management based on standardized processes. By formulating internal policies such as our *Supplier Management Standards*, we have established a comprehensive management system covering supplier screening, evaluation, cooperation, and offboarding. Leveraging our digital procurement platform, we are able to manage supplier information with precision, ensuring the efficiency and sustainability of our supply chain.

Supplier Management

Baidu has established a series of internal procedures, including the *Supplier Management Standards and Supplier Reward and Disciplinary Measures*, which together constitute a comprehensive framework covering supplier selection and admission, performance evaluation, communication and cooperation, and offboarding. In addition, we have launched an online supplier management system on our procurement platform covering the entire procurement lifecycle. This system enables comprehensive management of suppliers (including basic queries, classification, and performance assessments), allowing real-time monitoring of supplier status and continuous improvements in transparency.

Screening and Onboarding

- Screen potential suppliers for inclusion in the database.
- Conduct on-site inspections of potential suppliers to assess quality, compliance, and environmental standards and ensure they meet procurement requirements.

Evaluation and Assessment

- Conduct supplier performance evaluations to thoroughly assess factors such as product/service quality and delivery.
- Rate suppliers based on assessment results, require suppliers that fail to meet the necessary standards to implement corrective actions, and track progress until improvements are achieved.

Communication and Cooperation

- Categorize and rate suppliers, focusing on key product/service categories.
- Leverage our procurement platform to request quotes, evaluate bids, and negotiate new partnerships.
- Organize supplier conferences to communicate ESG performance and management requirements.

Offboarding

- Offboard suppliers that fail assessments and do not implement the required improvements.
- Implement the *Supplier Reward and Disciplinary Measures* for suppliers that violate national laws, regulations, or *Supplier Management Standards*.

Number of Chinese suppliers as of December 31, 2024 (including Hong Kong, Macau, and Taiwan)

23,881

Number of overseas suppliers

5,488

Number of suppliers assessed in 2024

1,000

Passed assessment

956

Failed assessment

44

Offboarded

17

Sustainable Supply Chain

We integrate ESG principles into supply chain management, which are outlined in the *Baidu Sustainable Development Principles for Suppliers*[5]. In order to ensure high ESG standards, we establish close partnerships with our suppliers and assess performance across multiple dimensions, including labor rights, business ethics, health and safety, and environmental protection. In addition, we prioritize the procurement of environmentally friendly products and services and encourage suppliers and partners to excel in environmental protection.

In the future, we plan to expand the scope and intensity of supplier ESG assessments. Where significant deficiencies are identified, on-site due diligence may be conducted to monitor and verify suppliers' ESG practices and outcomes, ensuring that our supply chain becomes greener, more responsible, and sustainable.

ESG Dimension	Goals	Assessment Requirements
Labor Rights	■ Require suppliers to strictly comply with the *Labor Law of the People's Republic of China* and other relevant laws, and ensure all staff are employed legally without resorting to child or forced labor. ■ Prohibit discrimination against employees based on gender, race, ethnicity, skin color, nationality, age, origin, physical condition, religious beliefs, or marital status.	■ Conduct background investigations (including on-site inspections) on potential key suppliers before commencing cooperation. ■ Require suppliers to provide documentation on employee human rights and labor rights policies. ■ Conduct regular labor rights training. ■ Blacklist suppliers who are found to have committed serious violations in accordance with the *Baidu Partner Blacklisting Regulations* (except in extenuating circumstances) and terminate cooperation indefinitely.
Business Ethics	■ Require suppliers to strictly comply with anti-corruption, anti-bribery, anti-money laundering, and anti-unfair competition laws in their operating regions. ■ Prohibit any form of corruption, embezzlement, bribery, fraud, or unfair competition.	■ Require suppliers to sign Baidu's *Honesty and Integrity Agreement* when entering into contracts for products or services. In 2024, 77% of procurement-related suppliers signed the agreement. ■ Develop anti-corruption policies and obtain certifications (e.g. ISO 37001). ■ Establish reporting channels and protection mechanisms for whistleblowers. ■ Conduct regular business ethics training. ■ Blacklist suppliers suspected of bribery or unfair competition in accordance with the *Baidu Partner Blacklisting Regulations* (except in extenuating circumstances) and terminate cooperation indefinitely.
Health & Safety	■ Suppliers must respect and protect labor rights and ensure that production and working conditions comply with occupational health and safety laws, regulations, and standards.	■ Develop internal occupational health and safety policies and obtain relevant certifications (e.g. ISO 45001).
Information Security	■ Suppliers are required to comply with information security and privacy protection standards to protect the personal privacy, information, and data security of customers, users, and partners, and to prevent data breaches.	■ Develop information security and privacy protection policies and obtain relevant certifications (e.g. ISO 27001, ISO 29151).
Environmental Protection	■ Production and work sites must comply with relevant laws, regulations, and standards regarding environmental protection, pollution, emissions, biodiversity, and greenhouse gas emissions.	■ Obtain environmental management system certifications (e.g. ISO 14001).

[5] For more details, please see the "Governance and Policy Documents" section on Baidu ESG website.

1.6 AI Ethics

Baidu believes that AI ethics are the cornerstone of a future intelligent society. The rapid rise of large language models (LLMs) has created new opportunities for our industry and society as a whole, while their widespread application has also introduced numerous challenges in technology ethics. We firmly believe that the mission of artificial intelligence is to serve humanity. To this end, Baidu is continuously improving AI ethical standards to ensure that AI technology delivers benefits to humanity.

AI Ethics Principles

Four Principles of AI Ethics

In 2018, Baidu Co-founder, Chairman, and CEO Li Yanhong revealed the Four Principles of AI Ethics:

1. The most important principle of AI is safety and controllability.
2. The vision of AI innovation is to ensure more equal access to technology and capabilities.
3. The value of AI lies in empowering mankind to learn and grow rather than surpassing or replacing humans.
4. The ultimate goal of AI is to create more freedom and possibilities for humanity.

These principles aim to establish a concept and set of rules that society as a whole can follow for all AI products and technologies, ensuring that we create responsible and sustainable AI products and address the issue of harmonious coexistence between AI and humans.

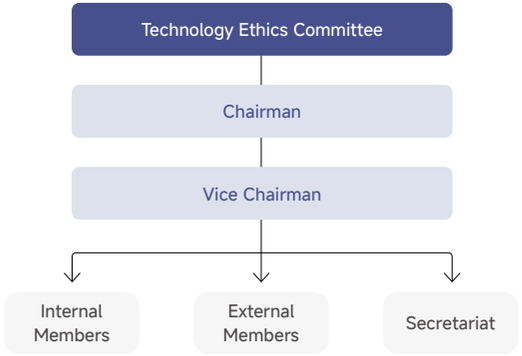
Six Strategic Objectives for AI Ethics

Based on mainstream international AI ethical frameworks and universal consensus on safety, controllability, human-centricity, equality, inclusiveness, and privacy protection, Baidu has defined six strategic objectives for AI ethics, building on its Four Principles of AI Ethics:



AI Ethics Management Framework

To manage ethical risks and stimulate innovation, Baidu has established a Technology Ethics Committee, chaired by senior executives and supported by internal subcommittees, external members, and a secretariat.



The Baidu Technology Ethics Committee aims to reduce the "black box" risks of AI algorithms and enable more anticipatory AI governance. At the same time, the committee brings together experts from various fields and incorporates authoritative external perspectives and oversight in the field of technology ethics.

In 2024, the Technology Ethics Committee convened two in-person meetings and held multiple online sessions to ensure timely information exchange and prompt resolution of ethical issues.

In 2024, the Technology Ethics Committee convened

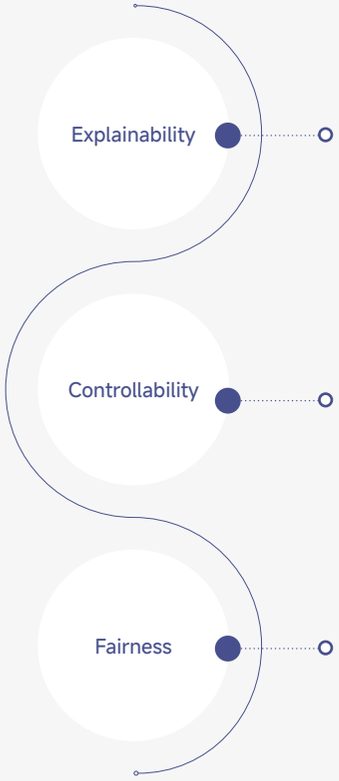
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in-person meetings.

AI Ethics Practices

Optimizing AI Algorithms

Baidu continuously explores the explainability, controllability, and fairness of AI algorithms when developing AI technologies and products.



Baidu enhances the explainability of model training and running processes by developing and applying technologies such as chain-of-thought reasoning and attribution algorithms, or by connecting external knowledge bases and retrieving trusted corpora.

Baidu's LLM content compliance solutions ensure that generated content does not pose significant risks, and address ethical issues such as privacy leaks, harmful values, bias, misinformation, and illegal activities. The compliance rate for generated content remains above 98%, with positive user guidance and correction of factual errors to enhance the user experience.

Baidu has built a complete heterogeneous dataset and optimizes AI fairness through diversity in data sources, objectivity in annotation methods, and balanced training strategies, ensuring that large models better understand the needs of different groups and reduce potential biases.

Technology Ethics Audits

In 2024, Baidu conducted technology ethics audits on key products in accordance with national laws and regulations as well as international standards. The results showed that the relevant products comply with AI ethics principles, underscoring our commitment to the responsible development and application of AI systems. In addition, through comprehensive planning of R&D processes and thorough pre-launch checks, we ensure that all our products comply with technology ethics principles.

Case | ISO/IEC 42001 Information Technology Artificial Intelligence Management System

In 2024, the Baidu AI Cloud Qianfan Platform, together with three AI-native applications (Xiling, Keyue, and Zhenzhi), became the world's first LLM platform application system to obtain ISO/IEC 42001 certification. This achievement is a testament to the quality of Baidu AI Cloud's LLM platform, demonstrating that its applications are secure, mature, and compliant with AI ethics and leading international standards.



AI Ethics Training

Baidu conducts regular training on AI ethics, inviting experts and scholars to explore a wide range of topics such as the legal compliance, fairness, and non-bias of LLMs, as well AI accountability mechanisms. AI ethics training is offered to employees and managers across different positions to deepen their understanding of technology ethics, provide a solid ethical foundation for the company's technological development and strategic decision-making, and shape the future of technology. Additionally, Baidu offers relevant training for suppliers in accordance with the *Baidu Sustainable Development Principles for Suppliers*[6] to enhance their awareness and competence in AI ethics.

- In 2024, Baidu convened a meeting of the Technology Ethics Committee to streamline understanding of ethical issues and discuss the latest developments in both domestic and international ethics policies and research.
- To improve awareness of ethics principles among employees and encourage them to apply these principles in their R&D activities Technology Ethics Committee, in collaboration with Baidu's Technical Training Center, held several small-scale training sessions for relevant staff and compiled an internal FAQ knowledge base on technology ethics. These measures have significantly strengthened employees' awareness of ethical issues, helping to drive continuous progress in technology ethics standards.

AI Ethics Standards

Baidu actively participates in developing standards related to artificial intelligence technology and ethical governance, and continuously shares advanced technologies and practices with industry peers to build consensus nearly a dozen and foster a healthy and trustworthy AI ecosystem.

In 2024, Baidu played a leading role in the development of three national standards and nearly a dozen industry standards concerning ethics and AI risk governance.

- Baidu closely monitored the work of standard-setting groups such as the NITS AI Subcommittee (SC42), the National Working Group on Basic Standards for Social Application and Evaluation of Intelligent Technology (SWG35), the China Communications Standards Association (CCSA), and the China Artificial Intelligence Industry and Development Alliance, focusing on the research and establishment of ethical standard systems.
- In 2024, Baidu shared best practices and participated in drafting the *Artificial Intelligence Risk Governance Report* of the China Artificial Intelligence Industry Alliance (AIIA). At the AIIA 2024 conference, we were recognized as an "Outstanding ethical company" and appointed as Vice Chair of the AIIA Technology Ethics Working Group.
- We also monitored developments in regulatory standards, including the *Measures for Managing Artificial Intelligence Research and Development*.
- In 2024, we became one of the first enterprises to sign the *Artificial Intelligence Safety Commitment*, underscoring a fundamental consensus within the industry to AI safety and ensuring AI generates real benefits for society. Moving forward, we will integrate this commitment into our code of conduct, continuously enhancing and optimizing our practices to ensure that AI applications remain human-centered and beneficial.



[6] For more details, please see the "Governance and Policy Documents" section on Baidu ESG website.

1.7

Human Rights Due Diligence

Baidu is acutely aware that respecting human rights is an essential element of corporate social responsibility and a cornerstone of sustainable development. We firmly believe that human rights are not only fundamental to every individual, but also a moral obligation that must be upheld in all aspects of our business operations. For this reason, we prioritize human rights due diligence at a strategic level, ensuring that every decision and action fully respects and protects the legitimate rights and interests of all stakeholders, with whom we work together to create a more just, inclusive, and prosperous future.

Improving Human Rights Policies

Since joining the United Nations Global Compact (UNGC) in 2008, Baidu has signed and committed to adhering to its ten principles. With reference to the *Universal Declaration of Human Rights*, the *International Covenant on Economic, Social and Cultural Rights*, the *UN Guiding Principles on Business and Human Rights*, and the *ILO Declaration on Fundamental Principles and Rights at Work*, Baidu has formulated the *Baidu Human Right Policy*[7], which covers stakeholders such as employees, users, suppliers, and communities, and applies to Baidu, its owned entities, majority-owned entities, and managed organizations. We invite Baidu's partners and suppliers to follow this policy and encourage them to develop human rights protection systems tailored to their specific circumstances.

In addition to the *Baidu Human Right Policy*, we have engaged third-party human rights experts to identify eight key human rights issues that are closely linked to Baidu's business operations. In these areas, we have established dedicated policies and safeguards and implemented a series of measures to protect the rights of relevant parties. The policies and practices corresponding to each issue are detailed in the table below.

Baidu continuously develops and refines its human rights policies. In 2024, we updated numerous regulations, including the *Baidu Data Security Strategies* and the *Baidu Employee Manual*, in response to evolving legal and regulatory requirements and internal company developments.

Key Human Rights Issue	Stakeholders	Policy Commitments	Related Sections
Privacy Rights & Informational Self-determination	Employees Suppliers & Partners Users	*Baidu Data Security Strategies* *Baidu Privacy Policy* *Baidu Data Management Regulations* *Baidu Security Incident Handling Guidelines*	Supply Chain Management Data Security and Cybersecurity Privacy and Personal Information Protection
Freedom of Opinion & Expression	Employees Suppliers & Partners Users	*Baidu Employee Manual* *Baidu Content Ecosystem Management Standards* *Baidu Risk Control Redlines for User Products* *Security Review Standards*	Content Governance
Anti-corruption & Human Rights	Employees Suppliers & Partners	*Baidu Management Regulation of Construction of Professional Ethics* *Baidu Code of Business Conduct and Ethics* *Baidu Avoiding Conflicts of Interest Policy* *Baidu Management Regulations of Professional Ethics Redlines* *Baidu Sustainable Development Principles for Suppliers*	Business Ethics
Right to Life & Health	Employees Suppliers & Partners Users Communities	*Baidu Recruitment Management Standards* *Baidu Security Management Standards* *Baidu Content Ecosystem Management Standards* *Baidu Sustainable Development Principles for Suppliers*	Content Governance Employee Rights, Diversity, and Inclusion
Right to Fair & Favorable Working Conditions	Employees Suppliers & Partners	*Baidu Employee Manual* *Baidu Compensation and Benefits Management Standards* *Supplier Management Standards* *Baidu Sustainable Development Principles for Suppliers*	Supply Chain Management Talent Acquisition and Development Talent Training and Development
Social Security Rights	Employees Suppliers & Partners	*Baidu Employee Manual* *Baidu Compensation and Benefits Management Standards*	Talent Acquisition and Retention
Equality & Non-Discrimination	Employees Suppliers & Partners Users Communities	*Baidu Employee Manual* *Baidu Code of Business Conduct and Ethics* *Baidu Sustainable Development Principles for Suppliers*	Content Governance Employee Rights, Diversity, and Inclusion
Freedom from Harassment and Violence	Employees Suppliers & Partners, Users Communities	*Baidu Employee Manual* *Baidu Code of Business Conduct and Ethics* *Baidu Sustainable Development Principles for Suppliers*	Content Governance Talent Acquisition and Retention Employee Rights, Diversity, and Inclusion

[7] For more details, please see the "Governance and Policy Documents" section on Baidu ESG website.

Human Rights Due Diligence and Impact Assessments

In accordance with UNGP guidelines, we have developed the *Baidu's Human Rights Policy and Tracking Indicators* for tracking human rights indicators. We also engage third-party human rights experts to conduct annual assessments of internal and external human rights due diligence. This process helps identify potential risks and impacts as well as develop appropriate measures to prevent or mitigate human rights risks within the company and across the value chain.

Assessment Process

Step	Description	Outcome
Identify Key Issues & Stakeholders	■ In accordance with UNGP guidelines, Baidu has developed the *Baidu's Human Rights Policy and Tracking Indicators* for tracking human rights indicators, covering key human rights issues in Baidu's business segments.	■ Identify and manage human rights risks to employees, women, children, third-party workers, local communities, and users, including human trafficking, forced labor, child labor, freedom of association, collective bargaining, equal pay, and discrimination. ■ Key issues include privacy rights and the right to informational self-determination, freedom of opinion and expression, equality and freedom from discrimination, freedom from harassment and violence, anti-corruption and human rights, the right to life and health, social security rights, and the right to fair and favorable working conditions. ■ Key stakeholders include employees, users, suppliers, and communities. ■ Create and periodically review a Human Rights Risk Map. Key goals, identified risks, preventive actions, KPIs, and remedial measures are disclosed in our ESG report under "Human Rights in Information Security and Privacy Protection," "Labor Rights and Human Rights Protection" and "Human Rights in Content Governance."
Define Objectives	■ Establish specific objectives for each key human rights issue.	
Risk Identification & Analysis	■ Analyze potential risks of each key issue, including an assessment of the impact of business activities on the human rights of stakeholders, as well as the impact that external factors (e.g., changes in laws and regulations, social unrest, etc.) may have on human rights due diligence practices.	
Preventive & Mitigation Measures	■ Develop specific measures based on identified risks, including formulating and enhancing internal policies, procedures, and training to ensure our business activities comply with human rights standards.	
KPI & Performance Review	■ Set and periodically review Key Performance Indicators (KPIs). ■ Promptly identify potential issues and rectify deficiencies to ensure effective human rights due diligence. KPIs include employee satisfaction, processing of harmful information, and processing of user complaints.	
Remedial Measures	■ In the event of a human rights violation, implement clear remedial actions, including providing compensation to victims, restoring their reputation, and improving working conditions. In addition, conduct root cause analysis and implement corrective measures to prevent similar occurrences in the future.	

To ensure that key human rights issues are thoroughly addressed and effectively managed, this report includes three sections on human rights: "Information Security and Privacy Protection," "Labor Rights and Human Rights," and "Human Rights in Content Governance." These sections provide a detailed explanation of our objectives, human rights due diligence measures, risk identification and response strategies, and disclose key performance indicators related to human rights.

Assessment Results

In 2024, Baidu engaged human rights experts to conduct a comprehensive human rights impact assessment covering all of Baidu's operations over a three-year period. The assessment arrived at the following key conclusions:

1. Baidu has established a comprehensive human rights due diligence system capable of protecting the fundamental rights of employees, users, and partners. Additionally, we have integrated human rights due diligence into our business processes. For example, before launching any product, we conduct a personal information and privacy compliance assessment to prevent privacy breaches, the misuse of personal data, or any violations of users' human rights.
2. While Baidu has made significant progress in respecting human rights, some potential risks remain:

- Information security and privacy protection risks: Due to technological advances, regulatory changes, cross-border data transfers, and varying levels of security awareness among users, the industry in which Baidu operates faces inherent risks of privacy breaches and data leaks, which may impact the security of our business and erode user trust.
- Content governance challenges: As a leading internet search engine and content service platform, Baidu's content governance framework directly affects user rights. Overregulation may limit freedom of expression, restricting users' ability to voice their opinions, while lax governance may results in bias, misinformation, or harmful content, infringing upon users' right to access accurate information.

Recommendations for Improvement

With respect to the aforementioned risks, and based on the recommendations of human rights experts, Baidu will focus on the following three areas in order to improve our human rights management:

Internal Measures

- Enhance investment in information security & privacy protection, adopt advanced encryption technologies, implement robust security protocols, and strengthen employee training to ensure data security and privacy.
- In relation to content governance risks, improve content moderation mechanisms by combining AI and human review, ensuring both accuracy and efficiency. Actively encourage users to provide feedback and refine governance practices to create a fairer and more inclusive platform.

Human Rights Governance

- Continue to improve our human rights policy framework and internal governance structure to ensure effective management and accountability.
- Assess the impact of AI technologies on human rights to improve ethical compliance, particularly in algorithmic recommendations, ad targeting, and child protection.
- Expand human rights due diligence in the supply chain, ensuring at least 50% of key suppliers sign human rights compliance commitments.

Stakeholder Communication

- Maintain constructive dialogue with regulatory authorities in our operating regions to ensure compliance with laws and regulations and share Baidu's best practices.
- Hold regular discussions with human rights experts, involving academia, legal professionals, and industry leaders to explore best practices in governance across areas such as information security, content management, and labor rights.
- In relation to material issues, continuously disclose human rights risks, preventive mitigation efforts, and remedial action to enhance the transparency and credibility of our governance measures.

Remedial Measures

In the event of human rights violations, Baidu takes appropriate remedial measures both internally and externally, tailored to different stakeholders. These measures may include compensating victims, restoring rights, and improving working conditions to help restore the rights and well-being of affected individuals.

At the same time, to prevent similar human rights violations from recurring, Baidu conducts in-depth root cause analyses, draws lessons from incidents, enhances relevant mechanisms and policies, strengthens oversight and regulatory measures, and improves its prevention and response capabilities.



02 User Trust and Service Excellence

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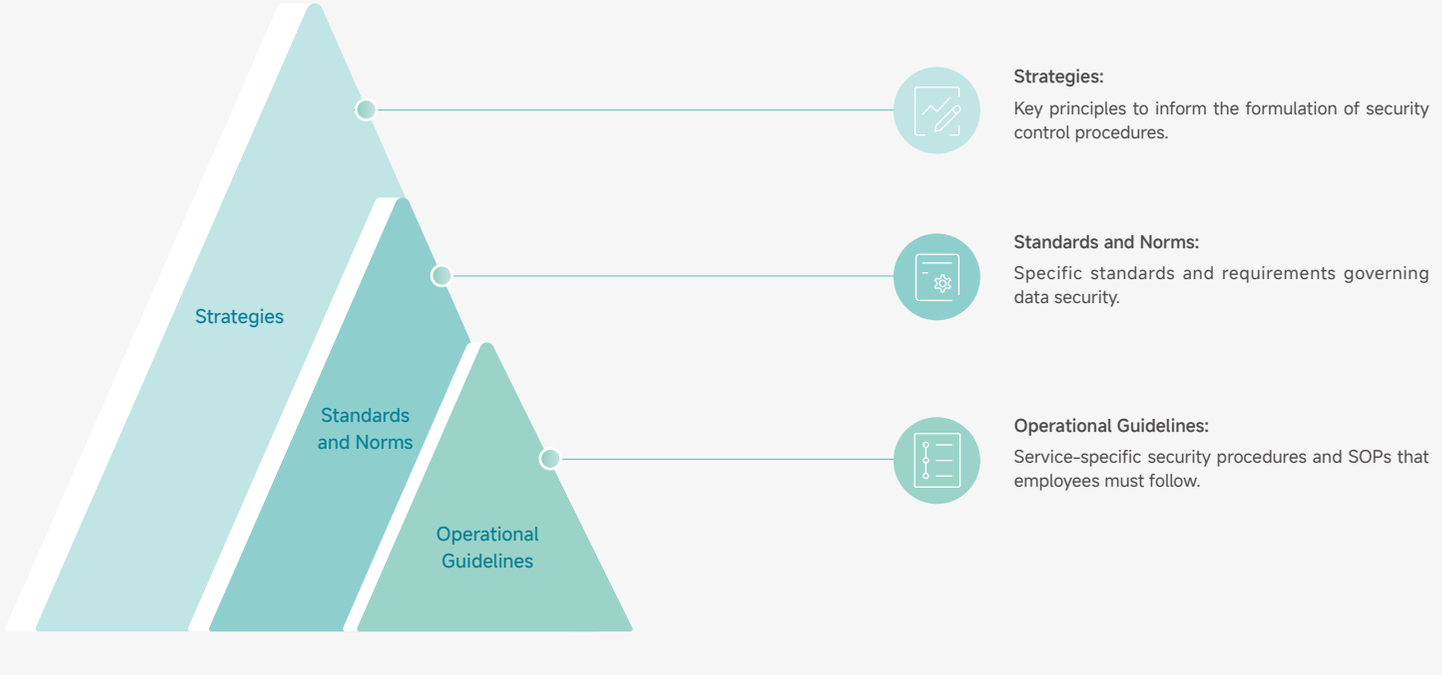
2.1

Data Security and Cybersecurity

Against the backdrop of digital transformation and the rapid development of artificial intelligence, data security has become an essential component of our sustainable development strategy. Baidu strictly complies with relevant laws and regulations, as well as advanced domestic and international security standards, and has built a security management system that covers the entire data lifecycle. By continuously improving our systems, strengthening our data protection capabilities, and enhancing security awareness and skills, we are commited to reinforcing the foundations of our data security framework in order to safeguard our business operations and foster public trust.

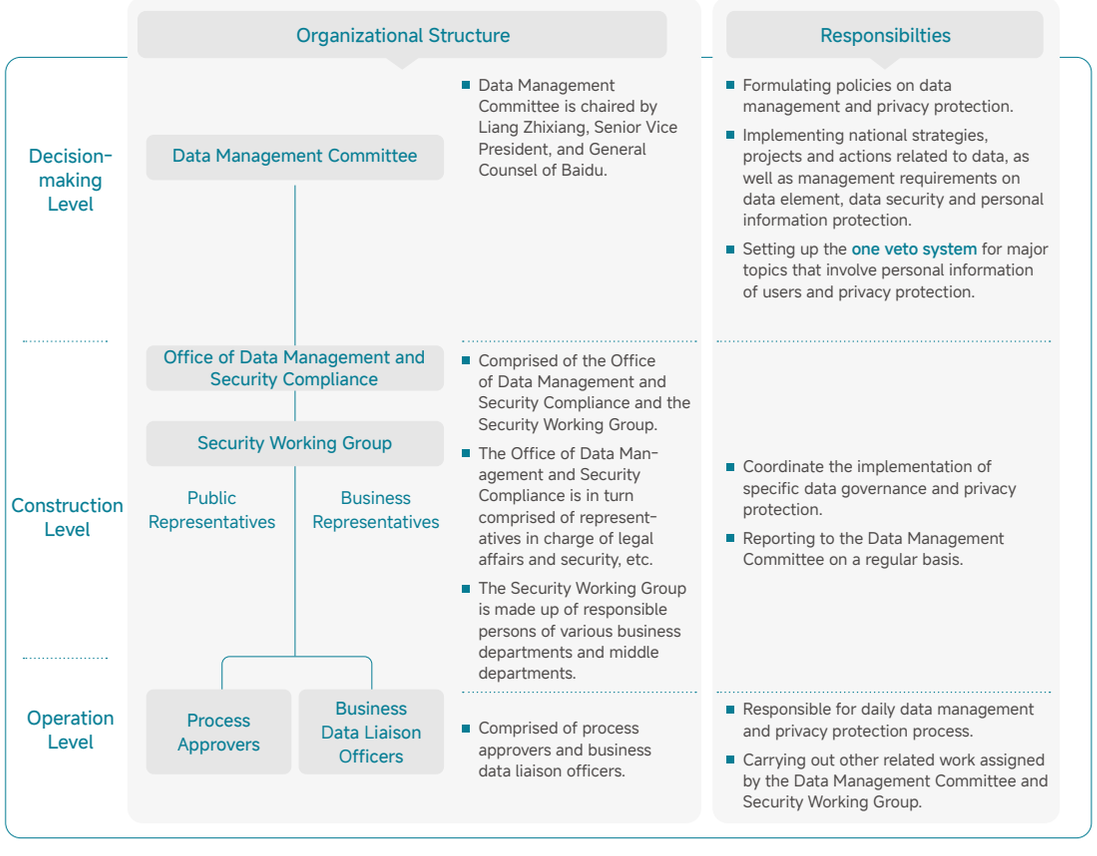
Robust Security Management System

Baidu prioritizes cybersecurity and data security, strictly adhering to national laws and regulations such as *the Cybersecurity Law of the People's Republic of China, the Data Security Law of the People's Republic of China*, and *the Personal Information Protection Law of the People's Republic of China*. To streamline our data security processes and enhance our risk management system, we have formulated a comprehensive series of policies for all lines of business, including the *Baidu Data Management Regulations*, *the Baidu Data Transfer Standards, the Baidu Data Permission Management Standards, and the Baidu Data API Management Standards*. Our policies, standards, norms, guidelines, and other relevant documents are also subject to a rigorous review, publication, and revision process to ensure their continued applicability and effectiveness, and cover topics such as baseline security, workplace security, infrastructure security, data security, product security, third-party security, and overall security management. They apply to 100% of Baidu's business units and are designed to safeguard operations, enhance employee awareness of security issues, and protect user data, driving the company's sustainable development and enhancing user trust.



Efficient Security Management Framework

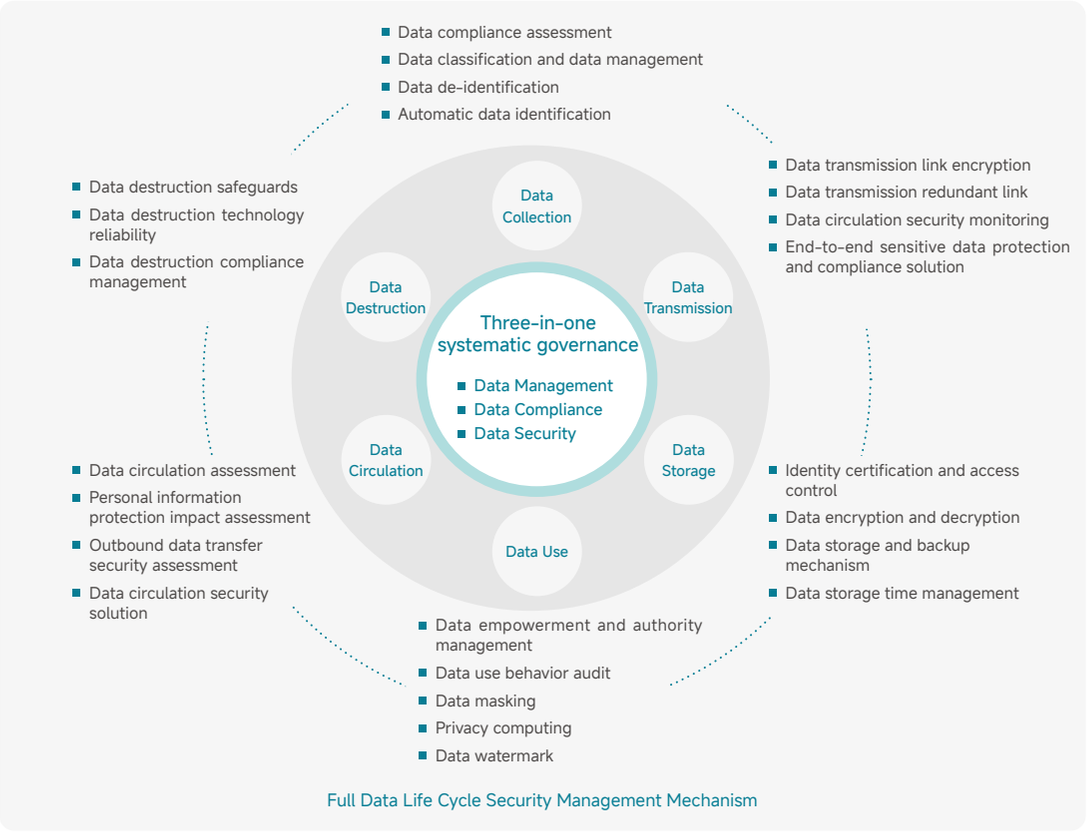
Baidu has established a three-tier data management framework, with the Data Management Committee serving as the company's top-level decision-making body for data governance. Security metrics are incorporated into the performance assessments of senior executives and relevant employees in order to drive the effective implementation of security management initiatives.



Security Management Organization and Responsibilities

Comprehensive Data Lifecycle Management System

Baidu has established a comprehensive set of policies and security management measures covering areas such as data management, data classification, data circulation, cross-border data transfers, and access control. In addition, we have implemented security and privacy protection solutions that span the entire data lifecycle, from data collection and transmission through to storage, usage, circulation, and destruction. By integrating policies, approval processes, and technical solutions into our products and platforms, we have established a comprehensive data lifecycle management system to identify (prior to occurrence), control (during occurrence), and track (after occurrence) data security risks.



Full Data Life Cycle Security Management Mechanism

Advanced Security Technologies

Baidu leverages advanced security technologies to safeguard its networks, systems, products, and other services. These technologies effectively prevent cyberattacks and malicious activity, ensuring the reliability and security of our operations. In addition, we deploy dynamic data protection technologies and strictly comply with relevant regulatory standards and legal requirements, demonstrating a strong commitment to protecting users' privacy rights. We continue to strengthen our security capabilities in emerging areas such as vulnerability management and security testing, further enhancing our overall security resilience.

Infrastructure Security

- We have formulated a comprehensive range of policies for all business segments in order streamline data security procedures and improve our risk management framework. Key policies include the *Baidu Data Management Regulations, the Baidu Data Circulation Standards, the Baidu Data Permission Management Standards*, and *the Baidu Data API Management Standards*.

Cybersecurity

- We deploy a full suite of cybersecurity technologies to protect network boundaries, applications, databases, and hosts against attacks, including a traffic intrusion detection system (IDS), host IDS, WAF system, firewall, anti-virus software, and white-box and black-box monitoring, effectively identifying and preventing external attacks.
- Our DDoS protection platform intercepted 4,973 attacks, with a peak attack volume of 650Gbps. Attacks affecting egress security were automatically intercepted within one minute.

Code Security

- When developing our AI-powered coding tool Baidu Comate, we integrated quality and security considerations across the entire development lifecycle. The tool includes a range of security features that anonymize sensitive information to prevent data breaches and make our AI-generated code more secure. Baidu Comate can automatically identify and fix vulnerabilities in code during the design, coding, building, testing, and validation phases, effectively addressing security issues.

Cloud Security

Leveraging AI, big data, and machine learning, we have designed a comprehensive security architecture to protect our cloud systems:

- Cloud security: We have deployed our proprietary ITHP security solution to protect customer's data assets on the cloud.
- Client security: We use our HOSTEYE cloud server security solution to ensure the security of our cloud servers.
- Data security: We deploy comprehensive data security solutions and products to protect enhance the management of user data.

Product Security

We incorporate data security and privacy protection measures into product and service development:

- Before product/iteration launch: All new products and iterations are required to undergo testing on our "Springer" platform, as well as secure multi-party computation and privacy benchmark testing.
- After product/iteration launch: All products and iterations must undergo a security vulnerability scan. If any vulnerabilities are identified, they must be tracked and resolved by staff from the security department and relevant business departments using a vulnerability management platform. Third-party SDK integration requires an internal security assessment.

Secure Operations

- We leverage AI technologies such as large models and intelligent agents to assist with threat analysis, intrusion detection, alert evaluation, and attack tracing. This has enabled us to transition from a passive to a proactive defense strategy, significantly enhancing the security of our operations.

Baidu is committed to upholding the highest standards of quality and security in our development tools. In response to the security challenges of software development, we leverage foundation models to improve efficiency and security for software developers, shifting from conventional management approaches to a technology-driven model. By implementing a "shift-left" security strategy, we enable developers to proactively address potential issues at the most critical stages of the DevOps lifecycle, preventing problems at the earliest phases of development to ensure high quality standards. Quality and security considerations are embedded throughout the entire development process, enabling developers to quickly identify and resolve common security issues—such as general vulnerabilities, supply chain risks, and confidential data breaches—during the design, coding, building, testing, and validation stages. This approach ensures an optimal balance between efficiency, quality, and security.

- In 2024, Baidu's AI-based security solution was recognized as an outstanding cybersecurity application by the Ministry of Industry and Information Technology.
- Our DDoS protection service won the "CSA 2024 Security Rock Award."
- Our deepfake video detection service was rated as "Excellent" by the China Academy of Information and Communications Technology.



24/7 Comprehensive Incident Response System

Baidu has established a series of internal regulations and policies governing data security incidents, including the *Baidu Data Security Strategies*, the *Baidu Data Security Incident Handling Regulations, the Baidu Cybersecurity Incident Handling Regulations*, and the *Baidu Security Incident Handling Guidelines.* These policies define and classify security issues and specify roles and responsibilities for various types of security incidents. We have also set up a 24/7 incident response team to ensure the prompt resolution of all security incidents.

Detection and Response

After detecting a security incident, the incident response team immediately contacts the relevant business unit and takes effective measures to mitigate losses.

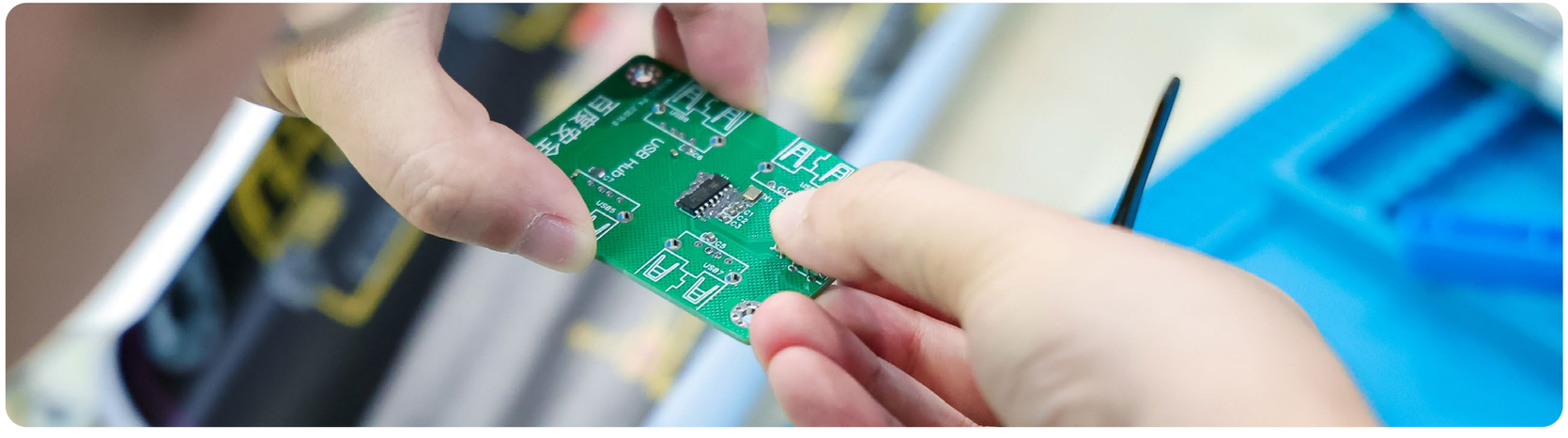
Analysis and Reporting

The incident response team conducts analysis to investigate the source of the intrusion, data breach, or other incident, and after clarifying the scope of impact, implements relevant control measures. In addition, they assess and classify the security incident and report to the responsible personnel.

Recovery and Review

The incident response team collaborates with the relevant business unit to implement remedial measures, discuss short-term solutions and develop a medium and long-term plan. The security team is responsible for verifying and monitoring implementation of the remediation plan.

Security Incident Response System



To enhance our security resilience, Baidu regularly conducts various drills and other preventive measure.

Security Incident Drills

We conduct regular drills to verify the effectiveness of our security incident plans and incident response procedures.

Frequency: 2-3 times per month

Cyberattack Drills

In accordance with the needs of each business unit, we simulate hacker attacks to test our attack defense mechanisms.

In 2024, we conducted a total of 22 internal drills.

Frequency: Regular

Vulnerability Detection and Remediation

We leverage our vulnerability detection and incident response platform to collect feedback from external technicians and repair security vulnerabilities in our various product lines and businesses.

In 2024, our Security Incident Response Center repaired 96.17% of vulnerabilities.

Frequency: Regular

Information Security Audits and Certifications

In 2024, Baidu obtained and retained a total of 26 certifications related to privacy protection and information security. These certifications cover all of Baidu's business groups, including AI Cloud, Mobile Ecosystem, Intelligent Driving, Technology Platform and Xiaodu.

International Safety Certifications

- ISO/IEC 42001 Artificial Intelligence Management Systems
- ISO/IEC 27001 Information Security Management Systems
- ISO/IEC 27017 Information Security Management System for Cloud Services
- ISO/IEC 27018 Protection of Personally Identifiable Information (PII) in Public Clouds Acting as PII Processors
- ISO/IEC 27701 Privacy Information Management System
- ISO/IEC 27032 Cyberspace Security Management System
- ISO/IEC 27040 Information Security Storage Management System
- ISO/IEC 29151 Code of Practice for Personally Identifiable Information (PII) Protection
- BS 10012 Personal Information Management System
- ISO 22301 Business Continuity Management System
- CSA-STAR Cloud Security Certification System, certified for some of ACG's IaaS, PaaS and SaaS products
- PCI DSS Payment Card Industry Data Security Standard, certified for ACG (Financial Cloud)
- AICPA SOC 1, SOC 2, and SOC 3 Reports (including Privacy Principles), certified for some of ACG's IaaS, PaaS and SaaS products

Chinese Safety Certifications

- Baidu Netdisk: PIP (Personal Information Protection) Certification, the first PIP-certified cloud storage service for individuals
- ACG Cloud Advisor: Data Security Maturity Level IV Certification (first in China)
- DCMM Level IV Certification
- TPG (Baidu Data Management Platform): Data Security Management Certification (first in China)
- Cloud-related products: "Trusted Cloud" Security Assessment
- CCRC Information Security License
- Baidu ABC Stack: Approval under national regulations for commercial cryptography applications

Baidu conducts internal and external security audits to ensure the effectiveness and reliability of our security management system. In 2024, we focused on conducting a compliance audit for our data security and personal information protection policies, including an appraisal of our overall governance framework, data classification processes, and security control and incident response measures. According to the results of the audit, appropriate measures are in place for all risks.

Internal Audit

Department: Baidu Internal Audit Department (internal auditors with internationally recognized qualifications)

Frequency: Once a year

Purpose: Assess risks pertaining to personal information and sensitive data and audit corresponding risk controls.

External Audit

Organization: Accredited third-party auditor

Frequency: Once a year

Purpose: Evaluate and audit Baidu's data security policies, systems, processes, and controls.



Security Ecosystem

The Baidu Security team leverages AI technology to build a comprehensive security ecosystem and deliver industry-wide security solutions and capabilities.

Data Security Products

In 2024, we updated our data security product matrix and released a comprehensive range of data security solutions, primarily comprising two key categories: client-side security solutions, and data lifecycle management (DLM) solutions for enterprises.

Client-side Security Solutions

Our client-side security solutions (e.g., Springer, security SDKs, and app scanning products) ensure data security and compliance when data is collected from apps, webpages, applets, autonomous driving applications, and smart devices.

Enterprise DLM Solutions

We offer a comprehensive range of enterprise DLM solutions, including the Baidu Data Management Platform, GRC Data Compliance Service, and Dianshi Platform, which ensure effective data security and compliance across the full data lifecycle.

Baidu's data security product matrix:

"Springer" Security and Privacy Protection Platform

Our "Springer" security solution provides a one-stop security solution for app developers, including app testing, security, and compliance functions.

Data Security and Compliance Platforms

Baidu Data Security Management Platform	Comprehensive, AI-powered data security and compliance solution for enterprises. The platform leverages Baidu's expertise, best practices, and Ernie LLM to provide enterprises with cutting-edge data management and security governance solutions, ensuring data visibility and ease of management.
Data Intelligence Compliance Platform	Leverages Baidu's leading AI-powered LLM technology to provide a one-stop solution for compliance auditing, assessments, dialog and report generation, as well as rapid and accurate responses to security compliance reviews, assessments, and risk evaluations.
Baidu AI Realm	Provides an all-in-one solution for managing high-value data assets across multi-cloud environments, ensuring data visibility and sovereignty.
Dianshi Privacy Computing Platform	All-in-one service for securely integrating data from multiple parties. The platform supports both cloud and on-premises deployment, and addresses a range of enterprise needs including risk control, precision marketing, and the 'cold-start problem'. By targeting data silos, it ensures data remains usable but not visible, safeguarding user privacy and compliance.

- Baidu received a three-star rating from the China Cybersecurity Industry Alliance (CCIA) for its data security and personal information protection policies.
- Our Baidu AI Cloud Qianfan data security solution won the "Outstanding Technology" award at the 2024 China International Big Data Industry Expo.
- Our AI-powered code generation tool and H5 facial recognition solution have received numerous accolades from the AIIA Security Governance Committee.

Developing Industry Standards

Baidu actively contributes to the cybersecurity ecosystem by developing industry standards in collaboration with industry peers. To date, we have participated in the formulation of over 395 standards. In 2024, Baidu we contributed to more than 30 standards, covering areas such as automotive security, personal information protection, and AI safety.

Number of standards to which Baidu has contributed as of the end of 2024:

More than 240

Number of AI safety and security standards to which Baidu has contributed:

35

Number of data security and personal information protection standards to which Baidu has contributed:

86



In 2024, Baidu participated in the formulation of the following safety and security standards

- WDTA AI-STR-01: Generative AI Application Security Testing and Validation Standard
- TC260-003: Basic Requirements for the Safety of Generative Artificial Intelligence Services
- GB/T 22081-2024: Cybersecurity Technology—Information Security Controls
- GB/T 29240-2024: Cybersecurity technology—General Security Technical Specifications for Terminal Computers
- GB/T 43697-2024: Data security Technology—Rules for Data Classification and Grading
- GB/T 43739-2024 Data security Technology—Personal Information Processing Specifications for Mobile Internet Applications (Apps) in Application Stores
- GB/T 43844-2024: IPv6 Address Allocation and Encoding Rules—Interface Identifiers
- GB/T 43848-2024: Cybersecurity technology—Evaluation Method for Open Source Code Security of Software Products.
- GB/T 44588-2024: Data Security Technology—Personal Information Processing Rules for Internet Platforms, Products and Services
- GB/T 44163-2024: Information Technology—Technical Requirements for Online Game Minor Guardianship System

Case | Baidu signs *AI safety commitment* to encourage industry self-regulation and responsible AI development

The China Artificial Intelligence Industry Development Alliance (AIIA) has actively implemented the *Global AI Governance Initiative*, bringing together insights from government, industry, academia, research institutions, and users. To encourage further progress in this area, the AIIA published the *Artificial Intelligence Safety Commitment*, which aims to promote industry self-regulation, establish an efficient and collaborative governance mechanism, and advance the human-centric and responsible development of AI. In December 2024, at the main forum of the 2025 CAICT In-Depth Observation Report Conference, Baidu became one of 17 leading AI enterprises to officially sign the commitment, underscoring our dedication to responsible AI.

2.2

Privacy and Personal Information Protection

Amid increasing global focus on data compliance and privacy protection, Baidu continues to enhance its personal information protection mechanisms. We focus on personal data security by developing cutting-edge privacy protection technologies, strengthening security impact assessments, and organizing regular employee training. These efforts aim to comprehensively enhance our corporate governance capabilities, prevent personal data breaches, and build a security management system that users can trust.

Comprehensive Privacy Protection Policies

Our privacy protection policies are based on the principles of informed consent, data minimization, user-centric experience, and security assurance. To embed these principles within our products, we have formulated numerous policies, including the *Baidu Privacy Policy*, *Baidu General Compliance Principles on Users PersonalInformation Protection*, and the *Baidu User Information Security Standards.* We have also formulated and published separate privacy policies for specific products and services, including Baidu Maps, Baidu Netdisk (cloud storage service), Baidu Tieba (online forum), and our text input tool.

These policies respect and protect users' fundamental rights, such as the right to access, correct, and delete their personal data, the right to modify the scope of authorized consent, the right to cancel their account, and the right to be informed in advance when products or services are discontinued. When users wish to access or edit their basic profile information, contact details, change passwords, add security information, link accounts, or complete identity verification, they can perform these actions via the "Account and Security" section of the relevant product. If users are unable to access or correct their personal information through the above channels, or have other concerns related to the protection of their personal information, they may contact Baidu through the Personal Information Inquiry and Feedback Platform in the User Service Center. Upon successful verification of the user's identity, Baidu will respond within 30 days.

Third-party Privacy Protection Requirements

All data provided by Baidu to third parties is strictly limited to the scope necessary for the provision of services, and there is no collection, rental, sale or provision of personal data to third parties for purposes other than completing transactions or services.

Suppliers

- We have formulated the *Baidu App Lifecycle Security Standards* and *Third-party SDK Security Access Specifications* to prevent data breaches caused by third-party SDKs. The approval of third-party SDKs is subject to a security assessment of the SDK's development code, including a security rating and a privacy risk assessment. For SDKs classified as high-risk, security vulnerabilities must be resolved before approval is granted.
- We require relevant suppliers and partners to provide a privacy policy and details of their personal information collection practices.
- We require suppliers to provide evidence that users have explicitly consented to the sharing of personal information, such as through separate pop-up windows.
- We require suppliers to sign our *Data Security and Confidentiality Agreement* to clarify third-party data protection obligations.

Partners

- We conduct due diligence on third parties using our *Assessment Form for Third Party Personal Information Protection* and require third-party partners to provide security licenses, data sources, proof of compliance, security certification (e.g., ISO certification), and other relevant documents.
- We have formulated the *Safety Standards for Third Party Cooperation* to clarify the responsibilities and requirements of relevant parties when third-party cooperation involves the use of Baidu resources.
- We require partners to sign and comply with the *Additional Baidu Security Terms* for projects which involve developing, integrating, or using third-party modules/services in Baidu's products, or the use of Baidu's domain names or Baidu's IDC resources.
- We conduct a comprehensive security assessment before integrating third-party SDKs into Baidu ecosystem apps.

Users

- Where relevant, Baidu products display a list of data shared with third parties, including third-party privacy policies and other relevant information.

Effective Privacy Protection Measures

Privacy Protection Platform

We have updated the Baidu Privacy Protection Platform, providing users with a clear and transparent explanation of how we process personal information, fulfill our corporate responsibilities, and comply with privacy protection principles. We integrate privacy protection into all stages of product development, ensuring that users benefit from robust data protection, consent-based data processing, and valuable services.

Security Awareness Training

Baidu organizes security awareness training to strengthen data protection awareness among employees and partners, fostering a comprehensive and secure digital ecosystem.

New Employees

- **Training:** Data security training for new employees
- **Coverage:** 100% of new employees
- **Frequency:** Onboarding phase, weekly

All Employees

- **Training:** Phishing/cyberattack email drills
- **Frequency:** Quarterly
- **Assessment:** Security awareness assessment for all employees
- **Frequency:** Annual

Needs-specific Training

- **Training:** Specialist training on relevant security skills
- **Frequency:** According to business needs

Suppliers and Partners

- **Training:** We provide free learning materials and courses on data security and privacy protection, and have established assessment and penalty mechanisms to ensure compliance with our data security policies.

Case | Baidu Security Month: Enhancing security awareness and strengthening privacy protection

Since 2018, Baidu has organized an annual Security Month to enhance employees' security awareness and skills. In 2024, our Security Month featured a range of online and offline activities under ten key themes, including cybersecurity training, data security lectures, security challenges, interactive experiences, community outreach, and the implementation of national standards—comprehensively showcasing Baidu's achievements in areas such as cybersecurity, data/privacy protection, and the fight against cybercrime. Through these initiatives, we not only strengthened employees' knowledge and practical skills in cybersecurity, data security, and privacy protection, but also demonstrated our responsibility to society by engaging in community activities and promoting industry standards, contributing to the development of a robust security ecosystem. In 2024, over 60,000 members of staff participated in our Security Month, which garnered more than 516,000 exposures—a 39.6% increase compared to 2023—demonstrating Baidu's ongoing commitments and achievements in the field of security.



Human Rights in Information Security and Privacy Protection

Baidu values users' right to privacy and informational self-determination. We implement comprehensive policies to protect users' privacy and security, ensure that users' personal information is properly managed, and safeguard their fundamental rights.

Key Issues	Policies and Objectives	Risk Identification	Risk Prevention and Response	KPIs	Remediation Measures
Privacy Rights and Informational Self-determination	Policy: *Baidu Privacy Policy* *Baidu Data Security Strategies* Objectives: ▪ Establish a comprehensive privacy and data security system covering all products and businesses. ▪ Provide users with control over their personal information (including the right to access, change, and delete personal data, and cancel their account) ▪ Ensure that employees are well trained in privacy and data protection.	▪ Risk of data breaches and failing to keep pace with the latest developments in security technology. ▪ Risk of changes in laws and regulations and cross-border data transfer. ▪ Risk of trust erosion and lack of user education. ▪ Information security risks due to users being unable to control their information.	▪ We have established a Data Management Committee, which is responsible for formulating relevant policies, implementing data protection requirements, and monitoring data transfers. ▪ We have implemented a data lifecycle management mechanism to identify (before occurrence), control (during occurrence), and track (after occurrence) security vulnerabilities. ▪ We have established the Baidu Privacy Platform, which provides users with a clear and transparent explanation of the privacy policy and informed consent mechanism for each product.	▪ The *Baidu Privacy Policy* and *Baidu Data Security Strategies* apply to 100% of products and businesses. ▪ 100% of business units have obtained certifications and qualifications related to data security and privacy protection. ▪ Regular training on data security and privacy protection is provided to 100% of full-time employees, outsourced employees and interns.	▪ In the event of a data breach, we immediately initiate our incident response procedures to identify, respond to, analyze, and report the incident and restore normal service. ▪ In 2024, the Baidu Security Response Center repaired 96.17% of security vulnerabilities.



2.3 Content Governance

Baidu adheres to its mission of "make the complicated world simpler through technology". We continuously enhance our content governance system and are committed to providing users with high-quality, secure, and responsible products and services.

Product Content Governance

Governance Principles and Systems

Baidu strictly complies with all applicable laws and regulations of the places where we operate and provide products or services, as well as international standards on the legality and necessity of regulating illegal content. We implement content governance measures across all our publicly accessible platforms. Our governance principles aim to strike a balance between content governance and users' right to freedom of expression, respecting the diversity of cultures, content, and viewpoints. We protect creators' right to publish on our platforms while safeguarding users' fundamental rights to freedom of speech and access to information.

Our governance framework respects national laws and regulations concerning content security and governance, including *the Cybersecurity Law of the People's Republic of China, the National Security Law of the People's Republic of China, the Provisions on the Governance of the Online Content, and the Administrative Measures for Online Information Services*. In line with these regulations, we have formulated content management policies covering all of Baidu's business lines, including *the Baidu Content Ecosystem Management Standards, the Baidu Risk Control Redlines for User Products*, and the *Baidu Children's Personal Information Protection Statement*. We have also formulated a database of product content standards such as the *Security Review Standards*, which are continuously updated based on feedback from business lines, users, and industry organizations, and added to our database of standards.



Governance Measures

Baidu has established a comprehensive content governance system that spans the entire content lifecycle, integrating both machine-based and human review processes. We continuously enhance our content governance processes across all our business lines and deploy technical measures to identify and filter harmful and illegal content, ensuring a healthy and orderly content ecosystem across all our platforms.

Content Governance Procedures

- **Automatic content moderation:** We leverage AI technology to apply a preliminarily filter, which identifies and removes content flagged as harmful or non-compliant.
- **Manual content moderation:** To improve moderation accuracy, manual checks are performed on suspected harmful content that may be difficult for algorithms to identify.
- **Appeal mechanism:** Users whose content is removed are notified through in-platform messages and given the right to appeal. After a user lodges an appeal, the corresponding content is reviewed on a case-by-case basis, ensuring a 100% resolution rate.

In addition, we leverage AI technology to support our content governance efforts. Alongside our existing content governance procedures, we deploy foundation models to streamline moderation practices, improve the efficiency and reliability of content moderation, and accelerate the processing of user appeals.

Baidu's multimodal content security solution wins WitAwards2024 award, demonstrating Baidu's continuous innovation in the field of AI security.

AI models

Text

- At the base layer, we use a database of tens of millions of words to detect harmful content, while at the application layer, we deploy of range of large language models to flag and remove pornographic, gambling-related, fraudulent, and other harmful content.

Images

- At the base layer, we use a database of millions of images, leveraging image similarity models, facial recognition, and other image analysis tools to detect and remove illegal, pornographic, harmful, and violent images.

Videos

- At the base layer, we utilize key frame extraction, automatic speech recognition, and voiceprint recognition, as well as video analysis tools that can detect harmful actions and inappropriate content such as pornography and violence.

Cutting-edge technology

Consistent Content Moderation Standards

- We adopt a dynamic approach to content moderation and train our large language models to learn and understand our content moderation standards, ensuring all content is moderated according to the same standards.

Improved Moderation Efficiency and Reliability

- We pre-train our large language models to enable them to review content in real-time and alert users who attempt to post non-compliant content.
- Our large language models accelerate the content moderation process, enhancing the diversity of content on our platforms.

Faster Processing of Appeals

- We have accelerated the appeals process by using large language models to conduct a preliminary review of user appeals.

Governance Topics

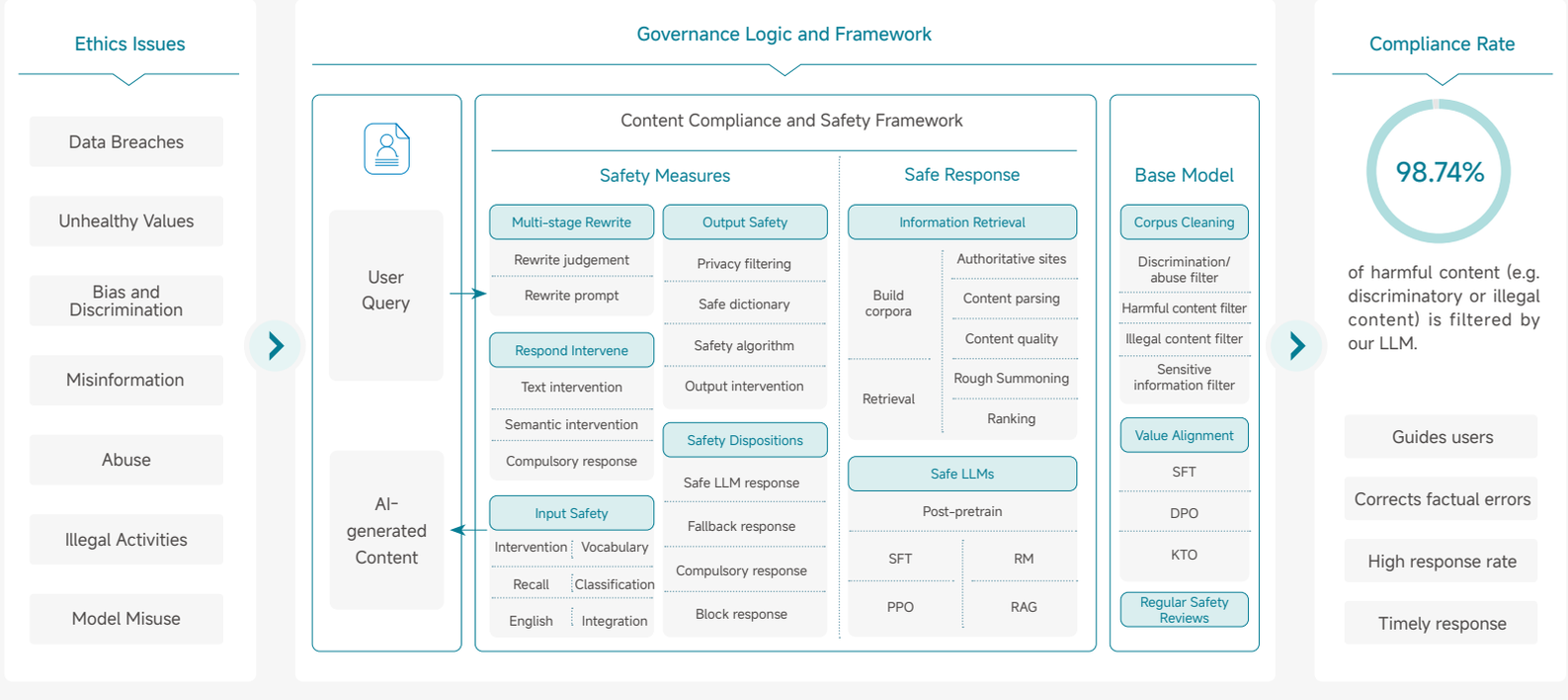
As a key participant in cyberspace, Baidu is committed to upholding its social responsibilities. By responding to regulatory requirements, implementing governance policies, and taking targeted actions to address violence, pornography, misinformation, cyberbullying, and the protection of minors, we strive to foster a safe and healthy online environment.

Types of harmful content targeted by our content moderation system

- Violence
- Pornography
- Hate speech
- Terrorist and violent extremist content
- Misinformation
- Harassment
- Self-harm
- Discrimination
- Protection of minors
- Fraud
- Drug-related content
- Rights infringements
- Dangerous goods
- Personal information
- Other inappropriate content

Governance of AI-generated Content (AIGC)

For generative AI products, Baidu has established dedicated governance models to address a range of ethics issues, including data breaches, harmful content, bias, discrimination, misinformation, and violations of laws and regulations.



We have established a multi-stage dialog mechanism for reviewing user content, analysing user intent, and responding to user requests. Our large language model is trained on authoritative data and integrates trust and retrieval-augmented generation (RAG) capabilities, ensuring safe responses and lower refusal rates. During the pre-training phase, we deploy a filtering mechanism to clean linguistic corpora, while regular safety assessments are conducted post-launch to maintain safety standards. Over 98% of content generated in response to ethics-related questions complies with our standards. The model also alerts users to factual errors, ensuring an improved user experience.

Governance Training

We conduct regular content governance training to strengthen awareness of our risk management and governance standards and improve the efficiency and reliability of content moderation.

Content-related risk management training in 2024:

32 sessions

Specialist training:

11 sessions

Average attendance for each training session:

More than 2,500 people

Governance Outcomes

As part of our commitment to content governance and cybersecurity, we continuously combat a wide range of harmful online content, and disclose comprehensive quarterly data to demonstrate the effectiveness of our content governance systems.

2024 data

Harmful content removed through manual content moderation more than:

91.182 million items

Harmful content removed through automated content moderation more than:

59.57 billion items

Malicious content intercepted more than:

61.95 billion instances

Malicious websites prevented from reaching users more than:

80.53 billion

Malicious websites and apps intercepted more than:

105.12 million times

Prevented disclosure of personal information more than:

270,000 times/day

Harmful Content Removed in 2024 (Unit: Billion Items)

Pornography	28.455
Gambling	16.999
Fraud	7.215
Illegal transactions	2.373
Counterfeit goods	1.187
Rights infringement	0.643
Violence and terrorism	0.605
Drugs	0.594
Confidential personal information	0.586
Dangerous goods	0.545
Other categories	0.459



Advertising Content Governance

Governance Principles and Systems

Baidu strictly complies with *the Advertising Law of the People's Republic of China, the Anti-Unfair Competition Law of the People's Republic of China, Measures for the Administration of Internet Advertising*, and other legal regulations of our operating location. We have formulated the *Baidu Commercial Advertisement Management Measures, Baidu Policy on Prohibited Advertising Content,* and *Commercial Advertisement Placement Handbook*, which outline stringent standards on ad placements covering a wide range of industries, including food, health, chemicals and energy, agriculture, forestry, real estate, home furnishings, accessories, clothing, games, software, tobacco products, and alcoholic beverages.

Governance Measures

Baidu has established a comprehensive advertising content management system that leverages a combination of AI moderation, human review, and manual audit. We utilize a range of algorithms and models to moderate advertising content and ensure compliance before, during, and after the placement process. We use large language models to monitor ad content in real-time and remove advertisements that contain harmful content. This approach reduces the time it takes to review non-compliant content and ensures the generation of high-quality advertisements on our platforms.

Stage	Pre-placement	During Placement	Post-placement
Content moderation measures for commercial advertisements	■ Establish a preliminary review mechanism to ensure advertisers are suitably qualified/ licensed and prevent the placement of inappropriate advertisements. ■ Provide landing page hosting for high-risk sectors and ensure comprehensive review of hosted pages to prevent tampering.	■ Monitor ad placements and landing pages, remove non-compliant content, and implement a comprehensive moderation process to ensure effective moderation and filtering.	■ Conduct compliance checks to prevent tampering, remove harmful advertisements, and terminate accounts that violate regulations.

Baidu's Full Life Cycle Advertisement Management System

Governance Topics

Baidu strictly complies with *the Advertising Law of the People's Republic of China* and other laws and regulations. We attach great importance to advertising standards, and proactively prevent the placement of advertisements that involve violence, discrimination, misinformation, or cultural insensitivity, as well as those that may harm children, physical or mental health, or promote tobacco, weapons, and gambling. Our Baidu Search advertising platform only accepts legally registered businesses, and strictly prohibits content related to obscenity, pornography, violence, terrorism, gambling, smuggling, counterfeiting, piracy, fraud, plagiarism, invasion of privacy, illicit trade, and other illegal activities. These principles are enshrined in the Ten Prohibited Advertisement Categories for the Baidu Search Platform, which all advertisers are required to comply with when using the platform. We suspend, and in serious cases, permanently terminate the accounts of advertisers who attempt to place harmful content, and report suspected criminal activity to law enforcement authorities. In addition, we continuously update our content moderation policies, ensuring regulations on prohibited content align with evolving needs.

Governance Training

To strengthen employees' awareness of advertising content risks and enhance their content moderation skills, we provide comprehensive training to all content moderation staff and related support teams. Training encompasses risk management practices, industry regulations and standards, case studies, and Q&A sessions.

In 2024, we conducted 196 training sessions using both online and offline formats, covering all product lines and onboarding for new employees. In addition, we organized 2-3 industry-focused sessions each week, with an average weekly training duration of 3 hours per employee. These initiatives have helped to enhance employees' professional skills and support the continued growth of our business.

Governance Outcomes

In 2024, we removed **99.90%** of non-compliant advertisements, reducing our risk exposure to **0.10%**. By implementing stringent content moderation measures for new and existing advertisements, we removed more than **25.3 billion** non-compliant advertisements, including over **110 million** videos.

For healthcare advertisements, we received a total of just over **100** complaints, a **60%** decrease compared with the previous year, with a response rate of **100%.** The accuracy of our content moderation tools also continued to improve, effectively addressing advertisers' concerns.

In addition, we removed over **30 million** pieces of content flagged as harmful to minors.

In terms of AIGC, we focused on addressing risks related to brand infringement, pornography, and infringement of personality rights, removing over **5.23 billion** pieces of content.

Human Rights in Content Governance

We are committed to safeguarding human rights in our content governance mechanisms. We conduct comprehensive risk assessments to safeguard users' rights, including freedom of opinion and expression, the right to life and health, equality and freedom from discrimination, and protection from harassment and violence. This approach ensures that users' rights are respected and protected, while also maintaining the healthy development of our platforms.

Key Issues	Policies and Objectives	Risks	Risk Prevention and Response	KPIs	Remediation Measures
Right to Freedom of Opinion and Expression	Policies: *Baidu Employee Manual* *Baidu Content Ecosystem Management Standards* *Baidu Risk Control Redlines for User Products* Objectives: ▪ Create an open and inclusive platform environment to ensure that users can freely express their views. ▪ Implement appropriate regulations to foster a healthy atmosphere while safeguarding diversity of opinion and freedom of expression.	▪ Excessive management of platform content may result in infringement of users' right to freedom of expression, leading to a loss of users. ▪ Lack of oversight may lead to the proliferation of violent or pornographic content or other undesirable content that promotes terrorism or fraud, resulting in user complaints and regulatory penalties.	▪ We have established an accurate and efficient content review mechanism that leverages a combination of AI and manual review to quickly identify and remove inappropriate content. ▪ Baidu has established the Baidu Service Experience Center to provide users with 24/7 customer service. We also offer diverse range of complaints channels. ▪ Baidu has established a user service center to provide users with an appeals mechanism.	▪ Our policies on content governance and respect for freedom of opinion and expression cover 100% of our products. ▪ In 2024, we conducted a total of 32 training sessions on content moderation and 196 training sessions on advertisement moderation to enhance the content moderation skills of relevant staff.	▪ Provide an appeals channel and process user appeals based on priority. ▪ Review 100% of appeal decisions, and inform users of the outcome through in-site notifications. ▪ Create a complete handling log for each complaint with detailed records of the handling process and result.
Right to Life and Health Right to Equality and Freedom from Discrimination Right to Freedom from Harassment and Violence	Policies: *Baidu Content Ecosystem Management Standards* *Baidu Commercial Advertisement Management Measures* *Baidu Policy on Prohibited Advertising Content* Objectives: ▪ Foster a safe and healthy online environment by effectively addressing bias, harassment, cyberbullying, misinformation, and threats to life and health. ▪ Ensure that users' rights to life, health, reputation, and access to information are fully protected when using the platform.	▪ Increased health risks due to misinformation and data breaches. ▪ Increased risk of users' rights being compromised due to the dissemination of harmful content such as implicit bias, violence, terrorism, etc.	▪ We have developed a comprehensive content governance system that combines machine and human review throughout the product lifecycle to identify content involving discrimination, harassment, violence, and self-harm or suicide, ensuring published content is safe and factually accurate. ▪ We have strengthened privacy protection measures to prevent personal data breaches. ▪ We have developed targeted content governance measures to address harmful AI-generated content.	▪ We have implemented a comprehensive ad content governance system comprising AI and human review. ▪ In 2024, we responded to 100% of complaints about healthcare advertisements. ▪ Our content policies on diversity, anti-discrimination, anti-harassment and violence cover 100% of our products.	▪ Our advertising content management system covers the full content lifecycle before, during, and after placement, ensuring non-compliant content is promptly removed and the corresponding account is suspended or terminated. ▪ Implement disciplinary measures for advertisers who violate our content rules, and report illegal conduct to law enforcement agencies.

Protection of Minors

Protection Philosophy

Baidu attaches great importance to the health and safety of minors. In response to the implementation of the *Law of the People's Republic of China on the Protection of Minors*, we launched a dedicated support service on the day the new law took effect, providing minors with access to comprehensive services including a support channel for safeguarding their rights, online psychological counseling, and offline awareness campaigns in schools. In addition, we have also released the *Baidu Children's Personal Information Protection Statement*, which specifies stringent measures and principles for protecting children's personal data.

For minors under the age of 14, Baidu handles children's personal information in accordance with five key principles: legitimate necessity, informed consent, clear purpose, security safeguards, and lawful use. the *Baidu Children's Personal Information Protection Statement* applies to all children's products and services on Baidu's platforms, and together with *Baidu's Privacy Policy* and product-specific privacy policies, constitute a comprehensive privacy protection framework. When collecting and using children's personal information, Baidu clearly communicates the purpose of use and obtains parental or guardian consent when necessary. In addition, Baidu uses cookies and other related technologies to provide personalized services and ensure the normal operation of our platforms.

When entrusting, sharing, transferring or publicly disclosing children's personal information, Baidu conducts stringent security assessments and signs confidentiality agreements with relevant parties. To protect the security of children's personal information, we adopt multiple measures such as encryption technology and security incident response mechanisms. Child users and their guardians have the right to access, correct, withdraw consent, and request the deletion of personal information. We update the *Baidu Children's Personal Information Protection Statement* in accordance with needs and notify users by appropriate means in the event of significant changes.

Protection Mechanisms

Baidu has implemented a series of comprehensive measures to strengthen online protection for minors and create a safe and healthy online environment, continuously reinforcing our governance outcomes and enhancing our governance capabilities.

Robust Protection and Research Mechanism

Baidu has established a robust mechanism for protecting minors on the Internet. We conduct in-depth research into online safety for children and promptly report research findings to the relevant departments.

Public Opinion Monitoring

We have optimized our processes for monitoring public opinion by establishing a professional monitoring team and a comprehensive monitoring system. We closely monitor online trends and public opinion in order promptly identify and respond to emerging topics concerning minors.

Comprehensive Content Moderation and Governance Strategy

We have enhanced our content governance strategy and content moderation standards, and organize regular and targeted training to combat harmful content.

Proactive Research-driven Governance Model

Our risk control team has introduced a proactive research–driven content governance model and established a dedicated minor protection team. Compared with the traditional reactive approach to content moderation, this model enables us to promptly identify trends in public opinion and eliminate potential risk factors.

Protection Measures

Baidu has implemented a number of targeted initiatives to create a healthy and safe online environment for minors.

Child-friendly Homepage Initiative

- Our dedicated minor protection team launched a "Child-friendly homepage" initiative in collaboration with the content recommendation and distribution team.
- We conducted random sampling and screening of homepage content viewed by minors, and conducted a risk assessment in accordance with our video content regulations to evaluate homepage content on the Baidu mobile app, applying a tiered governance model.
- We targeted a range of harmful content and values including horror videos, in-game spending, and teenage love affairs, as well as content that encourages binge eating or inappropriate school behaviour, ensuring prompt intervention to prevent such content from being recommended to minors.

Collaboration with Child Protection Organizations

- We collaborate with child protection organizations to enhance awareness of online safety issues among parents, educators, and service providers.
- We have established partnerships with university scholars, civil society organizations, and charities to investigate risks to child safety and conduct in-depth research into content governance.
- Drawing on the results of our research, we are committed to developing educational materials for users and conducting online and offline campaigns to combat harmful content and ensure the safety of children online.

Risk Matrix

- We have developed a risk matrix covering 35 key risk categories and 218 sub-categories, which assesses risks to child safety based on child participation and potential impact.
- We continuously monitor high-risk areas and implement a priority-based research and governance model.

Technology Empowerment

We leverage a combination of cutting-edge technology and stringent regulations to create a safer and healthier online environment for minors.

Cutting-edge Technology

- We use LLM technology powered by machine learning and natural language processing to enhance our automated content moderation capabilities.
- We conduct user profiling to identify the activity patterns and behavioral characteristics of child users and users who engage in fraud or illegal conduct, and develop targeted protection and governance measures.

Small Language Models

- For images, text, and short videos, we employ a dedicated small language model to detect images of minors. The model has an accuracy rate of over 80%.
- Baidu has developed its own small language model to detect content related to underage dating, nudity, child abuse, and horror.

AI-enabled Content Moderation

- We leverage large language models to conduct 24/7 monitoring of harmful content related to sexual solicitation, underage dating, sexual fetishes, and suicide.
- Our large language models conduct continuous contextual analysis to remove harmful content and assist with human review. According to the results of a pilot project for high-risk applications, our models have reduced harmful content by 74%.

Innovation and Collaboration

- Through participation in child protection initiatives such as the UNICEF *Responsible Innovation in Technology for Children* program, we develop new technological innovations to support the protection of children online.

Case | Official account dedicated to child safety awareness

We have launched an official account ("Duchang Zhianguan") for social workers, school teachers, parents, and volunteers to provide insights into the latest development in online child safety and highlight our achievements in child protection and combating cybercrime, enhancing the transparency and credibility of our platforms. The account uses a combination of livestream sessions and articles to educate users about potential online risks, while also encouraging them to report risks and contribute to our content governance efforts, ensuring children have access to a healthy online environment.

Case | Protecting children online: Baidu launches awareness campaign for parents, teachers, and social workers

In 2024, Baidu's child protection team focused on research and governance of online safety risks and explored new models of content governance. To foster collaboration with organizations from across society, we established partnerships with 15 charities in Beijing, Shaanxi and Shandong, and signed an agreement with 13 organizations to address risks associated with online media.

We also joined forces with 119 charities to organize a total of eight online awareness sessions for parents, school teachers, social workers, volunteers, and charity staff, with a particular focus on protecting children in rural and relocated communities. A total of 2,862 people participated in the sessions, covering 23 provinces, cities and regions including Beijing, Shanghai and Xi'an, effectively alleviating parents' concerns regarding online safety.

In addition, Baidu held a meeting with the Beijing Internet Association, industry experts, and representatives of a mothers association to discuss the latest research on online child safety and encourage child-friendly practices within the Internet sector.



2.4 Service Assurance

Baidu is committed to developing a comprehensive service management and demand response framework in order to continuously enhance the quality of our services and improve satisfaction for users, customers and ecosystem partners.

Users Assurance

User Service Management

Baidu is committed to improving the user experience and enhancing the quality of our services. To deliver on this commitment, we have established an oversight mechanism comprising two committees: the "Duyouyou Service Committee", and the "Duchacha Self-Disciplinary Committee".

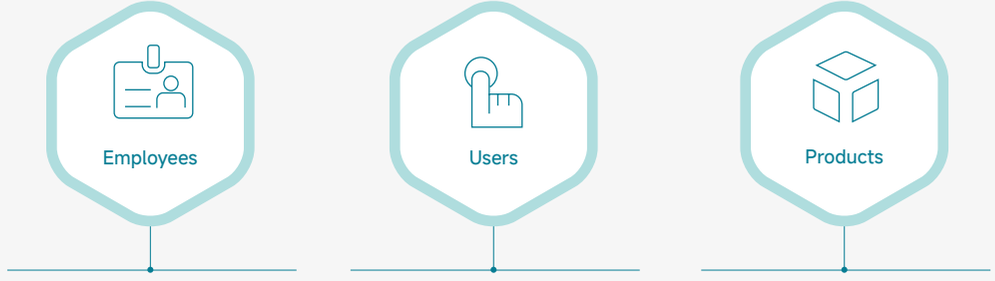
Baidu continuously collects and analyzes user feedback to improve our service standards and technical support, ensuring that users receive prompt and effective assistance when encountering problems. In addition, we continuously enhance our service system, integrating service procedures and safeguards in a closed-loop mechanism covering employees, users, and products.

Duyouyou Service Committee

Composed of industry experts and Baidu employees, responsible for monitoring Baidu's service standards and researching strategies for enhancing the user experience.

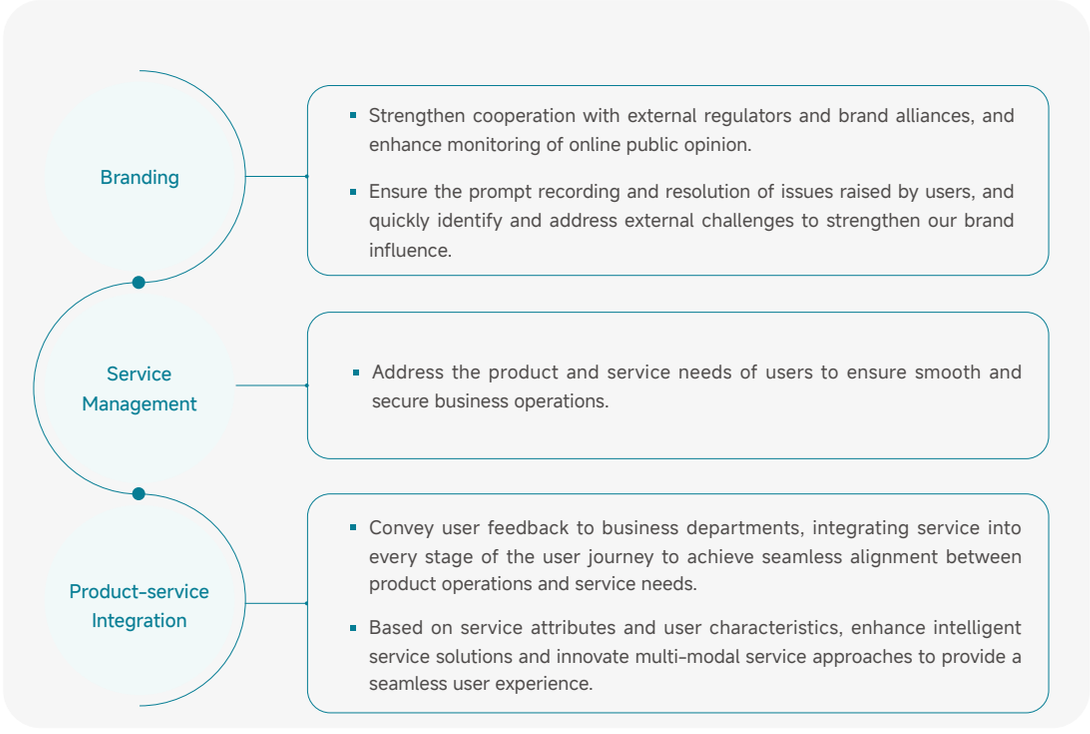
Duchacha Self-Disciplinary Committee

Composed of platform users, responsible for prioritizing and investigating harmful content reported by users and implementing targeted countermeasures for serious violations.



- All employees of our Service Experience Center are subject to closed-loop performance monitoring based on three metrics: efficiency, quality, and conduct. Performance is evaluated on a monthly basis.
- We provide a 24/7-service to over 1 billion Baidu users, and respond to 500,000 user queries per day. The maximum average response time for our customer service hotline is 30 seconds, with a human response rate of over 85%.
- We have launched an official website identification feature for our search engine to prevent fraudulent websites from harming users.

In addition, Baidu implements various measures to improve the user experience, covering three key topics: branding, service management, and product-service integration.



Complaint Management

The Baidu Service Experience Center serves as Baidu's official customer service hub, which leverages the comprehension, generation, reasoning, and memory capabilities of our ERNIE large language model to deliver an exceptional AI-driven service experience.

In addition, we have established a Copyright Complaint Platform to safeguard the rights and interests of content owners.

Complaint Management System

Measures	Content
Diverse Feedback Channels	Online channels: We provide a feedback option for our search engine, Baidu ecosystem services, and apps. Offline channels: Hotline and face-to-face interviews. Convenience: 97% of complaints are made online, such as by selecting the "Report" option in our "Tieba" online forum.
Rapid Response and Processing	Rapid response: We provide continuous 24/7 support, promptly address issues within our area of responsibility, and escalate matters beyond our control to the relevant departments, with a human response rate of over 85%. Processing time: General issues are addressed within 4-24 hours, while those requiring verification are resolved within a maximum of 3 business days. High-priority issues handled with the utmost urgency.
Tiered Resolution System	Tiered approach: We prioritize user complains based on the user category and nature of the complaint.
Feedback and Records	Notification of outcome: We inform users of our decision by means of in-platform notifications. Complaint log: We create a complete handling log for each complaint with detailed records of the handling process and result.
Complaint Handling Principles	Compliance with laws and regulations: We strictly adhere to relevant laws and regulations, and address content that violates laws and regulations or ethical norms. Protection of rights and interests: We safeguard the legal rights and interests of users and other relevant parties by addressing content that infringes upon the rights of others. Service concept: Trace, manage, and respond to complaints, and identify problems before they arise.

Complaint Management Results

In 2024, Baidu received a total of 42,493,084 complaints from our various service channels, of which 42,317,135 (99.6%) received a response. 674,563 complaints were processed by our "400" service hotline, which achieved a 95% satisfaction rate. A further 1,621,036 complaints were processed by our online instant messenger service, which reported a satisfaction rate of 80%.

Customers Assurance

As the world's largest Chinese search engine, we have established Baidu Alliance, which offers highly competitive traffic monetization services. Baidu Alliance is committed to helping partners unlock the value of their traffic while providing attractive returns to advertisers. Baidu Alliance offers a range of collaboration models (including Baiqingteng(formerly Network Alliance Partnership), Multi-Screen Ad Partnership, Search Ad Partnership, and Hao123 Ad Partnership) and has established close partnerships with websites, software providers, internet cafes, telecom operators, and device manufacturers, creating a "simple and reliable" media platform for partners and advertisers.

To protect the rights and interests of advertisers, Baidu Alliance has taken a series of measures to ensure the compliance, accuracy, and effectiveness of ad placements.

Contractual Commitments

- To protect the rights and interests of advertisers, Baidu Alliance requires all partners and advertisers to sign a contractual agreement stipulating the rights and obligations of each party, such as revenue share and settlement cycles.

Anti-fraud Systems

- Baidu Alliance adopts a zero-tolerance policy toward fraudulent conduct, and uses anti-fraud technology to target click fraud and other violations.
- To ensure the authenticity of ad impressions, users who engage in fraudulent activity will have their account blocked, or deductions will be made from ad revenue.

Data Monitoring

- Advertisers can view real-time ad performance data, including clicks, impressions, and conversion rates, enabling them to tailor their advertising strategy based on performance.

Compensation Mechanism

- Optimized Cost Per Click (oCPC) mechanism: Baidu's oCPC strategy offers a guaranteed cost compensation mechanism for advertisers. If the conversion cost exceeds the target CPA by more than 20%, Baidu will compensate for the excess.

Appeal Mechanism

- If an ad placement is removed by the compliance team, customers can file an appeal through our online platform.
- Appeals channels: Baidu Alliance official customer service, Fengling Platform, appeals mailbox, etc.
- Processing time: 2 working days for regular cases, 5 working days in special cases.



Ecosystem Partners Assurance

Baidu has always been a strong advocate of open source technologies. We have launched multiple open-source platforms, including our industry-leading open-source deep learning platform PaddlePaddle. In addition, we have formulated open-source policies that support open-sourcing of internal projects and encourage participation in external open-source projects, contributing to the open-source community while ensuring compliance and respect for third-party intellectual property.

Our open-source platforms include the *PaddlePaddle deep learning platform*, which provides a comprehensive range of services for the industry ecosystem.

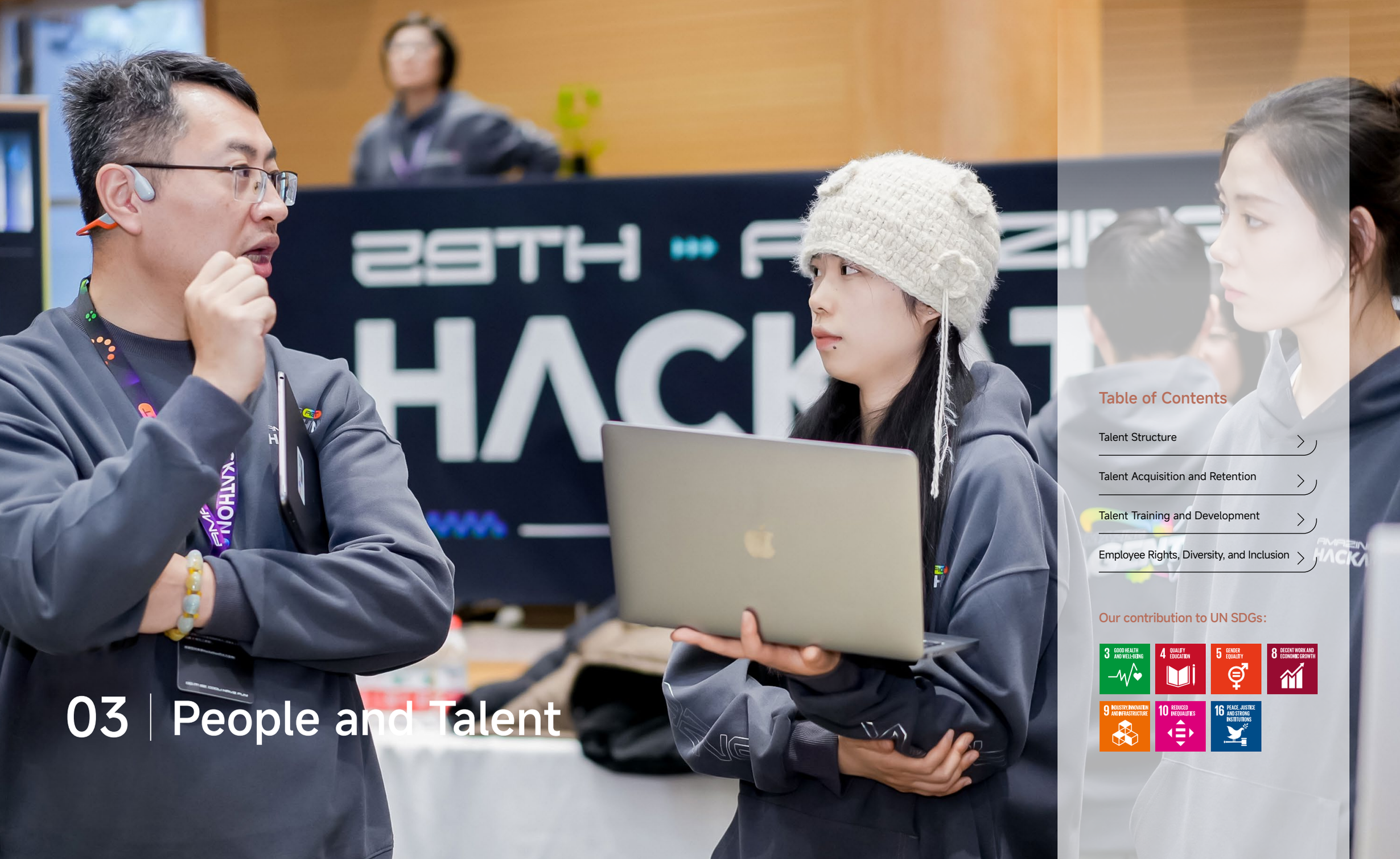
Technology Empowerment and Open-source Access	▪ By the end of 2024, the PaddlePaddle and ERNIE developer community grew to 19.24 million. Developers, academic institutes, enterprises, government administrations and hardware OEMs works together on PaddlePaddle, allowing PaddlePaddle to cultivate various industry models. ▪ By facilitating access to open-source software, Baidu lowers barriers to using AI technology, accelerating the adoption and application of deep learning technologies for developers and companies.
Hardware Ecosystem	▪ Baidu is actively building a hardware ecosystem, collaborating with over 65 domestic and international hardware manufacturers including NVIDIA, Intel, and Kunlunxin to promote the adaptation and optimization of chips for AI applications. The ecosystem outperforms PyTorch both in terms of adaptation costs and categories (No. 1 in China for adaptation capabilities). ▪ We have launched a "Hardware Ecosystem Collaboration Program" to promote extensive collaboration with hardware partners in R&D, resource sharing, licensing, and training.
Industry Empowerment	▪ We have established an AI Empowerment Center, leveraging AI technology services, solutions, and ecosystem resources to provide businesses with low-cost and efficient support services for AI applications. ▪ We have launched a "AI Navigation" program, which provides financial support to help businesses with the AI transition and train millions of AI professionals.
Industry Applications	▪ PaddlePaddle's technology has been applied across a broad range of industries, including government, finance, manufacturing, and biopharmaceuticals, helping businesses transition to an AI-powered future.
Feedback Mechanism	▪ Our PaddlePaddle platform features a user feedback and help section. ▪ Feedback channels: official GitHub, official Gitee, repositories, technical forums, exchange groups, and email.

We are also committed to technological innovation, invention, and application, and continuously share our intellectual achievements to support the development of the industry.

Case | Baidu announces new AI patent white paper and AI intellectual property initiative

In April 2024, to coincide with the 24th World Intellectual Property Day, Baidu hosted a forum on the theme of "Patent Utilization and Empowering the Growth of the AI Sector". During the event, we released the *2024 Baidu AI Innovation and Patent White Paper*, showcasing our industry-leading technological innovations and patents in large language models, software frameworks, chips, AI-native applications, next-generation intelligent computing systems, and autonomous driving. We also announced the launch of a new "AI Intellectual Property +" initiative, which aims to accelerate the development of AI patents and help the economy transition to an AI-powered future.





03 | People and Talent

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Talent Structure
Talent Acquisition and Retention
Talent Training and Development
Employee Rights, Diversity, and Inclusion

Our contribution to UN SDGs:

3.1 Talent Structure

Diversified Talent Structure

Indicator	Category	Unit	2024
Number of Employees	/	Person	30,229
Number of Employees by Gender	Male	Person	18,434
	Female	Person	11,795
Number of Employees by Age	30 and Below	Person	14,150
	31-40	Person	14,133
	41 and Above	Person	1,946
Number of Employees by Seniority	Senior Management	Person	14
	Middle Management	Person	170
	General Staff	Person	30,045
Temporary Workers	Part-time Employees	%	8.6
	Contractors/Consultants	%	0.02
Female Representation	Female Employees	%	39.0
	Female Representation in Management	%	43.9
	Female Representation in Middle Management	%	27.6
	Female Representation in Senior Management	%	35.7
	Female Representation in Top Management	%	28.6
	Female Representation in Revenue-generating Management	%	54.0
	Female Representation in T-level (Technical) Positions	%	20.4
Minority Groups	Employees with Disabilities	Person	20
	Employees from China's Hong Kong, Macau and Taiwan Regions	Person	56
	Employees from Foreign Countries	Person	44
	Employees from Ethnic Minority Groups	Person	1,655
Local Recruitment	South Korea	%	100
	U.S.	%	19.6
	Japan	%	53.6
	Thailand	%	50.0

Employee Turnover

Indicator	Category	Unit	2024
Employee Turnover	Employee Turnover Rate[8]	%	33.0
	Voluntary Turnover Rate[9]	%	20.3
Employee Turnover Rate by Gender	Male	%	34.5
	Female	%	30.8
Employee Turnover Rate by Age	30 and Below	%	35.5
	31-40	%	29.3
	41 and Above	%	42.2
Employee Turnover Rate by Region	China's Hong Kong, Macau and Taiwan Regions	%	25.0
	Overseas	%	50.0

[8] Employee Turnover Rate = Number of departing employees during the reporting period / Total number of employees × 100%

[9] Voluntary Turnover Rate = Number of employees who departed voluntarily during the reporting period / Total number of employees × 100%

3.2 Talent Acquisition and Retention

Baidu attaches great importance to the development of human capital. Through in-depth interviews, we analyze talent needs and formulate strategic, needs-based recruitment plans. In 2024, Baidu recruited 11,300 talented professionals, including 1,400 high-performing graduates. In addition, we adopt a people-oriented philosophy, ensuring we care for and empower our employees to support our talent acquisition and retention efforts.

In 2024, Baidu was recognized as "2024 Best Digital Employer" by Forbes China and was also listed in Forbes' World's Best Employers.

Structured Talent Recruitment Strategy

Talent Recruitment Programs

As a global leader in artificial intelligence, we prioritize talent recruitment and have established a structured talent recruitment strategy. In the field of AI in particular, we continuously attract top talent through a series of targeted programs, laying a solid foundation for our future growth.

Campus AIDU Program

- Targets top university talent in the AI sector in order to train leading experts in AI technology.
- Guided by expert teams and research into cutting-edge R&D.
- To date, the program has engaged over 100 PhD graduates in innovative research into robotics, autonomous driving, deep learning, and LLMs, driving technological breakthroughs and practical applications.

Management Trainee Program

- Trains future AI leaders for our core business functions.
- Covers two key career paths: Product R&D, and Strategy.
- Comprises a two-year mentorship, job rotations, and specialized training models to help trainees rapidly acquire new skills.
- As of the end of 2024, over 40 management trainees have joined the program, playing a key role in Baidu's core business segments and AI innovation.

Internship Program

- Provides over 6,000 internship positions for students, with the opportunity for outstanding interns to secure full-time positions.
- Positions cover four major fields: Technology, Product, Professional Services and Administrative Support, and Government Solutions.
- Positions are available in numerous cities, and help young graduates to prepare for a career in the AI sector.

In 2024, approximately 80% of our graduate trainee positions were related to AI technology, including a number of new graduate roles such as LLM algorithm engineers, LLM product managers, and strategic product managers. Our campus recruitment initiatives provide exceptional AI talent with the opportunity to develop large-scale pre-trained models and contribute to our core product strategies, as well as expand Baidu's pool of AI talent.

Innovative Recruitment Initiatives

To attract outstanding AI talent, Baidu employs innovative recruitment methods that help to bridge the gap with students and enhance the appeal of its campus recruitment programs.

Case | Enhancing the impact of our campus recruitment campaign through our campus ambassador team

In 2024, Baidu recruited 53 campus ambassadors, covering 47 universities nationwide. The ambassadors established a total of 50 online communities, where they interacted with over 8,000 students and posted more than 2,000 job advertisements, acting as an important channel for disseminating recruitment information and enhancing the influence and appeal of our campus recruitment campaigns.

Case | Targeting young talent through our campus recruitment open day

In July 2024, Baidu held a campus recruitment open day in Beijing, featuring 38 booths showcasing the company's core technologies and services. Through a combination of engaging video presentations and interactive Q&A sessions, teams from across the Baidu ecosystem provided in-depth insights into their core technologies and cutting-edge services. They also offered resume and career guidance services, with large numbers of students submitting their resumes and engaging in discussions, helping to raise their awareness of and interest in Baidu.

Intelligent Talent Selection and Recruitment Tools

Baidu leverages intelligent, data-driven talent recruitment tools to identify talent, match candidates to suitable positions within the company, and support the development of a sustainable talent ecosystem.

Baidu Talent Pool

- Strategic talent management tool.
- Leverages internal and external data and AI technology to match talent to suitable positions, providing support for talent needs and our long-term talent pool.

Number of resumes added in 2024:

More than **400,000**

Baidu Intelligent Recruitment System

- One-stop talent selection and recruitment management tool.
- Leverages AI technology to match resumes to open positions, summarize candidates' qualifications, and generate interview questions, helping recruiters to quickly identifying suitable talent.

Candidates selected and recruited:

More than **10,000**

Internal Talent Marketplace

- Flexible rotations: Through our internal talent marketplace, we enable employees to transition to other roles within the company, promoting mobility across different business segments and positions.
- Employee development needs: We enable employees to apply for new positions that align with their career development goals, enhancing their understanding of different business segments and providing diverse growth opportunities.

Employees who transitioned to other roles within the company in 2024:

Approx **2,000**

employees

Recruitment Management and Process Optimization

A fair, equitable, and transparent recruitment system is essential for attracting talent. We are committed to optimizing our recruitment processes, and aim to enhance the candidate experience so that every applicant has the opportunity to showcase their best self.

Recruitment Management

We streamline our recruitment processes in accordance with the *Baidu Recruitment Management Standards* in order to ensure a fair hiring process, improve the candidate experience, and enhance our employer brand.

These regulations apply to all staff involved in the recruitment process (HR, interviewers, etc.) and explicitly prohibit of any form of discrimination, including hiring decisions influenced by gender, age, ethnicity, and other factors.

The recruitment management team is responsible for monitoring violations, and has established a complaints and whistleblowing channel as well as corresponding disciplinary procedures.

In addition, Baidu strictly complies with the *Labor Law of the People's Republic of China*, the *Labor Contract Law of the People's Republic of China*, and other relevant laws and regulations. Our recruitment system includes age verification procedures to eliminate child labor, and strictly prohibits the hiring of candidates under the age of 18.

Optimizing Recruitment Processes

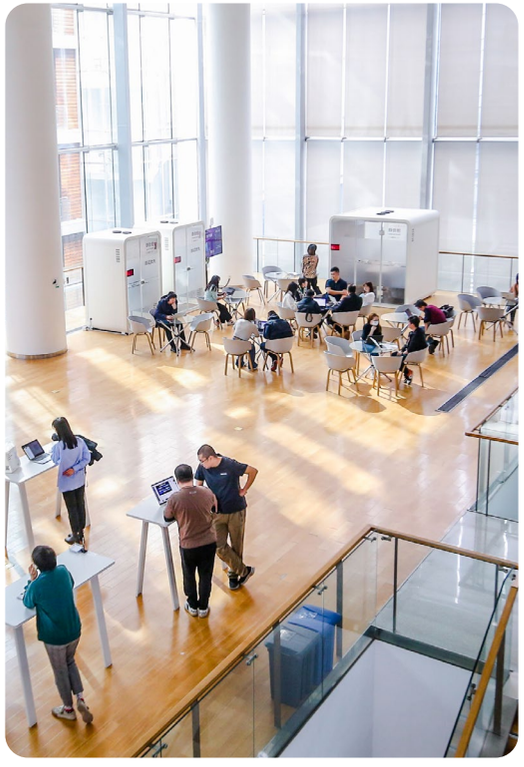
Baidu has established feedback and complaints channels to allow candidates to provide feedback on the hiring process. Candidates can express their opinions and suggestions through the official website or post-interview satisfaction survey.

In 2024, we continued to optimize our internal recruitment processes and systems, focusing on improving the efficiency of the recruitment process and enhancing the candidate experience.



Fair and Competitive Compensation and Incentives

Baidu is committed to developing reasonable, evidence-based compensation policies, transparent reward mechanisms, fair performance evaluation methods, and diverse incentive measures in order to ensure fair and competitive compensation and incentives for employees.



Performance Evaluations

We conduct regular (quarterly/annual) performance evaluations for 100% of employees.

Performance Management Procedures

1 Set Targets

Employees are required to fill out quarterly objectives and key results (OKRs) and align with managers when setting targets.

2 Performance Coaching

Managers provide performance coaching to employees, including routine coaching and quarterly OKR reviews.

3 Performance Evaluation

Performance evaluations prioritize team performance, followed by individual performance.

4 Appraisal Meeting

The employee's direct supervisor arranges a meeting to discuss the results of the performance evaluation. Employees who do not meet their performance targets are required to implement a performance improvement plan (PIP) to help them improve their performance.

5 Appeals Procedure

To ensure a comprehensive and fair evaluation process, employees who do not agree with the outcome of their performance appraisal may submit an appeal in accordance with the appeals procedure.

Baidu employs the IMPACT (Chinese name "Business Contribution Degree") concept model for annual performance evaluations to ensure a comprehensive assessment of employees' contributions.

Dimensions of Evaluation	Evaluation Process
Job Performance, Task Performance	Self-assessment, peer assessment, manager assessment, and step-by-step calibration
360-Degree Feedback and Assessment Process	

Baidu IMPACT Concept Model for Performance Evaluations

Compensation System

Baidu has established a robust compensation strategy and management process to ensure fair and competitive compensation for employees.

01
Market Research

Develop compensation strategy based on market information and job requirements, ensuring external competitiveness and internal fairness.

02
Determine Compensation

Determine salary based on role, capabilities, and performance.

03
Clear Career Paths

Establish transparent career paths to ensure employees are aware of promotion paths and pay scales.

04
Information Transparency

Allow employees to view their pay scale, overtime compensation, and other pay-related information via the internal ERP system.

05
Remuneration Appeal Mechanism

Employees can raise concerns or submit appeals on remuneration decisions by contacting a Human Resources Business Partner (HRBP).

Incentive Mechanisms

Baidu provides a range of short-term, long-term, and specific incentives to encourage employees to create value for the company.

Type of Incentive	Coverage	Details
Short-term Incentives	All employees	Includes monthly, quarterly, semi-annual, and year-end bonuses. Incentives are determined based on the specific role.
Long-term Incentives	Around half of employees	Provided to key talent at or above certain levels who create significant value, or employees who demonstrate exceptional performance and strong potential.
Specific Incentives	Specific teams and individuals	Rewards individuals and teams who make outstanding contributions, such as the "Baidu Top Award" and "Baidu Pride" award.

Case | Baidu establishes "Baidu Top Award" to incentivize team innovation and breakthroughs

Launched in 2010 by CEO Robin Li, the "Baidu Top Award" is the company's highest award and recognizes small teams of ten or fewer employees at director level or below who make outstanding contributions to the company through innovations in Internet technology, under the motto "small teams, great achievements". Each winning team receives a reward of US$1 million.

In 2024, the "Baidu Top Award" was awarded to four teams (YunFan, QingZhou, BaiLian, and ZongHeng) in recognition of their innovations and breakthroughs in LLM technology. To date, a total of 51 teams have received this honor.



Non-remunerative Benefits and Welfare

Baidu is committed to the welfare of each and every employee and has established the *Baidu Care and Welfare Management Instructions* to regulate the provision of non-remunerative benefits for full-time employees, interns, and contract workers.

Non-remunerative Benefits

Baidu has established a comprehensive non-monetary benefits system that provides employees with a range of benefits, including education, family assistance, and a healthy work-life balance. Our goal is to enhance employees' sense of belonging, worth, and happiness.

Case | Distributing holiday gifts to foster a culture of belonging

During major holidays such as New Year's Day, Spring Festival, International Women's Day, Children's Day, and Mid-Autumn Festival, we distribute gifts to employees to demonstrate our appreciation for their contributions to the company, including electronic devices from Xiaodu (Baidu's hardware brand), customized bags, and household goods.

On Women's Day, we provide gifts and leave entitlement to female employees to underscore our commitment to equality, diversity, and inclusion. On Children's Day, we distribute personalized gift packages to employees' children to highlight the importance of work-life balance.

These benefits have been positively received by employees, strengthening their sense of appreciation and belonging.

Life

Work-life Balance

Respect for personal life and flexible work arrangements.

Types of Leave Entitlement

Employees are entitled to various types of leave in addition to statutory holidays, such as paid annual leave, marriage leave, bereavement leave, maternity leave, paternity leave, and parental leave.

Employee Activities

We organize regular team-building activities to enhance team cohesion.

Other Benefits

Free meals, fitness training, lifestyle services, and holiday care.

Education

Career Development Training

Employees can access internal and external training courses to enhance their skills.

Academic and Skill Enhancement

We provide support with professional certifications and learning opportunities.

Family

Family Health Support

Launched the Greenpine Plan to provide commercial insurance coverage—including comprehensive medical insurance, life and accident insurance, and critical illness insurance—for parents of employees who have been with the company for two years or more.

Gift Cards/Condolence Payments

We provide gift cards to celebrate marriage and childbirth, as well as condolence payments for employees who experience illness or bereavement.

Healthcare

Insurance Plans

Full contributions to statutory social insurance and housing fund for all employees, along with optional commercial insurance plans.

Health Check-ups

We arrange annual health check-ups for employees.

Health Advice

We engage professional healthcare institutions to provide health consultations and lifestyle guidance.

On-site Health Services

We provide on-site support for employees who experience physical discomfort or injury, including consultations, medication, and medical hotline services.

Mental Health Support

We provide free psychological counseling services.

Non-Remunerative Benefits for Employees

Work-life Balance

We care about all our employees and advocate the concept of work-life balance to foster a healthy and sustainable work environment, as well as promote diversity.

Balancing Work and Parenting

We provide on-site lactation rooms, and female employees with children under one year of age are entitled to one hour of breastfeeding leave each workday.

Balancing Work and Caregiving

Employees whose parents require care are entitled to at least 10 working days of parental caregiving leave per year.

Flexible Work Arrangements

We advocate an efficiency and value-oriented approach to work and offer flexible work arrangements, allowing employees to freely arrange their working hours, provided they work eight hours per day and complete their allocated tasks.

Comprehensive Communication and Feedback Mechanisms

Baidu is committed to establishing effective employee communication channels and robust feedback mechanisms. By conducting targeted satisfaction surveys, we promptly identify employee needs, continuously improve the employee experience, and lay a solid foundation for the company's long-term growth.

Communication Channels

Baidu offers a diverse range of internal communication channels. Our commitment to employee communication is outlined in the *Baidu Employee Manual*, which states the following:

"Open communication is encouraged. Employees may discuss any employment-related matters with their direct supervisor, relevant managers, the Human Resources Department, or senior management. We strive to continuously improve our employment policies to create an open and comfortable working environment for every employee."

Channel	Method	Description
Intranet platform	Forums	Employees are encouraged to speak freely and share opinions and suggestions.
	Q&A section	Executives and business/product leaders can use this platform to ascertain employees' viewpoints and insights.
	Anonymous questions	Employees may submit questions anonymously if they do not wish to reveal their identity.
Activities	Face-to-face interviews	"Culture Night" events and in-person interviews.
	Year-end Conference	Reflect on the past year, look ahead to the future, and strengthen team cohesion.
Meetings with supervisors/ managers	Meetings with senior executives	Employees are given the opportunity to meet with senior executives to discuss their feedback and concerns.
	Director meetings	Promptly communicate management's proposals and strategic decisions.
	Employee dialogue	Employee speeches at events, town hall meetings, and internal communication meetings.

Case | Promoting transparent dialogue through face-to-face meetings with senior executives

In June 2018, Baidu launched a new initiative to give employees the opportunity to meet with senior executives. A total of 36 meetings have been held to date. Both executives and employees are encouraged to participate in the meetings, which aim to enhance employees' understanding of the company's strategy and achievements.

Employees can submit questions in advance via the company's intranet, covering topics such as strategy, industry trends, business operations, corporate culture, and talent. Executives provide detailed responses in order to foster an atmosphere of transparent communication. Employees who are unable to attend in person can access the meetings via live broadcast, video recording, or written minutes, ensuring information transparency and availability.



Grievance Mechanisms

Baidu encourages employees to raise and resolve issues encountered at work—especially those inconsistent with Baidu's values—through effective and appropriate channels, and to speak up against unfair practices in the workplace.

Conduct that contradicts Baidu's values may be reported via the company's grievance channels, which are outlined in the *Baidu Employee Manual*.

Reporting Channels

Email：	culture@baidu.com, bdjb@baidu.com
In Person:	Staff may contact a designated person via Baidu's Ruliu service account "Yangguang Zhichang"
Business Ethics Onsite Mailbox:	Workstation F7-BC384, Baidu Building
Mailing Address:	Baidu Professional Ethics Department (Attn), Baidu Building, No. 10 Shangdi 10th Street, Haidian District, Beijing, 100085
Baidu Baijiahao:	Grievances may be reported to designated personnel via a private message on Baidu Baijiahao.

Baidu strictly enforces whistleblower protection measures in accordance with applicable laws and regulations, as well as the *Baidu Professional Ethics Reporting Management Regulations*[10]. These measures include maintaining strict confidentiality of the whistleblower's identity, contact information, and reported content, and strictly prohibiting any form of retaliation. Where necessary, Baidu also provides legal consultation or assistance to safeguard the legitimate rights and interests of whistleblowers.

In 2024, there were no cases of dismissal, demotion, suspension, intimidation, or harassment resulting from lawful whistleblowing, nor were there any instances of retaliation against external whistleblowers.

Targeted Satisfaction Surveys

Baidu conducts a company-wide quarterly survey to gauge employee satisfaction and assess our organizational culture, including employees' morale and sense of mission. The survey covers multiple dimensions including job satisfaction, targets, optimism, stress and anxiety, and other mental health indicators.

Based on employee feedback, we promptly identify issues of concern and report the results of the survey to company managers and HR personnel for review and action.

Percentage of employees who participated in satisfaction survey:

over **90** %

Overall employee satisfaction:

91.2 %



[10] For more details, please see the "Governance and Policy Documents" section on Baidu ESG website.

Building a Strong Corporate Culture

We strive to build a strong corporate culture, involving all employees including new hires, management, and frontline staff. In doing so, we aim to strengthen team cohesion, improve employee satisfaction, and attract and retain top talent.

To achieve these goals, we promote our employer brand through content, communication channels, and in-person activities, which convey our belief in technology, commitment to employee growth and welfare, and our core value of being "simple and reliable".

In our 2024 organizational climate survey, indicators related to corporate culture showed an upward trend, reflecting the positive and meaningful impact of our corporate culture initiatives.

Strengthen Team Cohesion

"Baidu Pride" Awards Ceremony
Enhances employees' sense of worth and belonging.

"Baidu Welfare Market"
Promotes communication and interaction among employees.

"Autumn Carnival"
Enriches employees' cultural life and enhances teamwork.

Improve Employee Satisfaction

"Baidu Achievement Award"
Enables timely recognition of employees' achievements.

"Collaborative Gold Flowers"
Encourages team collaboration and mutual support.

Cultural understanding and integration

"Culture Night" events
Deepens employees' understanding of Baidu's corporate culture.

"Cultural Role Model" Awards
Recognizes employees who make outstanding contributions to our corporate culture.

In addition, cultural values form an important component of our annual employee evaluation system. Focusing on our core value of "simple and reliable", we encourage employees to practice principles such as equality, inclusion, and respect for diversity. Employees who demonstrate outstanding performance in implementing our corporate culture receive preferential access to long-term career support services.

Fostering a Culture of Innovation

Baidu attaches great importance to technological innovation. We are committed to advancing innovation management, fostering a culture of innovation, and developing new innovations in collaboration with our ecosystem partners.

We prioritize investment in R&D. Over the past decade, Baidu has invested more than RMB 180 billion in research and development. Supported by our long-term, comprehensive R&D strategy, Baidu has developed proprietary technologies across AI chips, frameworks, models, and applications.

Baidu's investment in research and development more than

RMB 180 billion

Comprehensive Intellectual Property Safeguards

To foster a culture of innovation, enhance innovation quality, and maximize the value of innovation outcomes, Baidu has formulated a series of intellectual property (IP) policies, including the *Evaluation Standards for High-Value Patents*, the *Guidelines for Drafting Foundation Model and AI-Native Patents*, the *Guidelines for Drafting Standard Essential Patents*, and the *Guidelines for the Management and Operation of High-Value Patents*.Baidu has also improved its IP protection and management system, covering the full lifecycle of intellectual property- from innovation incentives, patent filing, and quality enhancement, to litigation management, risk prevention, and commercialization. These measures aim to encourage the development of high-quality patents, ensure continuous innovation, and enhance our innovation capabilities.In view of the widespread adoption of Baidu's AI technologies, our high-quality patents continue to generate added value, enabling product and service innovation, supporting external collaboration, and advancing the industry-wide transition to an AI-driven future.

Systems

In 2024, we released the fifth version of our *Patent Incentive Policy*, updating our patent reward mechanism and optimizing our incentive scheme to encourage higher-quality innovation and drive the application of innovation outcomes.

Training

Baidu organizes regular patent training for employees, which covers a comprehensive range of IP topics tailored to the needs of each department, including invention disclosure, patent application, patent quality, and commercialization.

In 2024, we held over 70 patent training sessions, which were attended by more than 3,000 participants. These efforts aim to enhance awareness of IP protection among R&D staff and improve their innovation capabilities.

Industry leader in patents and innovation

Leveraging our technological expertise in the field of artificial intelligence and our extensive intellectual property portfolio, Baidu has established a number of patent collaborations with Chinese and overseas partners. In 2024, we filed over 2,000 patent applications in China, and obtained grants for more than 3,500 applications. For six consecutive years, we have maintained our position as China's leader in AI patent applications and grants.

As of December 2024, Baidu's global AI patent applications exceeded 27,000, of which more than 21,000 were filed in China. In addition, Baidu has received 17 China Patent Awards in the AI field, including one Gold Award and seven Silver Awards. Notably, we became the first company to win a Gold Award for an intelligent interaction patent.

Patent applications filed in China

More than 2,000

Obtained grants for

More than 3,500 applications

- According to a report by Questtel, Baidu is China's leader in foundation model patent applications, and also ranks first globally in deep learning patent applications.
- According to IFI Claims, Baidu ranks among the top 9 companies globally in generative AI patent applications, the only Chinese company to feature on the list.
- According to an analysis by Nikkei, Baidu is China's leader in generative AI patent applications.
- At the China Patent Awards organized by the China National Intellectual Property Administration (CNIPA), Baidu received one Silver Award in the autonomous driving category and one Excellence Award in the mapping category.



Case | Baidu announces top 10 technological breakthroughs of 2024, driving a new wave of innovation in the AI sector

On October 22, 2024, Baidu held the 2024 Baidu Top 10 Technological Breakthroughs Conference under the theme "Transforming the AI sector with cutting-edge inventions." All of the featured innovations related to foundation models and AI-native technologies.The conference has been held for three consecutive years, and aims to recognize cutting-edge AI innovations that enhance the performance of Baidu's own products, while also stimulating the development of new AI-native technologies in order to empower a wide range of industries. By recognizing cutting-edge innovations, Baidu encourages continued technological innovation and promotes the industrial application of AI technologies.

3.3 Talent Training and Development

Baidu has established a robust talent supply chain supported by a dual-track promotion system and intelligent job matching tools. We aim to cultivate talent with both managerial and technical capabilities to meet the demands of a rapidly evolving market. In addition, we leverage advanced tools to enhance employee productivity and optimize talent allocation, thereby driving continuous innovation and growth.

To prepare our workforce for the AI era, we prioritize employee skill development and empower employees to acquire new skills by implementing a tiered talent development system that covers all employees and provides targeted training tailored to the needs, seniority, and career development path of each role.

Training Performance

In 2024, Baidu invested over RMB 14 million in internal training and talent development programs. This budget was systematically allocated across various areas to ensure all employees have access to comprehensive training and growth opportunities. In 2024, 100% of employees participated in training.

Indicator	Category	Unit	2024
Percentage of Employees Trained by Gender	Male	%	100
	Female	%	100
Percentage of Employees Trained by Rank	Senior Management	%	100
	Middle Management	%	100
	General Staff	%	100
Average Number of Training Hours of Employees	/	Hours	31.6
Average Number of Training Hours of Employees by Gender	Male	Hours	32.6
	Female	Hours	30.3
Average Number of Training Hours of Employees by Rank	Senior Management	Hours	31.1
	Middle Management	Hours	41.7
	General Staff	Hours	30.6



Empowerment Training System

Baidu attaches great importance to employee development and has built a comprehensive training system covering the full career lifecycle. Supported by Baidu's comprehensive training platform and learning credits system, training is available to all employees and targets a range of skills, including professional, leadership, technical, and job-specific skills.

Learning Credits System

To foster a culture of collective learning, Baidu has established a Learning Credits system, which is available to all full-time employees (also be followed by interns) and helps to facilitate knowledge acquisition, enabling employees to grow together with the company.



Internal Training Platform

Our online learning platform Duxuetang is available to all employees, including interns, part-time staff, and contract workers, and provides a convenient, one-stop online learning solution covering a wide range of topics and fields.

In 2024, we organized 1,251 live training sessions and added 350 new sections and 2,657 courses to the platform. Of these new courses, 1,733 are related to foundation models and cutting-edge AI technologies.

In addition, we have integrated our own cutting-edge AI technologies into our Duexutang online training platform in order to enhance course development and improve the overall learning experience.

Case | New "Mini Capsule" soft skills course

Our online learning platform Duxuetang offers a flagship soft skills course called "Mini Capsule" covering five key soft skills—growth, critical thinking, execution, coaching, and influence. The course is designed to help employees address common workplace challenges, enhance their soft skills, and empower their career development.

Since its launch, the course has received 1.01 million views, with 34,564 participants. In 2024, the course satisfaction rate was 98%.



Case | Baidu launches new training program on AI-native technologies to enhance employees' knowledge of AI

In 2024, in view of the rapid emergence of AI-native systems, Baidu established a comprehensive training program to enhance employees' AI knowledge and practical skills. The program is hosted on our online training platform, and features a total of 85 courses on AI-native technology.

To enrich the learning experience, the program leverages multiple training formats including online courses, offline salons, and hands-on bootcamps, with more than 100 training sessions held to date. Around 25,000 employees have participated in the program (over a total of 1 million sessions), with over 90% reporting that the training has significantly improved their understanding of AI-native technologies.



Case | Leveraging virtual course instructors to empower training and enhance efficiency

Our online learning platform features AI-powered virtual instructors, which significantly shorten the course production cycle by enabling course developers to quickly generate new content. The platform also features intelligent search and summary functions, enabling employees to quickly filter learning resources and acquire the skills they need.



New Employee Integration and Support

Baidu is committed to providing comprehensive support for new employees to help them integrate into the company's culture and develop their careers. Through systematic onboarding programs and needs-tailored training initiatives, we ensure that new hires acquire essential knowledge and skills at the earliest opportunity, enabling them to transition smoothly into their new role and plan their career path.

General Onboarding Training

Baidu is dedicated to providing a rich and diverse training experience for new employees and graduate trainees. Our onboarding program covers cultural integration, essential knowledge and skills, professional conduct, technical skills, and job-specific competencies. It also includes training in AI-native technologies, and aims to help graduates transition from campus life, as well support new hires in transitioning to their role as Baidu employees, ensuring they have the skills to succeed in an AI-driven future.

Baidu New Employee Orientation

- Needs-tailored onboarding course for graduate trainees and experienced new hires.
- Features a combination of in-person training sessions, team and individual tasks, and a final assessment to help participants learn about Baidu's culture and acquire foundational job skills.

AI-Native Training

- Includes training on AI tools, case studies, and tailored activities such as AI contests.
- Helps new employees learn about Baidu's core advantages in the AI ecosystem and real-world applications of Baidu's technologies.

Mentor Program

- New employees are assigned a designated mentor.
- Offers comprehensive support ranging from daily guidance to long-term career development advice.
- As of the end of 2024, there was a total of 5,363 certified mentors.



Graduate Onboarding Programs

Baidu's business units have developed dedicated onboarding programs for campus hires. These programs comprise a variety of modules, including an introduction to our business segments, job-specific skills training, peer mentoring, and insights from industry experts. The aim is to help new graduates familiarize themselves with the relevant business segment, plan their career development path, and ensure a smooth transition to their new role.

MEG[11] Hongdu Program
Helps campus hires to quickly transition to roles in Baidu's content ecosystem.

TPG[12] Zhixin Program
Enhances technical R&D capabilities and fosters innovation skills.

ACG[13] Tengyun Program
Focuses on practical applications of AI and cloud computing technologies.

IDG[14] Xinghuo Program
Helps new employees to learn about our autonomous driving business and quickly familiarize themselves with their job responsibilities.

[11] MEG: Mobile Ecosystem Group [12] TPG: Technology Platform Group [13] ACG: AI Cloud Group [14] IDG: Intelligent Driving Group

Professional Competency Training

Baidu offers comprehensive competency development programs for different career tracks, covering technical skills and innovation. These programs are designed to support employees with their continuous professional development in a competitive business environment and facilitate their progression to senior positions.

Career Tracks

T Track (Technical)

Training Program

Covers core professional competencies such as coding, project management, architecture design, front-end/back-end development, and testing.

P Track (Product)

Training Program

Covers product planning, innovation, requirements analysis, data analytics, user growth, and other key professional skills.

E Track (Enterprise & Government Solutions)

Training Program

Includes training on core professional competencies such as sales skills and solutions knowledge.

Leadership Training

Baidu has developed a tiered leadership training framework to enhance team leadership, strategic thinking, and execution skills at all levels of management. This framework includes both general and specialist training programs for different managerial roles. The training curriculum covers a diverse range of practical skills, focusing on leadership competencies while also covering business, innovation, and AI-native topics.

Number of in-person leadership training sessions in 2024:

93

Number of participants:

2,838

General Leadership Programs

Our general leadership programs for new, experienced, and mid-to-senior-level managers help trainees to improve their management capabilities and leadership skills. Each program sets clear learning objectives, ensuring that managers can effectively address challenges and receive continuous support throughout their managerial careers.

Qihang Program → Management Pit Stop Program → Mini MBA → Linghang Program

Newly Appointed Managers

Helps new managers learn about Baidu's management philosophy and acquire basic management skills.

Experienced Managers

Supports ongoing skill enhancement by aligning with Baidu's annual management priorities.

Mid-level Management Talent Pool

Provides systematic management training to broaden perspectives, enhance strategic thinking, and improve knowledge of management tools and methodologies.

Director-level and Above

Reinforces management capabilities and broadens cognitive horizons.



Specialist Leadership Programs

Baidu has also launched a series of specialist training programs for high-potential managers in business and technical roles. Each program leverages a diverse range of training methods, including company visits, entrepreneur workshops, hands-on learning, coaching, management training, and professional exchanges.

Fenglei Program

High-potential Business Leaders

Identifies and nurtures outstanding young talent, facilitating their transition into future business leaders.

Qingzhou Program

Technical Managers

Strengthens management capabilities and team leadership skills of technical managers to help them address the challenges associated with rapid technological development.

Dual-track Talent Promotion System

Baidu's talent promotion system reflects the diverse nature of our career paths, offering opportunities for both vertical and horizontal growth.

Vertical Growth

Baidu implements a dual-track promotion system consisting of a management track (M track[15]) and a technical track (TPE & Band track[15]). Individuals who demonstrate the requisite knowledge, skills, experience, and problem-solving abilities are given the opportunity to progress to the next level, subject to a skills assessment and management approval.

Management Track (M Track)

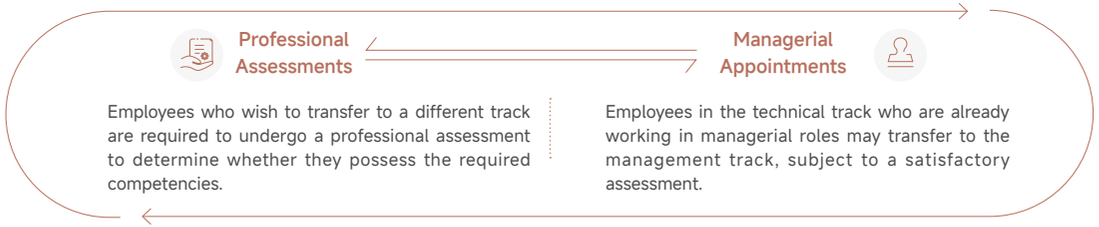
Focuses on management capabilities and leadership potential; suitable for employees who wish to pursue managerial roles.

Technical Track (TPE & Band Track)

Focuses on professional expertise and technical skills; suitable for employees who wish to deepen their subject-matter knowledge.

Horizontal Mobility

Baidu also encourages employees to acquire experience in different fields and roles. Once they reach a certain level, employees have the opportunity to switch horizontally between our management and technical track.



[15] M Track (Management): Management track for employees focused on leadership responsibilities and organizational oversight. T Track (Technology): Technical track for engineering, development, and technical innovation roles. P Track (Product): Product track for product planning, design, and lifecycle management roles. E Track (Enterprise & Government Solutions and Services): Specialist track for roles related to enterprise and government industry solutions and services. Band Track: Cross-functional track covering roles in sales and business development, business research and analysis, marketing and communications, and professional services.

Supporting Self-development

Baidu actively supports continuous professional development by providing a variety of learning and development opportunities. Through a combination of learning needs surveys and personalized development plans, we help employees to enhance their skills and competitiveness.

Learning Needs Surveys

We attach great importance to employee training, and collect feedback through quarterly and annual surveys. These surveys help us to update and optimize our learning courses, ensuring they effectively address training needs. Quarterly surveys cover around one quarter of employees, while the annual survey targets all employees.

Personalized Development Plans

We develop personalized development plans for employees to address specific talent needs. Each plan includes a range of courses, covering topics such as general management, team integration, and strategic planning to help employees acquire the necessary knowledge and skills. We have also established a mentorship system to ensure that every employee receives needs-tailored career support.

Digital Productivity Tools

Baidu leverages AI-powered digital tools to improve employee productivity, support career development, and enhance skill development.

AI-Empowered R&D Collaboration

Tool

Comate Platform

- Automatically generates code to simplify the development process.
- Increased annual code output of technical employees by 10.3%.

AI-generated code accounts for 40% of our code output.

Comate Stack

- Supports data engineering, prompt engineering, foundation models, and AI application assessments, enhancing the efficiency of AI-native application development.
- Used by over 10,000 employees, enhancing collaboration and R&D efficiency.

3.4 Employee Rights, Diversity, and Inclusion

We consider our workforce to be our most valuable asset and are committed to providing every employee with a fair, safe, and inclusive working environment. We uphold respect for human rights and labor rights, maintain a comprehensive occupational health and safety system, and actively promote a culture of diversity, equity, and inclusion.

Through a series of concrete and effective policies and initiatives, Baidu not only safeguards employees' fundamental rights, but also provides comprehensive support for their career development, physical and mental well-being, and overall welfare, enabling them to thrive as individuals and grow together with the company.

Occupational Health and Safety

We believe that equal protection and comprehensive occupational health and safety measures constitute fundamental commitments to our employees. Baidu has established a robust occupational health and safety management system that aims to minimize work-related injuries and fatalities, with 60.7% of our workplaces certified in accordance with ISO 45001 standards. In addition, we actively promote stress management, psychological counseling, and fitness initiatives to alleviate work-related and mental health pressures and ensure the overall well-being and safety of our workforce.

Safety Policies and Risk Management

Baidu strictly complies with relevant laws and regulations such as the *Labor Law of the People's Republic of China*, the *Work Safety Law of the People's Republic of China*, and the *Fire Protection Law of the People's Republic of China*, fully implementing occupational health, safety, and workplace fire protection requirements.

Internally, Baidu has formulated a series of health and safety policies, such as the *Baidu Specification on Office Management* and *Baidu Office Emergency Plan*[16], which apply to all office premises and aim to provide employees with a safe working environment. The company has also established a comprehensive risk assessment mechanism and emergency response procedures. Regular workplace safety inspections are conducted to identify and eliminate potential hazards, ensuring that all employees can work efficiently in a safe environment.

Occupational Health and First Aid Training

Baidu attaches great importance to occupational health and first aid training. In 2024, we held over 20 training sessions, totaling nearly 800 hours, with close to 1,800 employees participating. The training covered topics such as occupational disease prevention, health management, and safe operating practices, aiming to raise awareness and improve emergency response capabilities.

In addition, Baidu organized multiple first aid training sessions for employees, partners, and property management staff, significantly enhancing their first aid skills. In 2024, more than 800 people participated in first aid training, laying a solid foundation for a safe and efficient workplace.

Safeguarding Physical and Mental Well-being

Baidu is committed to supporting employees' physical and mental health by providing wellequipped facilities, comprehensive services, and a professional support system.

To help employees cope with workplace stress, we provide multifunctional leisure and wellness spaces and offer professional health advice. These facilities include rest areas, an on-site clinic, massage room, gym, yoga studio, climbing wall, table tennis and badminton court, basketball court, nursing room, barbershop, library, and café, creating an environment where employees can relax and recharge outside of work.

We have also opened an on-site clinic (Baidu Health Space) that offers services such as health consultations, medication, and health planning. Additionally, Baidu provides all employees with one free annual health check-up and promotes well-being through fitness classes, customized workout programs, and sports competitions.

In terms of mental health, Baidu has launched the Ledu EAP (Employee Assistance Program) to provide professional psychological counseling services for employees and their immediate family members. The services cover a wide range of topics, including emotional issues, family relationships, anxiety, and personal development, offering comprehensive support for employees' mental well-being.To make the service more accessible, employees can book an appointment via multiple channels, including phone, our dedicated service account, or email. In addition, stringent privacy measures are taken to ensure employees can seek assistance in strict confidence.As of the end of 2024, around 8,000 mental health appointments have been scheduled through the Ledu EAP, which has become a key pillar of mental health support for Baidu employees.

Case | On-site health clinic for employees

Baidu's office premises house an on-site clinic (Baidu Health Space) that offers free services such as health consultations, medication, and professional health check-ups. In 2024, the clinic provided 46,000 services, including 32,000 in-person consultations and medication handouts, underscoring our continued commitment to employee health.

In 2024,
the clinic provided
46,000 services

[16] For more details, please see the "Governance and Policy Documents" section on Baidu ESG website.

Diversity, Equity, and Inclusion

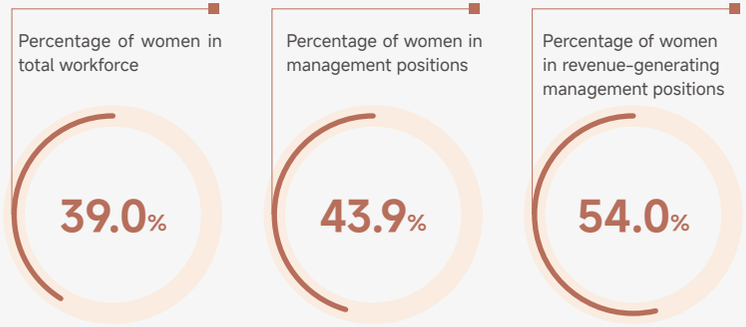
Baidu is committed to building an inclusive and equitable workplace where every employee feels valued and respected. By advancing gender equality and supporting underrepresented groups, we ensure that everyone has the opportunity to realize their full potential. We value cultural diversity and provide the necessary support to help employees integrate seamlessly into their teams.

Empowering Women in the Workplace

We firmly uphold the principle of gender equality and strictly adhere to a policy of equal pay for equal work, ensuring that female employees receive fair and equal compensation. In 2024, gender pay gap indicators were as follows:

Mean salary gap	Median salary gap	Mean bonus gap	Median bonus gap
0.60%	0.40%	1.50%	1.10%

Leveraging their exceptional skills, female employees continue to play a leading role in driving the company's sustainable development. We are fully committed to supporting women in realizing their potential and advancing their careers in the tech industry.



We are committed to safeguarding the rights of female employees and provide comprehensive maternity and parenting policies to demonstrate our support for working parents. Employees may apply for maternity, paternity, and parental leave in accordance with local laws and regulations. Upon the completion of maternity leave, we organize welcome-back parties and provide small gifts to help female employees transition back into the workplace.

Maternity leave

- Female employees may apply for maternity leave in accordance with local laws (minimum of 98 days).

Paternity leave

- Male employees may apply for paternity leave[17] in accordance with local laws.

Parental leave

- Employees with children under the age of three are entitled to no fewer than five working days of parental leave per year, depending on local regulations.
- Where permitted by local government regulations, employees may transfer parental leave entitlement to their spouse.

Respecting Employees From Minority and Underrepresented Groups

Baidu is committed to supporting employees from minority and underrepresented groups. We respect diversity in cultural practices and lifestyles, and provide employees with appropriate support and assistance whenever possible.

Area	Specific Measures
Cultural Customs	We respect diverse cultural customs and lifestyles to facilitate the integration of employees from underrepresented groups.
Dining Options	We offer Halal food counters in office cafeterias to accommodate a range of dietary needs.
Accessible Facilities	Major office buildings are equipped with barrier-free facilities, including accessible restrooms, ramps, elevators, and parking spaces to support employees with disabilities.
Support for Global Talent	We provide relocation support to employees hired from outside mainland China.
Support for Cross-Border Assignments	We offer various allowances for cross-border assignments, including base allowances, hardship allowances, meal subsidies, and additional compensation for employees stationed in conflict zones.

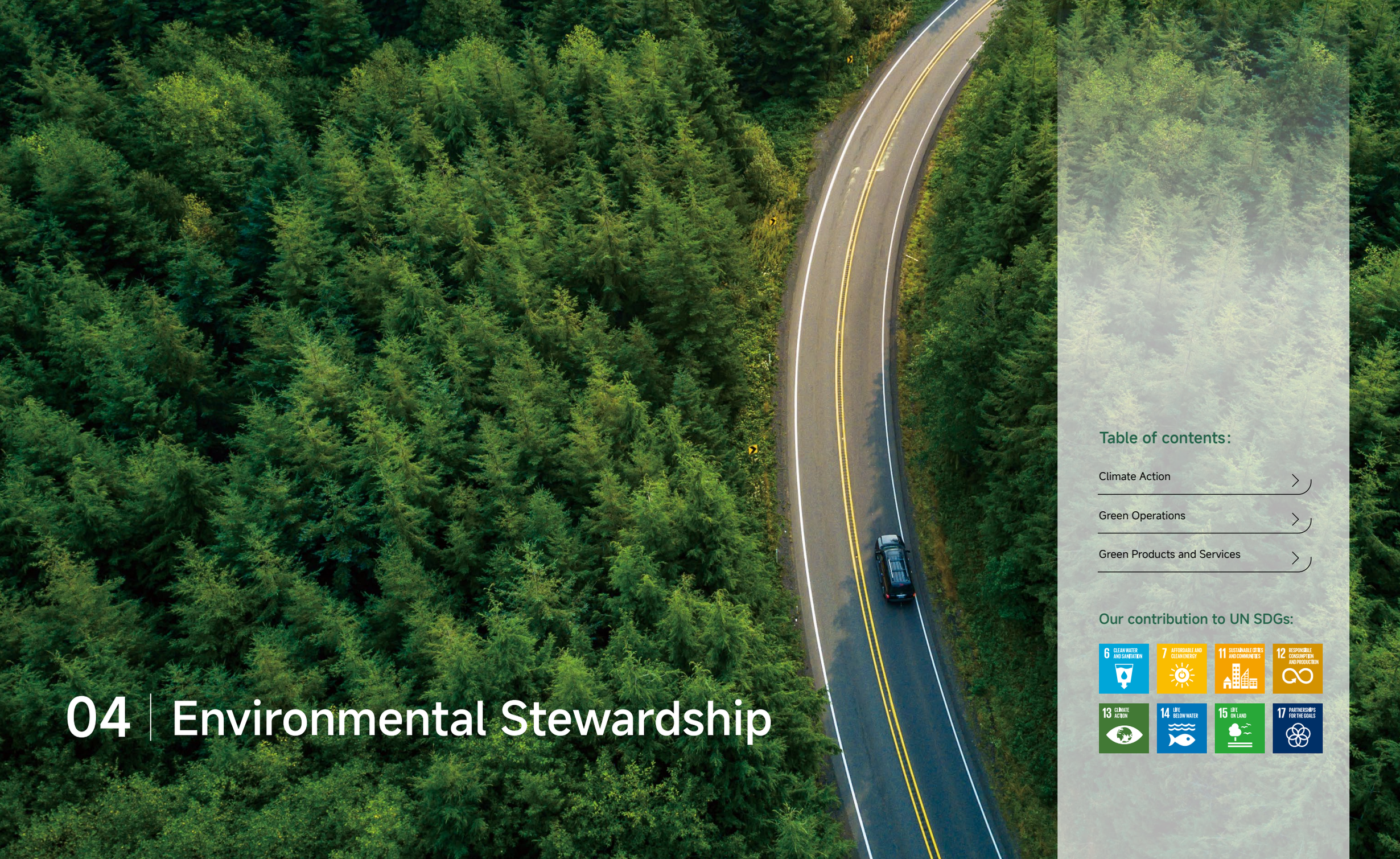
[17] The duration of paternity leave is subject to local laws and regulations.

Labor Rights and Human Rights Protection

We are committed to safeguarding the human rights of our employees. Baidu ensures that all employees enjoy fair and favorable working conditions, receive statutory social security benefits, and have their rights to free expression and opinion respected. In addition, we protect employees' rights to life and health, strictly prohibit workplace harassment and discrimination, and are committed to safeguarding employees' lawful rights and interests.

Key Issues	Policies and Objectives	Risks	Risk Mitigation Measures	Key Performance Indicators	Remedial Measures
Right to Fair and Favorable Working Conditions	Policies: - *Baidu Employee Manual* - *Baidu Compensation and Benefits Management Standards* - *Baidu Recruitment Management Standards* - *Baidu Personal Performance Management Standards* Objectives: ▪ Provide all employees with fair performance evaluations, career development opportunities, and regulated working hours. ▪ Prohibit child labor, forced labor, and any employment practices that violate domestic and international labor principles. ▪ Ensure employees' rights to freedom of association and collective bargaining. ▪ Offer competitive compensation, statutory social insurance contributions, and diverse welfare benefits.	▪ If cases of child labor, forced labor, or restrictions on freedom of association occur, the company will face regulatory compliance risks. ▪ If fair performance evaluations and career development opportunities are not provided to employees, there will be a risk of employee turnover.	▪ Implement strict screening procedures during recruitment to ensure no cases of child labor or forced labor. ▪ Establish a comprehensive performance evaluation and appeals mechanism. ▪ Provide career development guidance and a diversified promotion system.	▪ Baidu has not experienced any cases of forced labor or employment of individuals under the age of 18. The company supports freedom of association and collective bargaining through the presence of labor unions. ▪ 100% of employees receive fair and competitive compensation. ▪ Employees received an average of 31.6 hours of training. ▪ 100% of formal employees participated in annual performance evaluations.	▪ If any cases of child labor, forced labor, or restrictions on freedom of association are identified, the labor union will intervene immediately and enforce strict corrective measures to prevent such incidents from occurring. ▪ If employees have concerns or file complaints regarding compensation, benefits, or related policies (such as performance evaluations, severance compensation, or employee support programs), the Human Resources Department will provide timely assistance and address the issues accordingly. ▪ In the event of any failure to properly contribute to employees' social insurance, Baidu will promptly calculate and reimburse all unpaid social insurance contributions while providing affected employees with appropriate compensation. ▪ If any compliance violations occur, Baidu will conduct an internal review, implement timely corrective actions, and update relevant policies to ensure compliance and prevent recurrence of similar issues.
Right to Social Security		▪ If the company fails to provide statutory social insurance contributions, it may face regulatory risks, including government-imposed fines, back payments, and mandatory audits. ▪ If the company does not provide adequate protection and support programs (such as parental leave, caregiving leave, and family support plans), employees may feel neglected or be treated unfairly, leading to high turnover rates and talent loss.	▪ Ensure lawful and compliant contributions to social insurance for all employees. ▪ Provide employees with various support programs, including parental leave, caregiving leave, and family support plans.	▪ 100% of employees are covered by social insurance contributions. ▪ Employee welfare leave and support programs cover 100% of formal employees.	

Key issues	Policies and Objectives	Risks	Risk Mitigation Measures	Key Performance Indicators	Remedial Measures
Right to Freedom of Opinion and Expression	Policies: - *Baidu Employee Manual* - *Baidu Content Ecosystem Management Standards* - *Security Audit Standards* Objectives: ▪ Ensure employees' freedom of speech and encourage open communication. ▪ Enable employees to provide feedback on work-related disputes.	▪ Restricting employees' freedom of expression may lead to delays in communication and feedback, resulting in decreased morale and job satisfaction, as well as risks of poor team collaboration and reduced work efficiency.	▪ Facilitate employee feedback and communication through diverse internal channels such as the company intranet, company events, and dialogue between managers and employees. ▪ Conduct regular employee satisfaction surveys to gain insights into staff needs and expectations.	▪ Policies supporting open employee communication cover 100% of formal employees and interns. ▪ Participation in our employee satisfaction survey exceeds 90%, with an overall satisfaction score of 91.2%.	▪ Convene emergency meetings to communicate issues with employees and listen to their opinions. ▪ Review and adjust communication policies to support employees' right to freedom of expression. ▪ Publish clear corrective measures and timelines, providing regular updates to enhance transparency and trust.
Right to Life and Health	Policies: - *Baidu Security Management Standards* - *Baidu Employee Manual* - *Baidu Specification on Office Management* Objectives: ▪ Provide a safe and healthy workplace for all employees. ▪ Ensure employees do not engage in hazardous work. ▪ Support employees' physical and mental health through appropriate measures.	▪ Prolonged computer use may lead to physical health risks such as vision impairment and neck and shoulder pain. ▪ The fast-paced, high-intensity work environment may also result in mental health risks, including anxiety and depression.	▪ Establish a comprehensive occupational health policy and risk management mechanism. ▪ Conduct multiple training sessions on occupational health and safety. ▪ Implement workplace stress management, organize health-related activities, and provide mental health counseling services.	▪ Health and safety policies cover 100% of formal employees and interns. ▪ AED emergency rescue measures are available in 20 Baidu office locations. ▪ Nearly 800 hours of health and occupational disease prevention training have been conducted, with around 1,800 employees participating. ▪ 60.7% of locations have obtained ISO 45001 Occupational Health Management System.	▪ In the event of an accident, promptly activate contingency plans to ensure employee safety. ▪ Conduct a thorough investigation of the accident, analyze causes, and develop improvement measures. ▪ After the incident, provide health checks and necessary financial compensation to affected employees. In 2024, Baidu provided compensation to 22 employees for work-related injuries, and to 2 employees for work-related fatalities.
Right to Equality and Freedom from DIscrimination Right to Freedom from Harassment and Violence	Policies: - *Baidu Employee Manual* - *Baidu Recruitment Management Standards* - *Baidu Training Management Standards* - *Baidu Management Regulation of Construction of Professional Ethics* - *Baidu Professional Ethics Reporting Management Regulations* - *Baidu Code of Business Conduct and Ethics* Objectives: ▪ Provide equal opportunities for all employees, ensuring equal pay for equal work, regardless of gender, race, age, or other factors. ▪ Protect all employees (especially female employees) from workplace harassment and violence. ▪ Ensure whistleblowers do not face unfair treatment.	▪ Risk of unintentional discrimination or bias in recruitment, employment, training, promotion, and compensation, affecting equal treatment and development opportunities. ▪ There may be risks of inappropriate conduct such as sexual harassment, psychological harassment, and physical violence in the workplace or related external environments, affecting employees' physical and mental health. ▪ Employees may be deterred from expressing potential grievances and opinions due to fear of retaliation.	▪ Conduct satisfaction surveys in areas such as recruitment, employment, training, promotion, and compensation, and establish a grievance mechanism to ensure employees' rights to equality, and freedom from discrimination, harassment, and violence. ▪ Actively carry out training programs covering topics such as diversity, equity, inclusion, anti-discrimination, and prevention of workplace harassment and violence. ▪ Publicly declare zero tolerance for workplace discrimination, harassment, and violence; establish multiple reporting channels and ensure the protection of whistleblowers' rights.	▪ Female representation in management: 43.9% ▪ Gender pay gap: 0.6% ▪ Diversity and anti-discrimination policies cover 100% of formal employees and interns. ▪ Anti-harassment and anti-unfair competition policies cover 100% of formal employees and interns.	▪ Timely investigation and handling: Quickly initiate investigations into reported discrimination or harassment and take appropriate measures to ensure fair treatment. ▪ Protect whistleblowers and victims: Ensure that whistleblowers do not face retaliation during the reporting process, and provide psychological counseling and legal advice to affected employees to safeguard their rights. ▪ Provide support and reinstatement: Offer necessary job placement and psychological support to affected employees, helping them reintegrate and regain motivation. ▪ Transparent handling results: Maintain transparency in the handling process, promptly communicating results to all employees to enhance the credibility and trustworthiness of the company's whistleblowing mechanism.



04 | Environmental Stewardship

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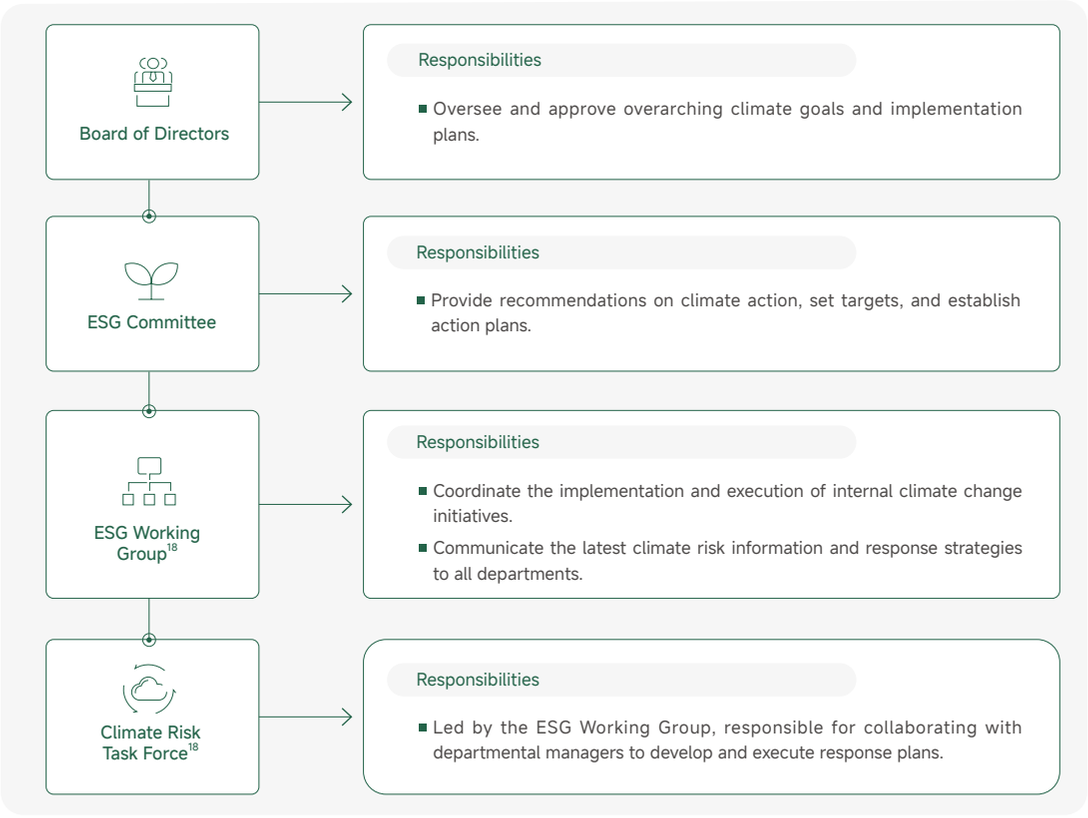
Our contribution to UN SDGs:

4.1 Climate Action

Climate change is a global challenge that requires collective action. Baidu is committed to supporting the objectives of *the Paris Agreement* and *China's "30-60" Carbon Peaking and Carbon Neutrality Goals*. We fulfil our corporate responsibilities in addressing climate change, identify climate risks to our operations, and explore new growth opportunities. In addition, we are committed to supporting the green transition through AI technology, empowering users, the economy, and society to pursue a greener future.

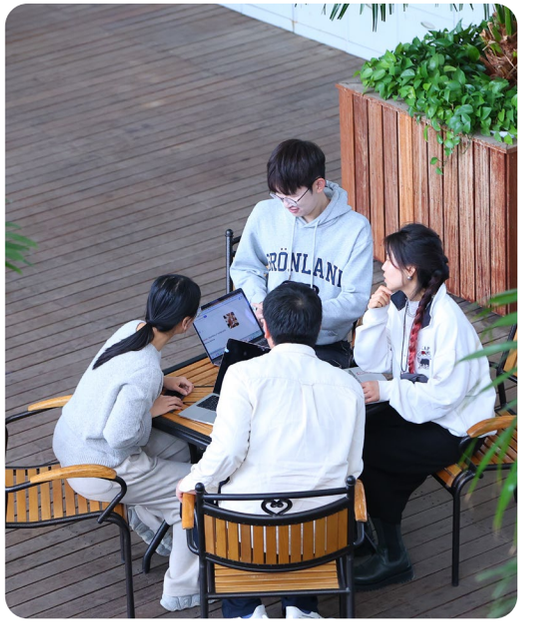
Climate Governance

Baidu has established a climate change management system led by the Board of Directors based on *the International Financial Reporting Standards S2 Climate-related Disclosures (IFRS S2)*. A dedicated climate risk management team is responsible for implementing specific tasks and integrating climate change considerations into corporate governance.



Assessment Standards

In addition to defining responsibilities at each level, Baidu advances climate governance by integrating climate-related targets into performance goals. For example, senior directors in Baidu Administration, Baidu Data Centers, and other relevant departments include energy efficiency, energy conservation, and environmental protection, and promotion of carbon neutral projects in their OKRs. Completion of quarterly OKRs also forms part of annual performance appraisals.



[18] As our climate governance efforts continue to progress, the roles of the ESG Working Group and Climate Risk Task Force have become more defined. Accordingly, we have adjusted some of the wording.

Climate Strategy

Baidu is acutely aware of the impacts of climate change on our business operations. Through climate scenario analysis, we identify and assess climate risks and opportunities under different scenarios, determine their impact duration, scope, and financial implications, and regularly update our climate strategy.

Overview of Climate Scenarios

Baidu utilizes *the Shared Socioeconomic Pathways (SSP) from the Intergovernmental Panel on Climate Change's Sixth Assessment Report (IPCC AR6)* and climate scenarios released by the International Energy Agency (IEA). We select both low and high-carbon climate scenarios to assess climate risks and opportunities across our business operations and value chain. This scenario analysis guides the formulation of Baidu's climate response measures, enhancing our climate resilience.

Categories		Scope	Scenario Model		
Physical Risks	▪ Acute Risks ▪ Chronic Risks	Business operations and value chain	Shared Socioeconomic Pathways from *the Intergovernmental Panel on Climate Change's* Sixth Assessment Report (IPCC AR6 SSP)	Low-carbon scenario: SSP1-2.6	Description: This scenario assumes that global temperature rise is limited to below 2° C by 2100, in line with the Paris Agreement.
				High-carbon scenario: SSP5-8.5	Description: This scenario assumes that CO_2 emissions double by 2050.
Transition Risks	▪ Policy and Legal Risks ▪ Technical Risks ▪ Market Risks ▪ Reputational Risks		International Energy Agency (IEA)	Low-carbon scenario: Net Zero Emissions Scenario (NZE)	Description: This scenario assumes the world will achieve net-zero emissions by 2050, with the increase in the global average temperature staying within 1.5°C of pre-industrial levels.
				High-carbon scenario: Stated Policies Scenario (STEPS)	Description: This scenario assumes that in the absence of additional policies beyond current government commitments, the global average temperature will rise by approximately 2.4° C above pre-industrial levels by 2100.
Transition Opportunities	▪ Resource Efficiency ▪ Energy Sources ▪ Products and Services				

Climate Scenario Analysis

In 2024, we updated our climate risk and opportunity assessment, incorporating the results of climate scenario analysis into our existing risk register in order to identify the impact timelines of climate risks and their potential financial implications. In addition, we continued to consider the potential impacts of LLM development in the context of Baidu's growth strategy.

	Risk Category	Risk	Potential Impact	Mitigation Measures	Scope of Impact
Transition Risks	Policy and Legal Risks	▪ More stringent carbon disclosure requirements. ▪ More stringent emission regulations and policies on low-carbon requirements.	▪ Domestic and international regulatory bodies, rating agencies, and other organizations issue increasingly stringent environmental disclosure requirements, causing Baidu to incur additional costs for data collection, operational management, etc. ▪ To comply with policy and regulatory requirements, Baidu may need to invest in energy-saving and emission reduction initiatives.	▪ Strengthen environmental disclosure capabilities, research policies and regulatory risks, enhance communication with stakeholders, and respond to stakeholder requests in a timely manner. ▪ Enhance energy management strategy, automate energy efficiency data, and make regular disclosures. ▪ Continue to invest in energy-saving technologies for data centers conrinuely, increase the share of clean energy, and disclose relevant information in a timely manner.	▪ Direct operations
	Technical Risks	▪ Increased expenditure for research into low-carbon technologies and equipment/facility upgrades. ▪ Failure to develop low-carbon technologies for data centers.	▪ Due to the rapid development of low-carbon technologies in the context of China's net-zero strategy, Baidu may need to step up research into energy-saving technologies and increase investment in emission reduction initiatives. ▪ The rapid development of LLMs has significantly increased the demand for computing power, resulting in higher energy consumption. This presents a challenge to Baidu's efforts to develop low-carbon technologies for its data centers.	▪ Explore ways to combine AI technologies, power supply systems, cooling systems, and computing power, while considering the adaptability of technical solutions. ▪ Maximize the use of renewable energy such as wind and solar power in data centers, and use energy-efficient equipment. ▪ Leverage AI technologies for predictive analysis and automated scheduling to efficiently allocate resources and improve overall computing efficiency.	▪ Upstream of the value chain ▪ Direct operations

	Risk Type	Risk	Potential Impact	Mitigation Measures	Scope of Impact
Transition Risks	Market Risks	▪ Changes in consumer behavior, leading to a growing preference for low-carbon products and services. ▪ Rising energy prices, leading to increased operational costs.	▪ Consumer demand for low-carbon products is growing. If Baidu's data centers and products fail to effectively reduce emissions, this could result in decreased demand from downstream customers. ▪ As domestic and international low-carbon policies progress, more companies are purchasing renewable energy, which may lead to fluctuations in energy prices.	▪ Respond to market demand for low-carbon products by leveraging Baidu's AI expertise to develop green solutions for transportation and other high-emission industries (including smart heating, smart water management, and smart transportation solutions), and help customers transition to a green and low-carbon future. ▪ Build green data centers and commit to providing customers with AI cloud services powered by 100% renewable energy. ▪ Enhance the environmental sustainability of Baidu's products to align with the growing trend toward green consumption.	▪ Upstream of the value chain ▪ Direct operations ▪ Downstream of the value chain
	Reputational Risks	▪ Increased negative publicity due to failure to implement climate strategy or achieve climate targets.	▪ If Baidu's climate strategies and statements are not supported by concrete actions, the company may face allegations of "greenwashing" from customers, investors, and the public, which could negatively impact the company's financing and corporate image.	▪ Set emission reduction targets and strategies for each of our six emission reduction pathways, and regularly disclose emission reduction measures and outcomes.	▪ Direct operations ▪ Downstream of the value chain
Physical Risks	Acute Risks	▪ Cyclones, hurricanes, typhoons. ▪ Extreme rainfall events, floods. ▪ Extreme high temperatures. ▪ Extreme low temperatures.	▪ Extreme weather conditions such as typhoons and rainstorms may disrupt Baidu's data centers and routine operations, which could negatively impact our business operations and corporate image.	▪ When selecting data center locations, conduct a risk assessment to avoid areas prone to typhoons, extreme rainfall, and other extreme weather events, ensuring the safety of data center operations. ▪ Our data center team has formulated the *Baidu Data Center Emergency Management Guidelines* which include contingency plans for various emergencies such as public health incidents, fires, typhoons, earthquakes, safety incidents, power outages, and flooding. All staff are required to participate in regular emergency drills.	▪ Direct operations ▪ Downstream of the value chain
	Chronic Risks	▪ Extreme variations in climate and precipitation patterns.	▪ Extreme variations in climate and precipitation patterns may lead to sustained heatwaves and water shortages, increasing the cost of water resources required for the operation of Baidu's data centers and posing greater challenges to data center cooling and water-saving technologies.	▪ Build data centers in regions that have abundant natural cooling resources and green energy (such as wind power and other renewable energy sources). ▪ Continue developing liquid cooling technologies to reduce the energy consumption of mechanical cooling systems.	▪ Upstream of the value chain ▪ Direct operations

Category		Opportunity	Potential Impact	Response Measures	Scope of Impact
Transition Opportunities	Resource Efficiency	▪ Enhance the efficiency of electricity, water, and other resources to reduce operating costs.	▪ By developing and adopting new technologies and upgrading equipment, Baidu can improve resource efficiency and reduce operating costs.	▪ Increase investment in energy-saving technologies at Baidu Data Center to further enhance energy efficiency and reduce costs.	▪ Direct operations
	Energy Sources	▪ Transition to low-carbon energy sources to reduce energy costs.	▪ To meet global carbon targets, policies increasingly mandate the use of renewable energy. Baidu can reduce energy costs by exploring the adoption of advanced renewable energy technologies.	▪ Actively explore renewable energy technologies and increase the deployment of wind and solar energy facilities to reduce energy costs under a low-carbon scenario.	▪ Upstream of the value chain ▪ Direct operations
	Products and Services	▪ Develop low-carbon products and explore new markets.	▪ Expand business related to low-carbon products and services to increase Baidu's market share.	▪ Develop low-carbon solutions for Baidu AI Cloud Group, Baidu Intelligent Driving Group, and other services to increase our market share and revenue.	▪ Direct operations ▪ Downstream of the value chain

Climate Risk Management

Process for identifying and assessing climate risks

Baidu has established a dedicated risk management process to enhance our capacity to identify, assess, and manage climate-related risks. We regularly study, identify, and evaluate climate risks and opportunities and continuously manage and respond to climate risks to strengthen our climate resilience.

1 Climate Research

- Regularly study climate-related policies, regulations, literature, and reports to enhance our understanding of the risks and opportunities that may arise in the context of intensifying climate change.

2 Risk Identification

- Identify climate risks and opportunities based on the *IFRS S2*[19] and the company's operational circumstances.

3 Risk Assessment

- Assess climate risks and opportunities under different scenarios.
- Evaluate the impact that various climate risks and opportunities may have on business operations and the company's finances, and categorize them for effective management.

4 Risk Mitigation

- Formulate effective response measures for significant climate risks and opportunities, including both quantitative and qualitative indicators.
- Periodically review and assess the effectiveness of risk mitigation measures.
- Progressively incorporate climate risks into the company's overall risk management framework.

5 Internal and External Disclosure

- Regularly report to the management on how we have managed the climate risks and opportunities.
- Disclose climate-related information in ESG reports and special reports.

[19] *the International Financial Reporting Standards S2 Climate-related Disclosure (IFRS S2)*

Metrics and Targets

In 2021, we announced our climate target of achieving carbon neutrality across our operations by 2030. Using 2020 as the baseline year, we have set corresponding emission reduction targets and released Baidu's *Six Emission Reduction Pathways*, actively promoting green practices while continuously improving energy efficiency and the share of clean energy usage. In addition to our own commitments, we also leverage AI technologies to empower the green transition across all sectors of the economy.



Pathway 1

Building Green Data Centers

- Continuously reduce energy consumption per unit of computing power through technological innovations, software and hardware iterations, and artificial intelligence.
- Progressively increase the share of renewable energy and build new data centers in areas with abundant renewable energy resources.



Pathway 2

Constructing Smart Office Buildings[20]

- Improve the energy efficiency of office buildings by leveraging advanced technologies and management strategies, including intelligent building systems, smart lighting, and automated cooling systems.
- Increase use of renewable energy in office buildings by installing on-site solar power systems.



Pathway 3

Carbon Offsetting

- Implement appropriate emission reduction measures to offset emissions from operational activities for which achieving net-zero carbon emissions may not be feasible.

Baidu's Six Emission Reduction Pathways



Pathway 4

Whole-chain Carbon Reduction Technologies Empowered by Intelligent Transportation

- Leverage Baidu's smart transportation services, Mobility as a Service (MaaS) solutions, and autonomous driving technologies to reduce emissions from road transport.



Pathway 5

Energy-efficient and Carbon Reduction Technologies Empowered by Baidu AI Cloud

- Leverage Baidu AI Cloud to support customers, partners, and other industry stakeholders with energy-saving and emission-reduction efforts and drive the transition to a zero-carbon future.

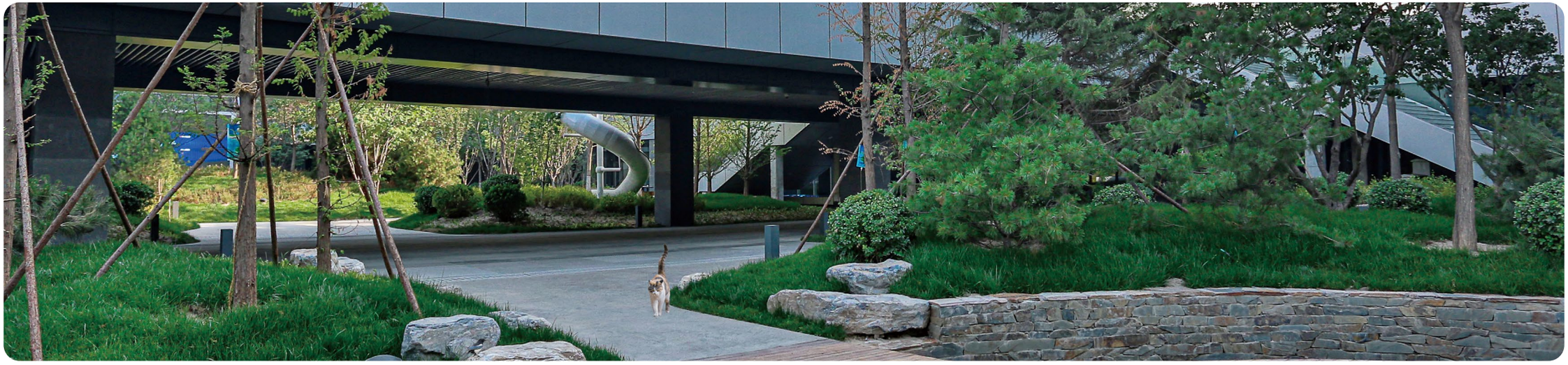


Pathway 6

Partnership Mechanism for Green Supply Chain

- Establish a new responsible supplier policy to promote emission reductions across the supply chain and create a green ecosystem for the digital economy.

[20] Due to technological advancements, Baidu has adopted new technologies and management approaches. As a result, the description of Pathway 2 for Constructing Smart Office Buildings has been updated compared to previous disclosures.



Baidu conducts an annual greenhouse gas (GHG) inventory to monitor and manage our energy consumption and carbon emissions. Based on these findings, we develop emission reduction plans to drive continuous reductions in GHG emissions.

In 2024, we conducted an audit of our GHG emissions across 33 operational sites, including office buildings and data centers. According to the results of the audit, the primary GHGs emitted by our operations are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and hydrofluorocarbons (HFCs).

Baidu's GHG Emissions[21]

Scope	Unit	2022	2023	2024
Scope 1 GHG emissions[22]	tCO_2e	20,320.9	20,039.0	20,569.5
Scope 2 GHG emissions (location-based)[23]	tCO_2e	801,942.2	903,195.5	777,438.8
Scope 2 GHG emissions (market-based)[24]	tCO_2e	-	851,017.7	645,057.7
Scope 3 GHG emissions[25]	tCO_2e	1,299,528.5	1,452,401.7	1,326,462.1
Total GHG emissions (location-based)	tCO_2e	2,121,791.6	2,375,636.2	2,124,470.4
Total GHG emissions (market-based)	tCO_2e	-	2,323,458.5	1,992,089.2
GHG emissions intensity (location-based)	tCO_2e / RMB 1 million	17.2	17.6	16.0
GHG emissions intensity (market-based)	tCO_2e / RMB 1 million	-	17.2	15.0

[21] In 2024, Baidu's Scope 1, Scope 2, and Scope 3 GHG emissions were verified and certified by a third-party organization.

[22] Direct emissions, including lost and fugitive emissions from stationary combustion sources, boilers, kitchen equipment, refrigerators, etc.

[23] Indirect emissions, involving emissions from purchased electricity, steam, and heating.

[24] Indirect emissions, involving emissions from purchased electricity, steam, and heating.

[25] Other indirect emissions, involving employee commuting and power consumption of rented data centers.

4.2 Green Operations

Baidu actively promotes green operations across all our business units. Through internal policies and ongoing development and application of new technologies and methods, we are committed to making our office buildings and data centers more environmentally friendly.

Environmental Governance

Environmental Policies

Baidu strictly complies with environmental laws and regulations in its listing jurisdiction and operating locations. To strengthen environmental governance, we have established a series of group-wide environmental policies. These policies are regularly reviewed and updated to ensure alignment with applicable legal requirements and Baidu's environmental objectives. Full details of these policies are available on the Baidu ESG website.

Policy	*Baidu Environmental, Social, and Governance (ESG) Policy*[26]
Commitments	We are committed to integrating environmental considerations and goals into our business activities. Our specific commitments include: ▪ Minimizing negative impacts on the environment, including greenhouse gas emissions, potential impacts on biodiversity, and the use of resources and land through continuous management of environmental impacts. ▪ Reducing energy consumption at data centers and other power-intensive facilities by sourcing clean energy and harnessing the potential of local renewable resources.
Applicability	Our ESG policy applies to Baidu, Inc. and all of its branches, subsidiaries, and affiliates, including all full-time employees, executives, consultants, and members of the Board of Directors, as well as Baidu's suppliers.

[26] For more details, please see the "Governance and Policy Documents" section on Baidu ESG website.

Environmental Communication

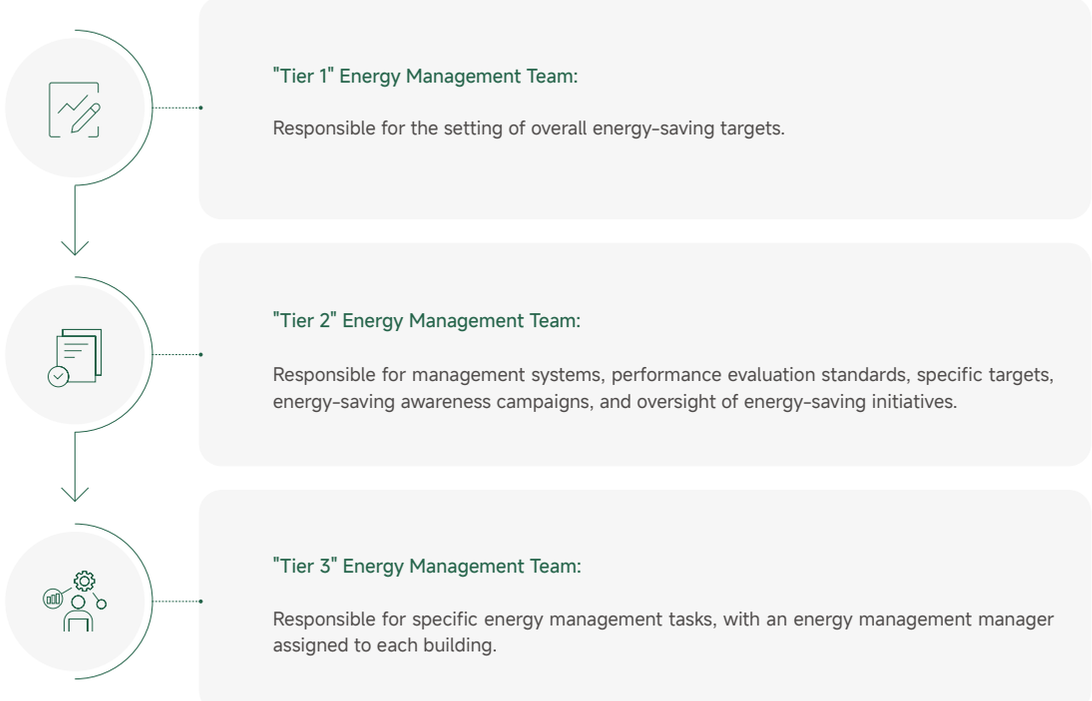
Baidu discloses its environmental policies, initiatives, and performance through multiple channels, including the ESG website, official WeChat account, and internal company platforms. We maintain active communication with internal and external stakeholders on environmental issues. Internally, Baidu organizes a range of activities to raise awareness of the company's environmental goals and encourage employees to practice sustainability.



Energy Management

By continuously working toward our 2030 carbon peaking and carbon neutrality goals, Baidu actively supports the 1.5 °C target of the Paris Agreement and China's "30-60" Carbon Peaking and Carbon Neutrality Goals. To ensure the effective management of energy resources, Baidu has formulated an *the Operational Energy-Saving Plan* and established a three-tier energy management framework with clearly defined responsibilities at each level.

At the operational level, Baidu actively implements green initiatives, continually exploring ways to reduce energy consumption and emissions, while increasing the use of renewable energy to create a more sustainable workplace. We also organize comprehensive education and awareness campaigns for employees, encouraging collective action to align with our environmental commitments.



Three-Tier Energy Management Framework

Energy Consumption

Indicator	Unit	2022	2023	2024
Diesel	Ton	118.5	81.1	75.0
Gasoline	Kg	377,725.3	8,171.2	6,130.4
Natural gas	10,000 m^3	267.2	277.3	267.9
Purchased electricity	MWh	902,076.0	1,020,507.6	1,145,027.5
Purchased heat[27]	GJ	104,748.0	102,029.3	86,756.3
Renewable energy	kWh	6,074,031.0	52,179,275.0	62,322,603.2
Total direct energy consumption	MWh	32,340.9	28,475.1	27,447.6
Total indirect energy consumption	MWh	931,156.6	1,048,833.4	1,169,113.2
Total energy consumption[28]	MWh	963,497.5	1,077,308.4	1,196,560.8



[27] In 2024, we adjusted the calculation method for purchased heat. To maintain data comparability, we have revised purchased heat data for 2022 and 2023.

[28] For the avoidance of doubt, the above figures are rounded. In 2023, Baidu's total energy consumption equaled the sum of our direct and indirect energy consumption for the year.

Data Center Energy Management

Baidu is committed to building energy-efficient, low-carbon data centers. Each data center has a dedicated energy management team and operations management platform. Annual targets are set for carbon usage effectiveness (CUE), power usage effectiveness (PUE), and water usage effectiveness (WUE), based on historical performance, and broken down into monthly and quarterly metrics for evaluation.

2024 PUE (avg.): [29]

1.20

2024 WUE (avg.):

1.61

Power Supply Solutions

- The Baidu Cloud Computing (Yangquan) Center has implemented the world's first power supply system combining direct grid electricity and high-voltage direct current (HVDC) offline architecture, achieving a power supply efficiency of 99.5%.
- Baidu's "PingHu" DC lithium battery system uses a combination of high-voltage direct current (HVDC) and lithium iron phosphate (LiFePO4) batteries, featuring a fully modular design and high power module efficiency. Key advantages include low environmental impact, a long service life, and low maintenance costs. The "PingHu" system improves power supply efficiency by 1% and reduces battery room space by 60%, offering a revolutionary low-carbon power supply solution for data centers.
- Baidu's "Hanhai" end-to-end efficient power supply technology addresses bottlenecks associated with traditional power supply solutions, such as low efficiency and long supply chains. The new technology has increased the overall efficiency of our power supply chain by more than 2%, and has won numerous awards including the "Innovation Pioneer Award" at the 2024 China Computing Power Conference and the "Innovative Technology Award" at the 2024 China IDC Industry Conference. A total of 12 relevant patents have been granted.

Cooling Technologies

- Baidu's "Bingchuan" phase-change cooling technology leverages oil-free gas pumps, evaporative condensation, and heat pipes to eliminate intermediate heat exchange stages. This optimizes the cooling system's heat exchange efficiency, improving overall cooling efficiency by 20% and significantly reducing carbon emissions from our data centers.
- Baidu's "Lingxi" liquid cooling architecture supports a rack power density of over 120 kW, effectively meeting the evolving demands of IT infrastructure. The system features AI-driven heat dissipation capabilities, can be used in a wide range of climates, and has an average PUE of less than 1.15.
- In 2024, we deployed a combination of liquid and phase change cooling systems and installed high-efficiency terminal solutions to support higher power rack density. This strategy provides an efficient, reliable, and flexible heat dissipation solution, while also ensuring our data centers can meet the evolving nature of artificial intelligence applications.
- We use immersion cooling technology for 100% of our IT equipment. This involves immersing IT equipment in a non-conductive fluid that is circulated to dissipate heat.

Clean Energy Use

- We continue to increase the proportion of renewable energy used by our data centers.

  Share of renewable energy in total energy consumption in 2024:

  5%
- Amount of solar power generated by distributed PV systems at our data centers in 2024:

  273,000 kWh
- Green electricity purchased in 2024:

  59.8 million kWh

[29] In 2024, the proportion of GPUs in our data centers continued to increase. As GPUs have more stringent temperature requirements and require lower supply air temperatures, the PUE has risen compared to 2023.

Energy Management in Office Spaces

Baidu actively manages energy and resource usage in its office spaces. We promote the implementation of international energy management standards and obtain certifications for our environmental management systems. The Baidu Building, Baidu Technology Park, and Baidu Kuike Technology Building have received ISO 14001 certification, representing 60.7% of our office spaces. The Baidu Building, Baidu Technology Park, Baidu Kuike Technology Building, Baidu Penghuan Building, and Electric Times Square have received ISO 50001 certification, representing 66.6% of office spaces.



Environmental Monitoring Platform

- Deployed across our headquarters, our cloud platform monitors environmental data such as temperature and humidity in real-time, enabling flexible adjustment of heating/cooling systems based on ambient conditions.

Energy Monitoring Platform

- We have developed a comprehensive, intelligent energy monitoring system to monitor energy usage across our office spaces.

Retrofitting of Equipment

- Annual electricity savings from installation of energy-efficiency lighting systems in office buildings (Baidu Building, Baidu Technology Park, Penghuan Building, Shanghai R&D Center, etc.):

4.45 million kWh

- Annual electricity savings from retrofitting the elevator system at our headquarters with energy-saving solutions:

470,000 kWh

- Annual electricity savings from installation of air conditioning condensate recovery system at the Baidu International Building in Shenzhen:

175,000 kWh

- Annual electricity savings from installation of automatic lighting control system in the basement of the West Tower at Baidu International Building in Shenzhen:

73,500 kWh

Clean Energy

- We have installed rooftop solar power systems at the Baidu Building, Penghuan Building, Baidu Technology Park, Shanghai R&D Center, and Baidu International Building in Shenzhen.

In 2024, these systems generated approximately

2.26 million kWh of electricity.

Carbon Offsetting

- Baidu offsets a portion of its carbon emissions generated from operations by purchasing carbon credits that meet international standards.

Case | zero-carbon Baidu AI Cloud Intelligence Conference

In September 2024, the 2024 Baidu AI Cloud Summit was held at the ZGC International Innovation Center in Beijing. According to data verified by the leading third-party certification body Bureau Veritas, the conference used internationally-accredited carbon credits from wind energy projects to fully offset the 182 tons of CO_2 emissions generated by the event, delivering a "Zero-Carbon Conference."

Water Stewardship

Baidu attaches great importance to the management of water resources. In 2024, we improved the water efficiency of our data centers and office buildings by setting water-saving targets, upgrading equipment, and exploring water-saving technologies, minimizing our operational impact on the environment.

Water Use

Indicator	Unit	2022	2023	2024
Total Water Withdrawal	Tons	1,997,531.4	2,071,681.1	2,110,550.2
Water Withdrawal Intensity	Tons/Person	57.4	61.5	69.8
Total Water Discharge	Tons	903,837.2	698,859.4	645,421.3
Recycled rainwater Volume	Tons	5,210.0	5,551.0	3,521.0

Water-Saving Measures

Water Monitoring → **Leak Detection** → **Water Conservation**

We have established a water usage ledger and record water data in real-time using remote water meters. Manual readings are also taken to ensure the accuracy of monitoring data.

We have installed pressure gauges and leak detection sensors at key pipe segments to promptly detect leaks and issue alerts.

We implement water treatment measures based on system requirements. This includes controlling conductivity and concentration to minimize discharge and conserve water.



Water-saving Technologies

- Cooling systems are tailored to local climate conditions. In North China, Indirect Evaporative Cooling (IDEC) systems are widely used, while dry cooling systems are used in transition and winter seasons. Compared to conventional systems, this reduces water usage by approximately

50 %

- At our Yangquan data center, we have implemented a wastewater reuse program, reducing water usage from the cooling system by

20 %

Water-saving Equipment

- Sensor-based water-saving equipment.
- Water-saving cooling towers.
- Reverse osmosis water treatment system to dispose of sewage and recycle it.

Water Recycling Initiatives

- At Baidu Technology Park, overflow recirculation devices have been fitted to cooling towers, reducing annual water usage by

15,600 tons

- At Baidu Technology Park, rainwater harvesting systems have reduced annual water usage by

420 tons

- At the Baidu International Tower in Shenzhen we have installed condensate water recovery systems for AC units, reducing annual water usage by

1,350 tons



Waste Management

Baidu has established a *Waste Sorting Management System* to minimize and neutralize the impact of waste from our operations. This system covers all stages of waste management, including disposal, collection, transportation, and treatment. We adopt various methods, such as sorting, recycling, and employee awareness campaigns, to reduce waste generation and minimize environmental impact. Professional waste management companies are responsible for waste disposal. In addition, we monitor and record the amount of waste generated by our operations on a daily basis.

Non-hazardous Waste

Office paper	Waste cardboard and newspapers	Scrap metal
159,488.0 kg	**24,938.0 kg**	**45.0 kg**

Plastic waste	Food waste
1,651.0 kg	**2,276 tons**

Other Waste

Other waste

2,176.2 tons

Hazardous Waste

Batteries	Light tubes	Electronic devices	Toner cartridges
38,426 cells	**2,317 pcs**	**14,407 units**	**918 pcs**

Office Waste in 2024

Waste Generation Data

Indicator	Unit	2022	2023	2024
Total non-hazardous waste generated[30]	Tons	5,273.8	5,105.2	4,638.4
Intensity of non-hazardous waste	Tons/Person	0.2	0.2	0.15
Total hazardous waste generated[31]	Tons	6.9	26.6	38.8
Intensity of hazardous waste	Tons/Person	0.0002	0.0008	0.0013

Baidu ensures that decommissioned office equipment, such as computers, is transferred to licensed recyclers for resale or safe disposal. Hazardous waste generated during operations is handled by licensed service providers for safe, compliant treatment.

Case | Laptop buyback program

Baidu has launched a laptop buyback scheme that allows employees to purchase their laptops used at work at a discounted price after 48 months. The purpose of the scheme is to extend the lifespan of devices and contribute to environmental protection.



[30] Including office paper, waste cardboard, newspapers, scrap metal, plastic waste, kitchen waste, and other non-hazardous waste.

[31] Including light tubes, electronic waste, used toner cartridges, and batteries. In 2022, Baidu significantly reduced hazardous waste by selling obsolete electronic devices to the second-hand market.

Biodiversity

Biodiversity is the cornerstone of human health and well-being and holds the key to a sustainable future. We are committed to minimizing the direct and indirect impacts of our business operations on nature and biodiversity by taking active measures and implementing sustainable practices.

Governance

In 2024, drawing on the recommendations of the Taskforce on Nature-related Financial Disclosures (TNFD), Baidu's ESG Committee and ESG Working Group conducted the company's first materiality assessment of biodiversity issue. The assessment identified and evaluated nature-related impacts and dependencies and impacts, while streamlining associated governance processes, metrics, and key targets, laying a solid foundation for our long-term nature strategy.

Strategy

In accordance with TNFD recommendations, Baidu adopts the LEAP approach (Locate, Evaluate, Assess, Prepare) to identify nature-related dependencies and impacts.[32-34]

Category	Indicator	Description	Materiality Rating
Dependency	\	Baidu's dependence on nature for resource utilization is not significant.	Very low
Impact	Noise pollution	Data center operations (such as diesel generators, cooling towers, etc.) may cause noise pollution, disturbing species populations and habitats.	Medium
	Water usage	Although the potential impact is limited, poor management may lead to negative impacts.	Low
	Greenhouse gas emissions		Low



[32] We use the *Biodiversity Impact Assessment (BIA)* tool and the *Integrated Biodiversity Assessment Tool (IBAT)* to assess our operational sites, identifying areas that may impact biodiversity. We assessed a total of 27 office locations, 6 office centers, and 1 vehicle operation site, none of which are located in high-risk areas.

[33] Some of our operating sites are located near species listed in the *IUCN Red List of Threatened Species*, *RCB Endangered Species List*, or protected by the *Wildlife Protection Law of the People's Republic of China*. These species include the *Emberiza rustica, Egretta eulophotes, Emberiza yessoensis, Limosa limosa*, which have large activity ranges.

[34] In accordance with TNFD recommendations, we use the *ENCORE database* to assess our dependence and impact on nature.

Risk Management

To address nature-related risks such as water resource utilization and noise pollution, Baidu has developed the following risk management strategies:

Avoid and Reduce

Avoid Resource Wastage

Adopt energy-saving and water-saving technologies to improve resource utilization efficiency, reduce reliance on natural resources, and promote the sustainable use of natural resources.

Noise Control

Implement soundproofing and noise reduction measures to minimize the impact of operations on the surrounding ecology and biodiversity.

Transform

Restore and Regenerate

Ecological Restoration Projects

Participate in or fund ecological restoration projects to help restore impacted habitats and ecosystems.

Biodiversity Conservation

Support species protection initiatives and promote biodiversity monitoring and conservation programs.

In addition, we harness AI technology to protect natural ecosystems and biodiversity, upholding our strategic commitment to sustainability.

Case | Baidu develops AI-powered solution to support dolphin conservation efforts

As part of a UN coastal biodiversity program, the Xiamen Rare Marine Species National Nature Reserve is dedicated to protecting the Chinese white dolphin and 12 other rare marine species. In collaboration with numerous partners such as Crowddigital (Xiamen) Information Technology and Xiamen University of Technology, the team at Baidu AI Cloud Qianfan foundation model platform developed an AI-powered testing, rescue, research, and knowledge system to support dolphin conservation efforts. The system utilizes satellite sensors and underwater devices to track Chinese white dolphin populations in real time, providing a standardized framework for dolphin rescue, rehabilitation, and tracking, as well as promoting collaboration with research institutions and enhancing public awareness. This AI initiative has made a key contribution to marine conservation efforts, injecting technological momentum into building a world where humans and nature can coexist in harmony.



Case | Baidu partners with International Fund for Animal Welfare (IFAW) to launch AI-enabled image recognition application

To combat the illegal wildlife trade, our open-source deep learning platform PaddlePaddle joined forces with the International Fund for Animal Welfare (IFAW) to launch a new AI-enabled application that can recognize images of endangered species and illegal wildlife products. In 2024, we used our PaddleX tool to develop an updated version of the application, expanding image recognition capabilities from 3 to 34 species and significantly improving recognition accuracy. In the future, we will continue to explore new application scenarios, collaborating closely with law enforcement agencies to provide innovative, AI-powered solutions for biodiversity protection.

Metrics and Targets

Baidu recognizes that water stewardship is key to protecting natural capital and is inextricably linked to climate change and biodiversity. Therefore, we are committed to reducing water usage in our business activities, conserving water resources, and managing and mitigating water risks. For more information on our water conservation measures and relevant indicators, see "Water stewardship" in the Environment section of this report.



Baidu mascots of endangered animals

4.3 Green Products and Services

We believe that incorporating sustainability into our business is key to unlocking new market opportunities. In addition to making our operations more sustainable, we are also committed to developing AI-powered green products and services for customers, companies, and society to support the green transition and mitigate the impacts of climate change.

Case | Low-carbon incentive scheme for Baidu Maps users

In collaboration with Beijing Municipal Bureau of Ecology and Environment and the Beijing Municipal Commission of Transportation, and in accordance with the *Low-Carbon Travel and Emissions Reduction Measures* issued by the Beijing Municipal government, we launched a new low-carbon incentive scheme for Baidu Maps users. The scheme collects user-authorized travel data to calculate emissions reductions achieved by choosing low-carbon transportation options. Users can earn carbon credits by choosing environmentally-friendly modes of transport such as cycling, walking, or public transport (e.g., bus or subway). These credits can then be redeemed for transportation vouchers or other rewards. The scheme been rolled out across many regions in China. Since its launch on September 8, 2020, a total of 3.04 million users have registered, including 950,000 new users in 2024.



Case | Baidu AI Cloud: AI-enabled environmental monitoring assistant

In partnership with the China National Environmental Monitoring Centre and Tsinghua University, our Baidu AI Cloud team developed the first AI-powered assistant for environmental monitoring applications. The assistant was developed using the ModelBuilder and AppBuilder applications on Baidu's AI Cloud Qianfan foundation model platform, leveraging an innovative development approach comprising four phases: scenario-based design, database/algorithm development, model training, and pilot projects. It supports a wide range of functions including data analytics, environmental forecasting, and a Q&A tool. The system can understand natural language queries from users with different professional backgrounds and offers clear, accurate responses. It currently supports questions related to air quality, water monitoring, and pollution, and has accuracy rate of over 90%, with continuous updates released to further improve accuracy.

In addition to providing innovative AI technology for environmental monitoring applications, the assistant has made an important contribution to improving enhancing the management, decision-making, and public service capabilities of the China National Environmental Monitoring Centre.

Case | Baidu Maps: AI-powered logistics planning tool

Leveraging our nationwide logistics maps and cutting-edge AI capabilities, the Baidu Maps team has developed an AI-powered logistics planning tool tailored to the needs of specific sectors, such as the FMCG, automotive, energy, and chemical industries. Taking into the account the physical limitations of freight vehicles (e.g., height, width, weight, and load restrictions) and by leveraging predictive traffic data, the tool optimizes logistics routes for complex delivery scenarios. Since its launch, the tool has reduced mileage by over 10% on average, making a signification contributing to energy conservation and emission reduction efforts.



Case | Apollo Go: Safe and eco-friendly mobility services

In 2024, our autonomous driving platform Apollo Go launched its sixth-generation autonomous vehicle, powered by the Apollo ADFM[35] foundation model. This next-generation vehicle can navigate complex urban road conditions, enabling more users to enjoy safe and eco-friendly travel.

In November 2024, Apollo Go obtained Hong Kong's first pilot license for autonomous vehicles, marking the start of its global expansion. Apollo Go is committed to bringing low-carbon, safe, and comfortable autonomous mobility services to users in more countries and regions.



[35] Apollo ADFM is the world's first autonomous driving foundation model capable of supporting Level 4 (L4) autonomous driving applications.



05 | Community Engagement

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5.1 AI Talent Community

Baidu attaches great importance to cultivating AI talent, which constitutes a core part of our strategy to drive technological innovation and industrial transformation. Our overarching aim is to build an AI community and create a sustainable talent ecosystem.

In 2024, Baidu implemented a series of AI talent development initiatives, including the launch of a new "Second-Skill Learning Platform for Workers". Developed in partnership with local labor unions, the platform empowers workers with technical skills and aims to enhance society's overall technological capabilities and competitiveness.

In addition to addressing industry needs, these strategic actions highlight Baidu's commitment to social responsibility in the era of the digital economy.

Building an AI Talent Pool

In 2020, Baidu launched an initiative to train 5 million AI professionals over a five-year period. In April 2024, we completed this goal ahead of schedule. As of December 2024, we have trained a total of 5.92 million AI professionals.

Building on the success of this initiative, we have launched the "Galaxy Talent Cultivation Plan", which aims to train an additional 5 million individuals in large language model (LLM) technology.

Case | Baidu "Astar" programming competition celebrates its 20th anniversary

At Baidu, we leverage our technical expertise and industry experience to further AI education and train the next generation of experts.

Launched in 2005, Baidu "Astar" is one of China's leading programming contests, the only such contest to have been held for 20 consecutive years. As a major national competition for university students, the event is regarded as the "Oscar of the tech industry."

To date, the competition has attracted over 300,000 participants from more than 1,000 colleges, enabling Baidu to identify and train over 100 programming experts. The event demonstrates our leadership in building a tech ecosystem and fulfilling our social responsibilities, and has laid a solid foundation for expanding society's pool of programming talent.



Case | Baidu joins forces with the China Computer Federation to launch the "CCF-Baidu Open Fund"

To accelerate the commercial application of AI technology and foster collaboration between industry and cutting-edge research, Baidu has launched the "CCF-Baidu Open Fund" in partnership with the China Computer Federation. Covering eight major research fields, the initiative aims to help young researchers make new breakthroughs in AI technology and develop commercial applications for their research, as well as promote cross-disciplinary collaboration.

To date, over 1,200 scholars have applied to the scheme, in which we have invested a total of more than RMB 10 million. The scheme has supported 61 colleges and 142 young scholars with completing their AI research and developing innovative commercial applications.

In addition to fostering an open and collaborative environment for innovation, the CCF-Baidu Open Fund has also contributed to the rapid development of China's AI ecosystem.

AI talent cultivation programs

Programming & LLM Competitions

Baidu Astar

Dubbed the "technical Oscars", the contest is one of China's leading programming competitions, the only such contest to have been held for 20 consecutive years.

As a major national competition for university students and with over 300,000 participants to date, the event has enabled Baidu to identify and train more than 100 programming experts.

IKCEST "Belt and Road" International Big Data Competition

International competition that leverages Baidu's Wenxin Intelligent Platform to explore a range of topical issues and trends.

A total of 10 contests have been held, with over 24,000 teams participating from 21 countries across five continents. In 2024, a total of 3,997 teams took part in the contest, which received over 1 million views.

China Collegiate Computing Contest-AI

A worldwide technology innovation contest targeting students from all disciplines, featuring open debates and an AI project demonstrations. The contest aims to inspire students to design and develop new applications using cutting-edge AI tools.

The contest has been held seven times, with over 25,000 participants in total. In 2024, a total of 3,962 teams competed, representing 100% of China's elite "Double First-Class" universities.

AI Education & Training

AI Talent Scheme

In collaboration with vocational colleges, the scheme aims to establish an AI talent training system for teachers and students and promote the application of Baidu's LLM technology.

We have collaborated with 11 vocational education groups, targeting over 10 industry-specific vocational colleges to improve access to digital technology in rural areas and cultivate new talent. The scheme has reached more than 1,000 vocational institutions and trained hundreds of thousands of vocational students.

AICA Chief AI Architect Training Program

In partnership with the National Engineering Research Center of Deep Learning Technology and Application, the program aims to train the next generation of interdisciplinary experts who can integrate artificial intelligence into the real economy.

The program has trained a total of 489 professionally certified AI architects. In 2024, the 8th cohort of graduates successfully completed the program, with 79 participants receiving AI architect certification.

AI Teacher Training Program

The program provides teacher training on deep learning in collaboration with leading Chinese universities.

We have funded a total of 41 teacher training sessions, reaching over 5,200 educators in AI-related fields at more than 1,300 universities.

University Partnerships & Funding

Industry-Academia Collaborative Education Program

For nine consecutive years, we have supported this collaborative education program initiated by the Ministry of Education's Higher Education Department.

To date, the program has received over RMB 10 million in funding for teaching and research, and has supported over 800 teaching projects at more than 300 universities, providing technical support to over 4,300 teachers.

CCF-Baidu Open Fund

A joint project launched in collaboration with leading industry associations to promote LLM research.

More than 1,200 teachers have applied for funding, and over RMB 10 million has been invested in 61 schools, helping 142 young teachers to develop new applications for their AI research.

Baidu Scholarship Program

By identifying talented young scholars who challenge traditional views in AI, the program aims to promote technological innovation and expand the application of AI technology.

The program has funded scholarships for 12 cohorts of Chinese university students. To date, 106 scholars have received scholarships totaling more than RMB 10 million.

Just AI Transition

Baidu actively responds to China's innovation-driven development strategy by empowering workers to enhance their AI literacy. Our AI learning assistant helps workers to improve their technical skills, enabling the Chinese economy to move toward a digital and intelligent future.

Case | Baidu joins forces with local trade unions to launch "Second-Skill Learning Platform for Workers"

To help workers adapt in the rapidly developing era of artificial intelligence, in 2024, we launched the "Second-Skill Learning Platform for Workers" in collaboration with the Wuhan Federation of Trade Unions. The platform is currently used by 3.08 million workers and 21,000 grassroots trade union organizations in Wuhan.

The platform provides a wealth of learning resources covering various fields of artificial intelligence and includes courses by industry experts, ensuring that learning content is both authoritative and easy to understand. Workers can access the platform via mobile phone or computer, offering flexibility and convenience.

Currently, the platform is available in numerous provinces and cities, including Wuhan, Shanxi, Nanjing, Shenzhen, Guangzhou, Dongguan, Anhui, and Beijing. In the future, access will be expanded to other major cities across China in order to ensure a just transition to an AI-driven future.

Number of workers assisted by platform in Wuhan:

3.08 million

Grassroots trade union organizations:

21,000





5.2 Leveraging AI to Enhance Societal Well-Being

Baidu leverages AI technology to explore innovations in a wide range of fields, including rural revitalization, educational equity, affordable healthcare, support for people with disabilities, and legal services, with a view to promoting the overall well-being of society.

Through these concrete actions, we practice sustainable development, fulfill our social responsibilities, and demonstrate our commitment to achieving a broader social impact.

Empowering Rural Revitalization with AI

Baidu utilizes AI technology to empower agricultural production, support the rural economy, promote rural revitalization, increase farmers' incomes, and provide convenient services for residents.

Case | Baidu partners with academic Zhu Youyong to launch new AI agent for farmers

Baidu employs AI technology to empower agricultural production and promote rural revitalization. In June 2024, we joined forces with Zhu Youyong from the Chinese Academy of Engineering to develop a new AI agent for farmers. The agent was built using Baidu's Wenxin Intelligent Agent Platform and incorporates Zhu's research achievements and relevant agricultural knowledge. Farmers can use the system to seek advice on various topics related to farming, such as planting conditions for dryland rice, cultivation techniques, and pest control. Since its launch, the service has helped to expand access to the latest agricultural technologies, address farmers' challenges, and support the growth of the rural economy.



Case | Baidu develops "digital human" service to help farmers market their produce

As part of our commitment to support economic growth in rural areas, Baidu has developed a new "digital human" service called Huiboxing to help farmers sell their produce online. In Yichun, Heilongjiang Province, a woman named Cuihua used the service to produce videos and create a digital clone of herself, which she used to sell her produce online. Lamu from Tibet, who cannot speak fluent Mandarin, used our technology to launch a 24/7 interactive livestreaming channel and sell local specialties (such as caterpillar fungus) to various parts of the country. Since 2023, Baidu's livestreaming initiatives have benefited farmers in 2,000 rural areas, helping tens of thousands of villagers to launch livestreaming channels, as well as making a significant contribution to rural economic development.



Case | Baidu partners with Sinoecare to launch 24-hour AI assistant for rural residents

In 2024, Baidu collaborated with the digital services firm Sinoecare to launch a new AI assistant for residents of Shenqiao County, Henan Province. The assistant has been integrated into over 1,000 WeChat groups, allowing local residents to obtain information on medical insurance payments, household registration, weather conditions, and other topics via voice or text. Additionally, Shenqiao County has also launched the "Village Chief Copilot", which can automatically generate work orders, significantly improving the productivity of grassroots workers. Currently, the assistant is available in over 6,000 villages and serves approximately 10 million residents, showcasing the advantages of AI technology in rural governance and services.



Empowering Educational Equity with AI

By leveraging AI to provide personalized educational services, we are committed to promoting educational equity and expanding access to quality educational resources in regions that lack educational infrastructure.

Case | Baidu AI learning assistant supports education for children in remote mountainous regions

To enhance the quality of education for children in remote areas and promote educational equity, in 2024, Baidu launched an AI learning assistant at the Ayi Dream Bookstore in the Liangshan Yi Autonomous Prefecture, Sichuan Province. The assistant utilizes natural language processing and a knowledge graph to provide local children with a wealth of learning resources, personalized learning experiences, and Q&A services for their studies.

The AI learning assistant is supported by a series of intelligent devices from Xiaodu, our AI hardware brand. For example, the Xiaodu AI Eye Protection Learning Machine features an AI teacher that can assist children with their studies by explaining problem-solving methods and teaching them how to learn independently. The Xiaodu Smart Dictionary Pen enables children to quickly look up words and improve their foreign language skills, while the Xiaodu Smart Screen is a multifunctional device offering children's stories, scientific knowledge, and other educational content.

With the aid of these intelligent devices, local children are able to access quality educational resources in regions with a shortage of teachers. This technology-enabled educational model narrows the educational gap between urban and rural areas, and offers an innovative model for promoting educational equity.



Leveraging AI to Promote Universal Healthcare

Baidu is committed to promoting universal healthcare by leveraging AI technology to match patients with healthcare professionals, optimize the allocation of medical resources, and improve patient satisfaction.

Case | Leveraging the Baidu Health platform to optimize the allocation of medical resources

To expand access to quality medical care, Baidu Health has leveraged AI technology to launch an innovative AI-based application that provides 24/7 support for patients, including finding doctors, interpreting medical reports, and obtaining medication assistance.

Baidu Health has also launched an AI-powered "smart appointment" service that enables patients to access first-class medical resources.

By utilizing the latest internet and AI technology, Baidu Health aims to eliminate the "information gap" and enable patients to access the healthcare resources they need. In addition to reducing waste within the healthcare system, the platform also enhances the quality of healthcare services, making an important contribution to promoting universal healthcare.



Using AI to Support People with Disabilities

By harnessing AI technology, Baidu continuously invests in the research and development of accessible products and technologies. We aim to enhance quality of life and social participation for people with disabilities, and are striving to bridge the digital divide.

Case | Helping visually impaired people to travel independently

To help visually impaired individuals travel safely and independently and improve the in-vehicle experience, we invited users to participate in the development of accessibility features for our Robotaxi service, including automatic vehicle location, automatically opening doors, and an in-vehicle interactive voice system. In 2024, we invited a blind girl and her four visually impaired friends to provide feedback on their experience, enabling the Robotaxi team to collect valuable insights and make improvements to button and screen design and voice prompts.



Case | Baidu Comate helps visually impaired people to acquire programming skills

In December 2024, our AI-based code generation platform Baidu Comate launched China's first accessible development tool to help lower barriers for visually impaired individuals entering the IT industry and enhance their programming skills. The accessible version allows visually impaired programmers to quickly generate code and complete development tasks using commands, natural language, and keyboard shortcuts. For example, users can use natural language commands to generate hundered of lines of executable code. This cutting-edge tool has helped visually impaired developers to streamline workflows and boost productivity, enabling them to access more career opportunities.



Case | Facilitating communication for the hearing impaired with a new "digital human" sign language service

In 2024, to improve the provision of hearing-impaired services at public service institutions, our Xiling Digital Human Platform teamed up with ecosystem partners to launch a new sign language device. The device can convert sign language from hearing-impaired individuals into text or speech in real-time, facilitating efficient two-way communication at public service locations like hospitals and train stations and enabling hearing impaired users to overcome communication barriers. This initiative has significantly enhanced the quality of life and social participation of individuals with hearing impairments, and demonstrates our commitment to promoting social inclusivity and equity.



AI-powered Legal Services

Baidu leverages AI technology to improve the accessibility and efficiency of legal services.

Number of cities served by Fa Xing Bao, Baidu's AI legal advisor developed using our Ernie large language model:

Approx 30

Number of people who have accessed free legal services using Fa Xing Bao:

Over 9.4 million

Case | New AI legal advisor enhances access to legal services

In 2024, we launched a free AI legal advisor called Fa Xing Bao, which aims to address information asymmetry and lower the cost of accessing legal services, as well as help lawyers and law firms to reduce operational costs and improve efficiency, ensuring all members of society can obtain legal assistance irrespective of their economic circumstances.

Fa Xing Bao is based on our Ernie large language model and has significantly reduced the cost of accessing legal services. The tool handles an average of one million requests daily, allowing users to obtain professional legal advice at no cost.

Fa Xing Bao has also pioneered a new collaborative model for lawyers that combines AI assistance with professional legal services. Through partnerships with local lawyer associations, Baidu has successfully hosted a range of promotional events, and the service is currently available in around 30 cities across China. Approximately 7,000 lawyers have experienced the transformative effects of Fa Xing Bao, leveraging AI to drive income growth in the legal sector and enhance the accessibility of legal services.

In order to expand access to legal services, Fa Xing Bao has established a comprehensive ecosystem comprising local governments, enterprises, and civil society organizations. We have also launched a number of legal awareness campaigns about topical social issues in collaboration with charitable and civil society organizations. In 2024, we organized a variety of educational activities, providing over 10 million urban and rural residents with access to their own "free AI lawyers".

In addition to demonstrating the value of AI in protecting people's legal rights, our Fa Xing Bao platform has also injected technological momentum into upholding the rule of law.



5.3

Philanthropy and Charitable Initiatives

Baidu upholds its social responsibilities and contributes to charitable initiatives through firm commitments and tangible actions. Through extensive community assistance and charitable donations, we actively respond to social needs and make a continuous contribution to sustainable development.

Charitable Donations and Social Responsibility

As a caring enterprise, Baidu provides assistance to communities in need by actively supporting individuals and organizations[36].

From 2022 to 2024, Baidu donated a total of RMB 136 million to society, supporting various areas including natural disaster relief efforts and educational initiatives for underprivileged children in remote areas.

● Case | Baidu assists with earthquake relief efforts in Shigatse, Tibet

On January 7, 2025, a 6.8-magnitude earthquake struck Dingri County in Shigatse, Tibet. In response, the Baidu Foundation donated RMB 1 million to the affected region. We also delivered emergency and winter supplies to members of the local community through our B2B "Baidu Aicaigou" platform.

The Baidu Foundation donated

RMB 1 million

to the affected region



[36] We help individuals through projects such as "Hello World", and provide financial assistance to numerous organizations including the Baidu Foundation, the China Red Cross Foundation, and the Peking University Education Foundation.

Community Assistance and Charitable Initiatives

"Hello World" is one of Baidu's most important charitable initiatives. The primary sources of donations for this initiative include charity auctions, public fundraising, and employee donations. Donations are used to purchase books, learning materials, and sports equipment for schools in impoverished areas, and to provide training courses to support children's learning and development. The initiative also funds the construction of libraries in underprivileged regions, and covers tuition fees for disadvantaged children to help them complete their education.

These initiatives not only reinforce our commitment and responsibility toward community investment, but also strengthen the bond between employees and members of the community.

Case | Baidu charity auction raises funds for the "Hello World" initiative

In 2024, Baidu held a total of three charity auctions. The auctioned items were sourced from Baidu's employee gift reporting system[37]. Over the course of the year, 1,309 items were auctioned, and 3,097 employees participated in the auctions, raising a total of RMB 327,825.

All proceeds from the auctions were donated by the Baidu Foundation to support the "Hello World" charitable initiative.

In 2024, Baidu held charity auctions a total of

3

Over the course of the year, auctioned items

1,309

Raising a total of

RMB 327,825



[37] See 1.4 Business Ethics – Fostering a culture of integrity

Appendix

Stakeholder Engagement

Baidu actively engages with stakeholders through a diverse range of channels. By employing open and effective communication mechanisms, we aim to promote sustainable values together with our stakeholders. In 2024, Baidu organized over 22 ESG engagement events to address shareholder and stakeholder concerns and provide updates on key topics.

Stakeholders	Engagement Channels	Expectations and Concerns
Shareholders and Investors	▪ General meetings of shareholders ▪ Periodic reports and announcements ▪ Communication with investors via email and conferences ▪ ESG engagement events/roadshows	▪ Continuous growth ▪ Compliant operations ▪ Risk management ▪ Product service and quality
Users	▪ Feedback channels ▪ Product surveys ▪ Interaction via our website and social media	▪ Improved user experience ▪ Information security ▪ Data and privacy protection ▪ Content governance ▪ Product quality assurance
Governments and Regulators	▪ Information disclosure ▪ Collaborative projects ▪ Routine communication and reporting ▪ Oversight and inspections ▪ On-site visits	▪ Compliant operations ▪ Information security ▪ Data and privacy protection ▪ Content governance
Employees	▪ Internal office systems ▪ Internal meetings ▪ Periodic feedback surveys ▪ Online and offline training	▪ Protecting employee rights and interests ▪ Employee training and development ▪ Employee benefits ▪ Occupational disease prevention
Suppliers	▪ Invitations to tender ▪ Project procurement ▪ Contracts and agreements ▪ Supplier management conferences ▪ Supplier communication meetings ▪ Other supplier communications	▪ Sustainable supply chain ▪ Integrity ▪ Mutually beneficial partnerships ▪ Empowering suppliers
Partners/NGO	▪ Baidu World ▪ Baidu Create ▪ ABC Summit ▪ Baidu Union Summit ▪ Project-based cooperation ▪ Technology exchanges ▪ Achievements sharing	▪ Technological innovation ▪ Collaborative development ▪ Product quality assurance ▪ Low-carbon operations ▪ Corporate social responsibility
Media	▪ Press conferences ▪ Exclusive interviews ▪ Invitation to meetings or events held by Baidu ▪ Interaction via our website and social media	▪ Transparency ▪ Compliant operations ▪ Information security ▪ Data and privacy protection ▪ Content governance ▪ Corporate social responsibility
Environment	▪ Adoption of energy-saving technologies ▪ Development of eco-friendly products ▪ Raising climate awareness among users	▪ Emissions management ▪ Energy and resource conservation ▪ Low-carbon operations
Communities	▪ Community activities ▪ Interaction via Baidu website and social media	▪ Charity projects ▪ Volunteering activities

HKEX ESG Index

Indicator	Description	Page
Mandatory disclosure indicators		
Governance Structure		
A disclosure of the board's oversight of ESG issues		P05-08
The board's ESG management approach and strategy, including the process used to evaluate, prioritise and manage material ESG-related issues (including risks to the issuer's businesses);		P05-08
How the board reviews progress made against ESG-related goals and targets with an explanation of how they relate to the issuer's businesses		P06-08
Reporting Boundary		
A narrative explaining the reporting boundaries of the ESG report and describing the process used to identify which entities or operations are included in the ESG report. If there is a change in the scope, the issuer should explain the difference and reason for the change.		P01
"Comply or explain" Indicators		
A. Environmental		
Aspect A1: Emissions		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.	P73, 84, 86
A1.1	The types of emissions and respective emissions data.	P86
A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P79
A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P86
A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P86
A1.5	Description of emissions target(s) set and steps taken to achieve them.	P78-79
A1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them.	P86

Indicator	Description	Page
Aspect A2: Use of Resources		
General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials.	P81-85
A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).	P81
A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	P84
A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them.	P81-83
A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them.	P84-85
A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	P86
Aspect A3: The Environment and Natural Resources		
General Disclosure	Policies on minimising the issuer's significant impact on the environment and natural resources.	P80-90
A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	P80-90
Aspect A4: Climate Change		
General Disclosure	Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.	P75-77
A4.1	Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them.	P75-77
B. Social		
Aspect B1: Employment		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer.	P55, 70, 71

Indicator	Description	Page
B1.1	Total workforce by gender, employment type (for example, full- or part-time), age group and geographical region.	P53
B1.2	Employee turnover rate by gender, age group and geographical region.	P53
Aspect B2: Health and Safety		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer.	P68, 71
B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	P71
B2.2	Lost days due to work injury.	N/A
B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored.	P68
Aspect B3: Development and Training		
General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	P63-67
B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	P63
B3.2	The average training hours completed per employee by gender and employee category.	P63
Aspect B4: Labour Standards		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer.	P55
B4.1	Description of measures to review employment practices to avoid child and forced labour.	P55, 70
B4.2	Description of steps taken to eliminate such practices when discovered.	P55, 70
Aspect B5: Supply Chain Management		
General Disclosure	Policies on managing environmental and social risks of the supply chain.	P21-22
B5.1	Number of suppliers by geographical region.	P21
B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, and how they are implemented and monitored.	P21-22
B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	P21-22
B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	P21-22
Aspect B6: Product Responsibility		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer.	P30-51
B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	N/A
B6.2	Number of products and service-related complaints received and how they are dealt with.	P49
B6.3	Description of practices relating to observing and protecting intellectual property rights.	P51, 61-62
B6.4	Description of quality assurance process and recall procedures.	N/A
B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored.	P37-39
Aspect B7: Anti-corruption		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer.	P19-20
B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	P20
B7.2	Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored.	P16-20
B7.3	Description of anti-corruption training provided to directors and staff.	P19
Aspect B8: Community Investment		
General Disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	P92-100
B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	P92-100
B8.2	Resources contributed (e.g. money or time) to the focus area.	P92-100

GRI Content Index

Statement of use	Baidu has reported in accordance with the GRI Standards for the period [January 1, 2024 to December 31, 2024].
GRI 1 used	GRI 1: Foundation 2021

GRI Standard	Disclosure		Location
GRI 2: General Disclosures 2021	2-1	Organizational details	P05
	2-2	Entities included in the organization's sustainability reporting	P01
	2-3	Reporting period, frequency and contact point	P01
	2-4	Restatements of information	P01
	2-5	External assurance	P110-111
	2-6	Activities, value chain and other business relationships	P04
	2-7	Employees	P53
	2-8	Workers who are not employees	P26
	2-9	Governance structure and composition	P12
	2-10	Nomination and selection of the highest governance body	P12
	2-11	Chair of the highest governance body	P12
	2-12	Role of the highest Role of the highest governance body in overseeing the management of impacts	P05-06
	2-13	Delegation of responsibility for managing impacts	P05-06
	2-14	Role of the highest governance body in sustainability reporting	P05-06
	2-15	Conflicts of interest	P17-18
GRI 2: General Disclosures 2021	2-16	Communication of critical concerns	P07-08
	2-17	Collective knowledge of the highest governance body	P06
	2-18	Evaluation of the performance of the highest governance body	P06
	2-19	Remuneration policies	P06
	2-20	Process to determine remuneration	P06, 56-57
	2-21	Annual total compensation ratio	P69
	2-22	Statement on sustainable development strategy	P05
	2-23	Policy commitments	P05-06, 26
	2-24	Embedding policy commitments	P05-06, 26
	2-25	Processes to remediate negative impacts	P26
	2-26	Mechanisms for seeking advice and raising concerns	P16-20
	2-27	Compliance with laws and regulations	P17
	2-28	Membership associations	P25，47
	2-29	Approach to stakeholder engagement	P101
	2-30	Collective bargaining agreements	P27
GRI 3: Material Topics 2021	3-1	Process to determine material topics	P07-08
	3-2	List of material topics	P07-08
	3-3	Management of material topics	P07-08

GRI Standard	Disclosure		Location
GRI 201: Economic Performance 2016	201-1	201-1Direct economic value generated and distributed	See annual report for details
	201-2	Financial implications and other risks and opportunities due to climate change	P75-77
	201-3	Defined benefit plan obligations and other retirement plans	P58
	201-4	Financial assistance received from government	N/A
GRI 203: Indirect Economic Impacts 2016	203-1	Infrastructure investments and services supported	P92-100
	203-2	Significant indirect economic impacts	P92-100
GRI 204: Procurement Practices 2016	204-1	Proportion of spending on local suppliers	P21
GRI 205: Anti-corruption 2016	205-1	Operations assessed for risks related to corruption	P19-20
	205-2	Communication and training about anti-corruption policies and procedures	P19
	205-3	Confirmed incidents of corruption and actions taken	P20
GRI 206: Anti-competitive Behavior 2016	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	P16-18
GRI 301: Materials 2016	301-1	Materials used by weight or volume	P86
	301-2	Recycled input materials used	P86
	301-3	Reclaimed products and their packaging materials	P86
GRI 302: Energy 2016	302-1	Energy consumption within the organization	P81
	302-2	Energy consumption outside of the organization	P81
	302-3	Energy intensity	P81
	302-4	Reduction of energy consumption	P81-83
	302-5	Reductions in energy requirements of products and services	P89-90
GRI 303: Water and Effluents 2018	303-1	Interactions with water as a shared resource	P84-85
	303-2	Management of water discharge-related impacts	P84-85
	303-3	Water withdrawal	P84
	303-4	Water discharge	P84
	303-5	Water consumption	P84

GRI Standard	Disclosure		Location
GRI 304: Biodiversity 2016	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	P87
	304-2	Significant impacts of activities, products and services on biodiversity	P87
	304-3	Habitats protected or restored	P88
	304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	P87
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	P79
	305-2	Energy indirect (Scope 2) GHG emissions	P79
	305-3	Other indirect (Scope 3) GHG emissions	P79
	305-4	GHG emissions intensity	P79
	305-5	Reduction of GHG emissions	P79
	305-6	Emissions of ozone-depleting substances (ODS)	P79
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	P79
GRI 306: Waste 2020	306-1	Waste generation and significant waste-related impacts	P86
	306-2	Management of significant waste-related impacts	P86
	306-3	Waste generated	P86
	306-4	Waste diverted from disposal	P86
	306-5	Waste directed to disposal	P86
GRI 308: Supplier Environmental Assessment 2016	308-1	New suppliers that were screened using environmental criteria	P21-22
	308-2	Negative environmental impacts in the supply chain and actions taken	P21-22
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	P53
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	P58
	401-3	Parental leave	P58

GRI Standard	Disclosure		Location
GRI 402: Labor/Management Relations 2016	402-1	Minimum notice periods regarding operational changes	N/A
GRI 403: Occupational Health and Safety 2018	403-1	Occupational health and safety management system	P68
	403-2	Hazard identification, risk assessment, and incident investigation	P68
	403-3	Occupational health services	P68
	403-4	Worker participation, consultation, and communication on occupational health and safety	P68
	403-5	Worker training on occupational health and safety	P68
	403-6	Promotion of worker health	P68
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	P68
	403-8	Workers covered by an occupational health and safety management system	P68
	403-9	Work-related injuries	P71
	403-10	Work-related ill health	P68
GRI 404: Training and Education 2016	404-1	Average hours of training per year per employee	P63
	404-2	Programs for upgrading employee skills and transition assistance programs	P64-67
	404-3	Percentage of employees receiving regular performance and career development reviews	P56
GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	P12，53
	405-2	Ratio of basic salary and remuneration of women to men	P69
GRI 406: Non-discrimination 2016	406-1	Incidents of discrimination and corrective actions taken	P70-71
GRI 407: Freedom of Association and Collective Bargaining 2016	407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	N/A

GRI Standard	Disclosure		Location
GRI 408: Child Labor 2016	408-1	Operations and suppliers at significant risk for incidents of child labor	N/A
GRI 409: Forced or Compulsory Labor 2016	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	N/A
GRI 411: Rights of Indigenous Peoples 2016	411-1	Incidents of violations involving rights of indigenous peoples	N/A
GRI 413: Local Communities 2016	413-1	Operations with local community engagement, impact assessments, and development programs	P92-100
	413-2	Operations with significant actual and potential negative impacts on local communities	N/A
GRI 414: Supplier Social Assessment 2016	414-1	New suppliers that were screened using social criteria	P21-22
	414-2	Negative social impacts in the supply chain and actions taken	P21-22
GRI 415: Public Policy 2016	415-1	Political contributions	N/A
GRI 416: Customer Health and Safety 2016	416-1	Assessment of the health and safety impacts of product and service categories	P40-47
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	N/A
GRI 418: Customer Privacy 2016	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	N/A

SASB Standards

Topic	Accounting Metric	Code	Location
Environmental Footprint of Hardware Infrastructure	▪ Total energy consumed; ▪ Percentage grid electricity ▪ Percentage renewable electricity	TC-SI-130a.1	P81-84
	▪ Total water withdrawn ▪ Total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	TC-SI-130a.2	P84-85
	▪ Discussion of the integration of environmental considerations into strategic planning for data center needs	TC-SI-130a.3	P82、85
Data Privacy & Freedom of Expression	▪ Description of policies and practices relating to behavioral advertising and user privacy	TC-SI-220a.1	P37-39, 44-47
Data Security	▪ Number of data breaches; ▪ Percentage involving personally identifiable information (PII); ▪ Number of users affected	TC-SI-230a.1	P30-39
	▪ Description of approach to identifying and addressing data security risks, including use of third-party cybersecurity standards	TC-SI-230a.2	P30-36
Recruiting & Managing a Global, Diverse & Skilled Workforce	▪ Employee engagement as a percentage	TC-SI-330a.2	P53
	▪ Percentage of gender and racial/ethnic group representation for ▪ management; ▪ technical staff, and ▪ all other employees	TC-SI-330a.3	P53
Managing Systemic Risks from Technology Disruptions	▪ Description of business continuity risks related to disruptions of operations	TC-SI-550a.2	P13-15, 30-39

Contributions to UN SDGs

SDG	Baidu's Commitments and Key Actions	Corresponding Section
	▪ Provided earthquake relief aid to affected areas in Shigatse, Tibet to enhance disaster resilience and reduce vulnerability. ▪ Launched the "Hello World" charitable initiative to support sustainable development in poverty-stricken areas.	Charitable Donations and Social Responsibility Community Assistance and Charitable Initiatives
	▪ Launched an AI agent for farmers to enhance agricultural productivity. ▪ Developed an AI-based "digital human" livestreaming service to help rural residents sell their produce online and boost their incomes.	Empowering Rural Revitalization with AI
	▪ Prioritize employees' physical and mental health, establish On-site health clinic, and provide professional health consultations and health management services. ▪ Optimize allocation of medical resources and promote inclusive healthcare.	Occupational Health and Safety Leveraging AI to Promote Universal Healthcare
	▪ Create a comprehensive and robust training system for all employees. ▪ Launched the "Second-Skill Learning Platform for Workers" to enhance the AI literacy of skilled workers. ▪ Support education in remote mountainous areas to promote educational equity.	Empowerment Training System Just AI Transition Empowering Educational Equity with AI
	▪ Promote female participation at all levels of management to foster gender equality. ▪ Diversity, anti-discrimination, anti-harassment, and anti-unfair competition policies cover 100% of full-time employees and interns. ▪ Protect rights of female employees, and provide comprehensive maternity benefits to support working mothers.	Diversity, Equity, and Inclusion Labor Rights and Human Rights Protection
	▪ Prioritize water resource stewardship to improve water efficiency and reduce the environmental impact of business operations.	Water Stewardship

SDG	Baidu's Commitments and Key Actions	Corresponding Section
	▪ Continuously increase the proportion of clean energy used by data centers and purchase 59.8 million kWh of green electricity per year. ▪ Actively manage energy and resource consumption for our office areas.	Data Center Energy Management Energy Management in Office Spaces
	▪ In 2024, we created 11,300 new job opportunities, including 1,400 graduate roles. ▪ Strictly comply with applicable laws and regulations, prohibit child labor, and prevent the employment of individuals under 18. ▪ Establish a comprehensive occupational health and safety management system to create a safe and secure work environment. ▪ Support employees from disadvantaged groups (e.g. employees with disabilities, providing them with as much assistance as possible. ▪ Prioritize employee human rights protection, ensuring fair and favorable working conditions, and provide employees with statutory social security benefits.	Structured Talent Recruitment Strategy Recruitment Management and Process Optimization Occupational Health and Safety Diversity, Equity, and Inclusion Labor Rights and Human Rights Protection
	▪ Over the past decade, Baidu has invested over RMB 180 billion in R&D. ▪ In 2024, we filed over 2,000 patent applications in China and received grants for 3,500 patents, making us China's leader in AI patent applications and grants for the sixth consecutive year.	Fostering a Culture of Innovation
	▪ Prohibit all forms of discrimination in recruitment decisions, including gender, age, and ethnicity. ▪ Provide equal opportunities to all employees, ensuring equal pay for equal work regardless of gender, race, age, and other factors.	Recruitment Management and Process Optimization Labor Rights and Human Rights Protection

SDG	Baidu's Commitments and Key Actions	Corresponding Section
	▪ Launched a 24-hour AI assistant for members of rural communities to enhance community participation and inclusiveness and promote sustainable urban governance. ▪ Baidu Maps leverages nationwide logistics maps, leading AI technology, and traffic prediction data to optimize logistics routes and reduce emissions.	Empowering Rural Revitalization with AI Green Products and Services
	▪ Continuously improve our personal information and privacy protection systems by developing cutting-edge technologies, conducting regular training, and strengthening our management practices to prevent data breaches. ▪ As part of our mission to "make the complicated world simpler through technology", we continuously improve our content governance mechanisms to provide high-quality, secure, and responsible products and services. ▪ Establish a comprehensive waste management system in order to reduce waste and mitigate its environmental impact. ▪ Integrate sustainability into our business strategy, and leverage AI technology to provide green products and services to customers and society.	Privacy and Personal Information Protection Content Governance Waste Management Green Products and Services
	▪ With reference to IFRS S2 requirements for climate-related disclosures, Baidu has established a climate change governance system with corresponding carbon reduction strategies and targets. We regularly identify climate change risks and take concrete action to address climate change.	Climate Governance
	▪ Support the establishment of marine protected areas and protect biodiversity through AI-powered monitoring systems and research partnerships.	Biodiversity
	▪ Launch an AI-enabled image recognition application to combat illegal wildlife trade (e.g. ivory trade) and protect endangered species.	Biodiversity

SDG	Baidu's Commitments and Key Actions	Corresponding Section
	▪ Embed ESG principles into the company's management strategy, continuously enhance governance standards, control operational risks, and uphold business ethics. ▪ Establish an effective, accountable, and transparent human rights and labor protection system to ensure that decision-making at all levels is responsive, inclusive, participatory and representative. ▪ Promote and implement anti-discriminatory policies to support the company's continued growth. ▪ Launch "Fa Xing Bao", a new AI-powered legal assistant that lowers the cost of accessing legal services, improves productivity for lawyers, and reinforces the rule of law.	ESG Management Human Rights Due Diligence AI-Powered Legal Services
	▪ Actively participate in building a cybersecurity ecosystem, and develop standards in collaboration with industry peers and institutions. ▪ As a strong advocate of open-source software, we have launched several open-source platforms to support the industry ecosystem. ▪ Collaborate with the International Fund for Animal Welfare (IFAW), the China National Environmental Monitoring Center, Tsinghua University, and other organizations to strengthen partnerships on sustainability topics. ▪ Through multilateral partnerships and sharing cutting-edge technology, Baidu has provided AI training to 5.92 million people in order to promote the widespread adoption and worldwide growth of AI technology.	Security Ecosystem Ecosystem Partners Biodiversity Green Products and Services Building an AI Talent Pool

Greenhouse Gases Verification Opinion

Bureau Veritas Certification

Greenhouse Gases Verification Opinion

is awarded to

BAIDU, INC.

Bureau Veritas Certification (Beijing) Co., Ltd. was engaged to conduct an independent verification of the greenhouse gases (GHG) emissions reported by Baidu, Inc. for the period stated below. This verification opinion applies to the related information included within the scope of work described below.

Boundaries covered by the verification:

- Verification site name: Baidu, Inc.
- Verification site address: Baidu Campus, NO.10 Shangdi 10th Street, Haidian District, Beijing, The People's Republic of China 100085 (HQ), including 27 office locations, 6 Baidu operated digital centers and 1 vehicle operation site.
- Reporting period covered: January 01, 2024 to December 31, 2024

Organizational boundaries: Activities and facilities of Baidu, Inc. under operational control approach.

Reporting boundaries: Direct GHG emissions generated in [Office and data center areas, vehicle operations] and related management activities within the organizational boundaries, as well as significant indirect greenhouse gases emissions

Emissions data verified under reporting boundaries:

- Category 1: Direct GHG emissions: 20,569.48 tCO_2e
- Category 2:

  Indirect GHG emissions from imported energy : 777,438.82 tCO_2e (location-based)

  Indirect GHG emissions from imported energy : 645,057.69 tCO_2e (market-based)
- Category 3: Indirect GHG emissions from transportation: 1,140.49 tCO_2e
- Category 4: Indirect GHG emissions from products used by organization: 1,325,321.55 tCO_2e
- Category 5: Indirect GHG emissions associated with the use of products from the organization: Non-significant indirect emissions and not quantified
- Category 6: Indirect GHG emissions from other sources: Non-significant indirect emissions and not quantified

  Total quantified emissions : 2,124,470.35 tCO_2e (location-based)

  1,992,089.22 tCO_2e (market-based)

Limitations and exclusions: Excluding other non-significant indirect GHG emissions

GHG verification protocol used to conduct the verification:

- ISO 14064-1:2018 Greenhouse gases - Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals
- ISO 14064-3:2019 Greenhouse gases - Part 3: Specification with guidance for the verification and validation of greenhouse gas statements

Level of assurance:

- Reasonable assurance

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GHG verification methodology:

- Interview for relevant personnel;
- Review of the documentary evidence;
- Evaluation of the methodology and information systems for data collection, aggregation, analysis and review;
- Audit of sampled sites and data to verify source.

Verification conclusion:

Based on the verification process and findings, the GHG emission data in the GHG inventory report from Baidu, Inc. is in compliance with ISO 14064-1:2018 Greenhouse gases - Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals.

Statement of independence, impartiality and competence:

Bureau Veritas Group is an independent professional services company that specializes in Quality, Health, Safety, Social and Environmental management with over 190 years' history in providing independent assurance services.

No member of the verification team has a business relationship with Baidu, Inc. and its directors or managers beyond that required by this assignment. We conducted this verification independently and to our knowledge there has been no conflict of interest.

Bureau Veritas Group has implemented a Code of Ethics across the business to maintain high ethical standards among staff in their day-to-day business activities.

Lead verifier: Han Bao
No.: EMICN100537A
Version No.: No.1

Verification date: 17-20/02/2025
Issue date: 03/03/2025

Signed on behalf of
Bureau Veritas Certification (Beijing) Co., Ltd

Bureau Veritas Certification

Appendix for Greenhouse Gases Verification Opinion

Baidu, Inc. has commissioned Bureau Veritas Certification (Beijing) Co., Ltd. to conduct a third-party verification on the GHG emissions within its reporting boundary. Key information is listed below:

Category 1, Category 2	Energy consumption	Unit	Remark
Total direct energy consumption	**27447.63**	**MWh**	Converted into electricity consumption
Natural gas	2,679,056	m^3	
Diesel	74.97	t	
Gasoline	6,130.39	kg	
Total indirect energy consumption	**1169113.15**	**MWh**	Converted into electricity consumption
Electricity	1,145,027.50	MWh	
Heat	86,756.33	GJ	
Renewable energy power	62,322,603	kWh	

ESG Report Verification Statement

CTI 华测认证

Independent Assurance Statement

CTI Certification Co., Ltd. ("CTI") is entrusted to assure the sustainable development related disclosed by Baidu, Inc. ("Reporting Organization") in Baidu 2024 Environmental, Social and Governance (ESG) Report("Report"). The purpose of this process is to provide confidence for stakeholders to make decisions based on the information provided by the Reporting Organization.

Intended users of the assurance statement

- Shareholders and investors
- Users
- Governments and regulators
- Employees
- Suppliers
- Partners/NGO
- Media
- Environment
- Communities

Assurance standard

AA1000 Assurance Standard v3

Assurance scope

- Verify the content, context and application of the report, as well as the quality of sustainability related information presented during the reporting period;
- Assess the Report's degree of adherence to AA1000 Accountability Principles (2018) of inclusivity, materiality, responsiveness and impact;
- Review the sustainability practices and performance information described in the Report;
- Assess the reporting mechanisms for sustainability related information and their alignment with applicable reporting standards;
- Assess the appropriateness and suitability of data collection, quantification and data management processes incorporated into the Report.

Type of engagement

Type 2 engagement

Level of assurance

Subject matter	Level
Degree of adherence to AA1000 Accountability Principles (2018)	Moderate Level
Quality of specified sustainability related information	Moderate Level

Preparation standards and normative references

Baidu 2024 Environmental, Social and Governance (ESG) Report was prepared in accordance with the *ESG Reporting Guide 2.0* issued by the NASDAQ Stock Exchange, the *Environmental, Social and Governance Reporting Guide* and the relevant consultation papers of the Listing Rules issued by Hong Kong Exchanges and Clearing Limited (HKEX), with reference to the "Ten Principles" of the United Nations Global Compact (UNGC), the *Sustainability Reporting Standards* (GRI Standards) issued by the Global Sustainability Standard Board (GSSB), the *SASB Standards* issued by the Sustainability Accounting Standards Board (SASB), International Financial Reporting Standards (IFRS) Sustainability Disclosure Standards issued by the International Sustainability Standards Board (ISSB), and the United Nations Sustainable Development Goals (UN SDGs).

Source of information disclosure

Disclosure title: Baidu 2024 Environmental, Social and Governance (ESG) Report
Source: Baidu, Inc.

Description of methodology

CTI formulated an engagement plan based on the assurance process and conducted the engagement according to the plan. CTI conducted inspections with a professional skepticism attitude and the assurance activities included the following procedures:

- Process for understanding, testing and evaluating the extent to which the Reporting Organization adheres to AA1000 Accountability Principles, and thereby assessing the degree of adherence;
- Conduct management interviews on the effectiveness of impact-generating processes, involving the Reporting Organization's top management, departmental managers and sustainability officers;
- Review and inspect the Reporting Organization's management practices, business processes and evidence collection procedures through sampling;
- Collect and evaluate evidentiary materials and management declarations that substantiate the Reporting Organization's adherence to AA1000 Accountability Principles.

Conclusions

According to the AA1000 Assurance Standard v3, CTI conducted a Type 2 moderate level assurance on the sustainable related information disclosed in the Report prepared by the Reporting Organization. According to the requirements of the AA1000 Accountability Principles (2018), the conclusions are as follows:

The degree of adherence to AA1000 Accountability Principles (2018) of the Reporting Organization and the Report

Inclusivity	After assessment, CTI confirms that the Reporting Organization has identified and understood stakeholders, maintained proper, transparent and timely communication with them, and incorporated key stakeholder concerns into significant considerations for corporate sustainability, aligning with the inclusivity requirement of AA1000 Accountability Principles (2018).
Materiality	After assessment, CTI confirms that the Reporting Organization has applies the double materiality assessment principle to determine the significance, likelihood, current and anticipated future impacts of identified material issues, has conducted a materiality evaluation covering both internal and external aspects of the organization, aligning with the materiality requirement of AA1000 Accountability Principles (2018).
Responsiveness	After assessment, CTI confirms that the Reporting Organization has adopted suitable reporting frameworks to define and reflect responses to material matters in the Report, aligning with the responsiveness requirement of AA1000 Accountability Principles (2018).
Impact	After assessment, CTI confirms that the Reporting Organization has established clear procedures for regular monitoring and measurement of sustainability impacts, with dedicated professionals effectively driving the sustainability agenda, aligning with the impact requirement of AA1000 Accountability Principles (2018).

The quality of sustainability related information disclosed in the Report

CTI did not identify any material misstatements in the sustainability related information described in the Report as described below:

Information on sustainable practices

ESG Management

- double materiality assessment

Corporate Governance

- "Three Lines" risk management model
- business ethics management initiatives
- supplier ESGtraining
- Technology Ethics Committee
- technology ethics audits
- AI ethics training
- human rights risk identification and preventive measures
- *Integrity Agreement*

User Trust and Service Excellence

- security management framework
- security management measures
- define and classify security issues
- information security audits and certifications
- give users the right to make decisions about their personal data
- product content governance
- moderation of advertising content
- complaint management system
- *Baidu Privacy Policy Framework*
- *Baidu Personal Information Protection Compliance Guidelines*
- *Baidu User Information Security Standards*
- *Baidu Content Ecosystem Management Standards*
- *Baidu Risk Control Redlines for User Products*
- *Baidu Children's Personal Information Protection Statement*

People and Talent

- talent recruitment programs
- 360-degree feedback and assessment process
- employeegrievance channels
- whistleblower protection
- Duxuetang online learning platform
- professional competency training
- occupational health and first aid training
- on-site health clinic
- supporting employees from minority and underrepresented groups
- *Baidu Employee Manual*
- *Baidu Specification on Office Management System*
- *Baidu Office Emergency Response Plan*
- *Evaluation Standards for High-Value Patents*
- *Guidelines for Drafting Foundation Model and AI-Native Patents*
- *Guidelines for Drafting Standard Essential Patents*
- *Guidelines for the Management and Operation of High-Value Patents*

Environmental Stewardship

- climate governance framework
- six emission reduction pathways
- energy management framework
- data center dedicated energy management team
- data center IDEC water-saving technology
- biodiversity impact assessment

Community Engagement

- second-skill learning platform for workers

Information on sustainability performance

- number of harmful contents removed
- complaints from various service channels and processed quantity
- number of employees
- percentage of employees trained
- average number of training hours
- certifications related to privacy protection and information security
- Coverage of *Baidu Privacy Policy* and *Baidu Data Security Policy* for products and businesses
- patent applications in China and obtained grants
- total non-hazardous waste generated
- total hazardous waste generated
- total water consumption
- Baidu data center average PUE
- Baidu data center average WUE
- total charitable donations

Limitations and approach used to mitigate limitations

The limitations and mitigation methods of CTI in the assurance process:

- CTI confirms solely through interviews and factual evidence verification that all sustainability performance indicators have clearly defined data sources;
- CTI cannot provide assurance opinions on viewpoints described in the Report, including opinions, beliefs, inferences, aspirations, expectations or future intentions;
- CTI will focus further on the improvement and advancement of the Reporting Organization's sustainability information disclosure and management practices in future assurance work, in alignment with the principle of continuous improvement.

Competence and independence of CTI

Founded in 2004, CTI Certification Co., Ltd. is a professional certification body approved by the Certification and Accreditation Administration of China (CNCA) and accredited by the China National Accreditation Service for Conformity Assessment (CNAS), enjoying an independent third-party impartial status. We have extensive experience in conducting third-party audits for management system certifications in quality, environmental, energy, occupational health and safety as well as environmental data such as greenhouse gases. Except for the assurance of sustainability information, no member of the assurance team has any business relationship with Baidu, Inc., its directors, executives or department managers. After the internal impartiality assessment conducted by CTI, we believe that there is no conflict of interest in this assurance engagement.

Signed by

AA1000
Licensed Report
000-669/V3-TA8WC

CTI Certification Co., Ltd.
April 11 2025

Reader Feedback Form

Dear readers,

Thank you for reading our 2024 Environmental, Social, and Governance Report. We welcome your valuable comments and suggestions. Please take a moment to fill out this form and mail it back to us, or email a scanned copy to esg@baidu.com. Thank you for your feedback!

1. As a Baidu stakeholder, what is your relationship to Baidu?

☐ Shareholder ☐ Employee ☐ Supplier ☐ User

☐ Government ☐ Community ☐ Financial Institution

☐ Academic Institution ☐ Others (Please specify)

2. How would you rate this report overall?

☐ Excellent ☐ Good ☐ Average ☐ Below average

3. How would you rate the clarity, accuracy, and completeness of the information disclosed in this report?

☐ Excellent ☐ Good ☐ Average ☐ Below average

4. How would you rate the comprehensiveness of Baidu's economic responsibilities reflected in this report?

☐ Excellent ☐ Good ☐ Average ☐ Below average

5. How would you rate the comprehensiveness of Baidu's environmental responsibilities reflected in this report?

☐ Excellent ☐ Good ☐ Average ☐ Below average

6. How would you rate the comprehensiveness of Baidu's social responsibilities reflected in this report?

☐ Excellent ☐ Good ☐ Average ☐ Below average

7. How would you rate the design and layout of this report?

☐ Excellent ☐ Good ☐ Average ☐ Below average

8. Which part of this report do you think could be improved?

☐ Corporate Governance

☐ User Trust and Service Excellence

☐ People and Talent

☐ Environmental Stewardship

☐ Community Engagement

9. Is there any other content you would like to be included in this report?

10. Please list any other suggestions you may have regarding our ESG report.


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