



# 2024

# Sustainability Report

Lianzhou International Co., Ltd.  
Guangming Branch

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# About the Report

## Reporting Scope

This report is the 2024 Sustainability Report independently released by Lianzhou International Co., Ltd. Guangming Branch.

The report discloses the management concept and practical achievements of the Guangming Branch in sustainability development.

Guangming Branch serves as the primary role for TP-Link Group in the field of whole-machine manufacturing business. Some businesses are directly managed by the parent companies - Lianzhou International Co., Ltd. and TP-Link Systems Inc. Therefore, some contents of this report will involve and extend to these parent companies. To ensure clarity for readers, we will provide explicit references and explanation for the contents related to the direct management of the parent companies within the report.

## Reference Explanation

Full name	Short name
Lianzhou International Co., Ltd. Guangming Branch	"Guangming Branch", "We", "Company"
Lianzhou International Co., Ltd.	"Lianzhou International"
TP-Link Systems Inc.	"Group", "TP-Link"

## Basis for Preparation

This report refers to the United Nations 2030 Sustainable Development Goals (SDGs), the Global Reporting Initiative (GRI 2021) standards, the Sustainability Accounting Standards Board (SASB) standards, and the International Sustainability Standards Board (ISSB) framework recommendations.

## Reporting Period

The reporting period is from January 1, 2024 to December 31, 2024. To more accurately reflect the current situation of the Company, some content appropriately goes beyond this range, tracing back to 2023 or extending forward to March 2025, and is explained in the report.

## External Measurements

Guangming Branch entrusted SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch ("SGS" for short) to audit the substance of the report and data to ensure that the information and data contained in the report are accurate, reliable, and have been fairly presented.

## Release

This report was published electronically on the official website.

To facilitate your access to the electronic version of this report, you could obtain it through the following website: [www.tp-link.com/en](http://www.tp-link.com/en)

If you have any questions or comments regarding this report and its content, please contact us in the following ways:

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# Message from the CEO

TP-Link is the Wi-Fi network backbone for an abundance of homes and businesses worldwide. With humble beginnings in 1996, TP-Link has grown to what it is today: a global leader of reliable networking devices. You can find our reliably smart devices all over the world, connecting billions of people in over 170 countries and regions. Our products and technologies deliver a simple, reliable always connected lifestyle, with information security and eco-friendly sustainability at the forefront of decision making.

Through technology innovation and human inspiration, we aim to benefit both customers and the planet with energy-efficient, sustainable, and environmentally friendly products. By developing sustainable products and technologies in both our supply chain and product design process, TP-Link aims to reduce our waste and carbon footprint. In recent years, TP-Link has actively responded to and joined organizations such as the United Nations Global Compact (UNGC), the Responsible Business Alliance (RBA), the Responsible Minerals Initiative (RMI), the Science Based Targets initiative (SBTi), and has gradually improved the Company's management system in accordance with international standards such as ISO 14001, ISO 45001, and ISO 14064. TP-Link has progressively strengthened and perfected its management systems.

As more businesses rely on digital data and technology, ensuring data security has become increasingly important. As an ISO 27001 & ISO 27701 compliant and certified company, we're demonstrating a commitment to data confidentiality and integrity. TP-Link has built trust and loyalty among stakeholders while also complying with applicable laws and regulations related to data protection. We understand that

data security is critical to delivering a reliable always connected lifestyle to our valued customers. TP-Link has expanded the scope of ISO 27001 certification to include the primary manufacturing base of the Group, Lianzhou International Co., Ltd. Guangming Branch, by 2024.

Corporate social responsibility is becoming increasingly important, and businesses like TP-Link can make a significant impact by giving back to their local communities. By conducting research and outreach internally, we have built relationships with local non-profit organizations to provide valuable support to those in need while also building strong relationships within the community. We have partnered with local hospitals to provide resources needed to bring positivity into patients' visits and strive to continue efforts like this in the years to come. We understand that by prioritizing social responsibility, TP-Link can create a meaningful and lasting impact in our local communities.

Looking ahead to 2025, in an increasingly interconnected world, TP-Link will continue to pursue excellence and explore the future. Adhering to the social responsibility management concept of "persisting in technology and product innovation, helping customers' digital development, letting consumers enjoy the latest technology's brilliance, and enabling more consumers to enjoy a technology-driven lifestyle; while also responding to the United Nations' global sustainability goals, promoting the continuous upgrading of industries towards a greener and low-carbon direction, and actively assuming social responsibility", TP-Link integrates social responsibility management into various aspects of its business operations.

# About TP-Link

## › Company Profile

TP-Link is a supplier of equipment and solutions specialized in network communication, consumer electronics, and security monitoring, and has a comprehensive range of product design, research and development, manufacturing, marketing, and services. TP-Link has consistently committed to independent research and development, independent manufacturing, and independent marketing since the brand's founding in 1996. As a result, it has continued to provide high-quality, highly reliable, and high-performance product experiences for users around the world.

TP-Link always prioritizes technical reliability and product stability. As an enterprise impetus, "Reliable" is deeply embedded in every aspect of enterprise development. As a result, the TP-Link brand has gained recognition and trust from all over the world, and has achieved the largest shipment of Wi-Fi equipment in the world for consecutive years. It has won over 1,800 awards including "The Most Satisfied Brand" and "The Best Product Performance Award" for many times.

Guangming Branch is a primary whole-machine manufacturing base of TP-Link. It produces various categories of products including Wi-Fi devices, SOHO and enterprise-level switches, broadband access devices (GPON, ONU, etc.), IoT devices, surveillance devices, and other types of network communication devices and consumer electronics products.

Guangming Branch always closely follows the Group's business development, and consistently achieves high quality, high-efficiency, and high on-time delivery rates for finished product supply tasks, providing guarantee and support for the Group's business development under various circumstances such as rapid market expansion, fluctuations in demand, product updates, and increasing customer requirements.

TP-Link will continue to bring high-performance, innovative products and solutions to users with cutting-edge technology, "making life better with technology and allowing more people to enjoy the wonders of technology".

### Mission

To use technology to make life better and enable more people to enjoy the wonders of technology.

### Values

Pursuing Excellence and Exploring Possibilities.

## › Business Scope

TP-Link's products cover a wide range of commercial and domestic fields, including Ethernet, wireless LAN, broadband access, campus networking, surveillance cameras, smart homes, and home robots, and has set up a one-step solution based on the product system. In 2022, TP-Link took the lead in launching a full set of Wi-Fi 7 commercial and home network equipment in the industry, and actively developed high-end technologies such as AI Mesh, multi-Gigabit, and 5G, which set off a new wave of network products.

As a global multinational company, TP-Link boasts 4 R&D centers including those in Irvine (USA) and Shenzhen (China). It has established a global manufacturing and supply system in China, Vietnam, and Brazil, and collaborates with 42 overseas companies. We sell products in over 190,000 retail stores and 700 e-commerce platforms. With its business reaching over 170 countries and regions across the globe, TP-Link has firmly maintained its position as the world's top supplier of WLAN products in terms of shipment volume.

### Global Network



## ▶ Participation in Initiatives

TP-Link connects everything with the power of technology and expects to assist people in realising the vision of a better life with advanced technology and high-quality products. TP-Link joins organisations such as the Wireless LAN Alliance (Wi-Fi Alliance) and shares our technological exploration, creation, and achievements with our customers and peers who share the same vision while following the world's cutting-edge technology.

As of now, TP-Link has actively joined RBA (Responsible Business Alliance), RMI (Responsible Minerals Initiative), SBTi (Science Based Targets initiative), and UNGC (United Nations Global Compact), further solidifying its commitment and actions in sustainability.

Joining the RBA membership signifies TP-Link's strong commitment to responsible business practices, promoting sustainability of the industry chain by sharing best practices with other members. At the same time, joining SBTi and committing to emission reduction targets further demonstrates TP-Link's determination in climate action, leading the industry towards carbon neutrality and sustainability goals through setting science-based emission reduction targets. Joining UNGC means that TP-Link is committed to following the ten principles of the United Nations in areas such as human rights, labor, environment, and anti-corruption, making a positive contribution to achieving the global sustainability goals. These measures will inject more sustainability and competitiveness into the Company's future operations, while also making a positive contribution to global climate change and sustainability issues.



Guangming Branch achieved EcoVadis Gold Medal in 2024



**Responsible Business Alliance**  
Affiliate Member

Guangming Branch achieved RBA VAP Silver Medal in 2024



SCIENCE  
BASED  
TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

Validated through SBTi emission reduction targets



Responsible Minerals Initiative



United Nations Global Compact



B rating in Climate Change, A rating in Supplier Engagement



Wi-Fi Alliance



Bluetooth SIG

## ▶ TP-Link Certificates

- In 2000, Lianzhou International adopted the **ISO 9001** and obtained the certificate for **24** consecutive years.
- In 2010, Lianzhou International adopted the **ISO 14001** and obtained the certificate for **14** years.
- In 2020, Guangming Branch passed the **ISO 9001** for the first time and obtained the certificate for **4** years.
- In 2020, Guangming Branch passed the **ISO 14001** for the first time and obtained the certificate for **4** years.
- In 2022, Lianzhou International adopted the **ISO 14064** and successfully obtained certification in April 2023.
- In 2023, Lianzhou International passed **ISO 27001** and **ISO 27701** certifications for the first time and obtained the certificate.
- In 2023, Guangming Branch adopted the **ISO 27001** and obtained certification in March 2024.
- Guangming Branch passed the **ISO 45001** for the first time and obtained the certificate for **2** years.
- In March 2024, Guangming Branch obtained the **ISO 14064** certificate. By the end of the reporting period, the branch had passed a new round of verification.
- In December 2024, Guangming Branch passed the **ISO 50001** audit for the first time and obtained the certification.

## ▶ Product Awards



Tapo won the First Place in Annual Sales of PC Cameras of BCN



Tapo C425 was rated as a "Very Good" product by Connect Living



"9/10 Recommended Product" by RedesZone



"Best Wi-Fi7 Router" by The Gioi So Magazine



"Best Mesh Wi-Fi for Home Use" by Nghienghin Vietnam Magazine



"Best Wi-Fi Router Brand" and "Best Mesh Solution" by Tinhte.vn



ArcherGE650 won the iF DESIGN AWARDS



"Outstanding, Best 2K Wired Camera" of PCMag Editors' Choice Award



Best Buy Mesh Wi-Fi Router Category for January 2024

# 01

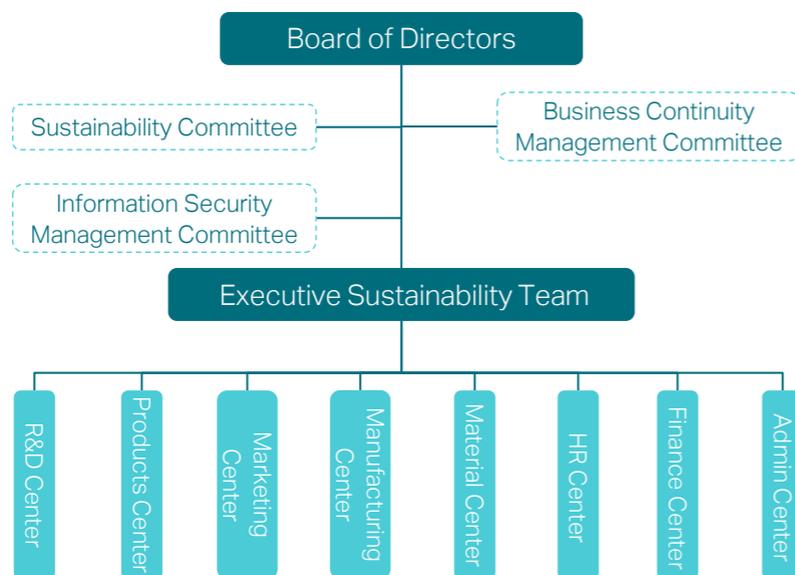
## Sustainability Management

- › Sustainable Governance
- › Sustainability Strategic Goals and SDGs
- › Identification and Communication with Stakeholders
- › Substantive Issue Assessment



# Sustainability Governance

TP-Link has deeply integrated the sustainability concept into the development strategy and daily operation. The Company has created a top-down sustainability management system led by the senior management with the participation of all employees, supplemented by a set of mature and perfect working mechanisms. The Company aims to ensure efficient and orderly implementation and progress of all sustainability initiatives, and to continue to promote the harmonious coexistence between the Company and the environment.



**Sustainability Management Architecture**

## Board of Directors

Be fully responsible for the identification of business risks, the formulation of strategies, and the implementation of strategies and business plans.

## Sustainability Committee

With CEO as chairman, formulate TP-Link's sustainability strategy and policy goals, guide TP-Link's sustainability implementation, be responsible for making decisions on key matters and major topics of TP-Link's sustainability, and report TP-Link's sustainability situation and progress to the top leadership.

## Executive Sustainability Team

Implement TP-Link's sustainability-related decisions, identify potential risks and opportunities, and make recommendations to the committees; Promote communication with key stakeholders; Oversee the development and implementation of the Company's sustainability strategies, goals, and policies within each business unit; Report sustainability progress regularly to the committees.

## Business Units

Under the guidance of the sustainability execution team, the sustainable goals of respective units will be incorporated into daily business for implementation, and the implementation of sustainability will be summarized regularly. Potential risks and opportunities will be identified and recommendations will be proposed to the execution team.

# Sustainability Goals and Progress in 2024

Sustainability strategy		Sustainability goals	Progress of 2024	SDGs	
Company Governance	Business ethics	0 corruption and bribery incidents 0 complaints (or lawsuits) against anti-competitive behaviors	Completed	  	
	Information security	0 information security incidents	Completed		
	Supply chain management	100% coverage rate of new supplier social responsibility survey, and 100% signing rate of Social Responsibility Commitment 100% coverage of environmental and social responsibility training for procurement personnel	Completed		
	Products and services	0 customer complaints resulting from product safety issues	Completed		
Social Responsibility	Merit-based recruitment	0 incidents involving child labor, forced labor, discrimination, and harassment 100% solving rate for employee complaints 100% coverage rate of holiday benefits for employees in service and 100% coverage rate of birthday benefits 100% overtime pay rate At least 1 time of staff symposium per month	Completed	  	
	Rights and equality				
	Empowerment assessment and development	100% coverage rate of employee health and safety training	Completed		  
	Occupational health and safety	0 level 8 or above work-related injury accidents 0 fire accident	Completed		
Green Development	Response to climate change	With 2023 as the baseline, Short-term target: By 2030, reduce Scope 1&2 greenhouse gas emissions by 42% and Scope 3 by 25%; Long-term targets: By 2040, reduce Scope 1&2 greenhouse gas emissions by 90%; by 2050, reduce Scope 3 by 90%	in progress	  	
	Energy saving and consumption reduction				
	Water Resources Management	Per capita water consumption decreased by 1% year on year	in progress		 
	Environmental compliance	100% compliance with emission standards for environmental impact factors (waste gas, water, noise, waste)	Completed		

# Identification and Communication with Stakeholders

The expectations of stakeholders are important considerations for Guangming Branch to implement TP-Link's sustainability strategy and optimize sustainability management. Guangming Branch identifies stakeholders and their key areas of concern through various methods. Based on its own governance structure, operating model, and business characteristics, as well as drawing from the experience and practices of global peers, Guangming Branch has identified the main stakeholders, and maintaining effective communication with stakeholders is an important way to continuously improve sustainability.

Guangming Branch has established diversified communication channels tailored to the characteristics of different stakeholders, taken various measures to ensure the smooth and effective communication channels. Through effective communication, Guangming Branch actively listens to stakeholders' suggestions and opinions, thoroughly understands stakeholders' expectations and requirements, and incorporates stakeholders' demands into the Company's daily operations and sustainability management. Together with all stakeholders, Guangming Branch collaborates to promote the continuous progress and development of the Company.

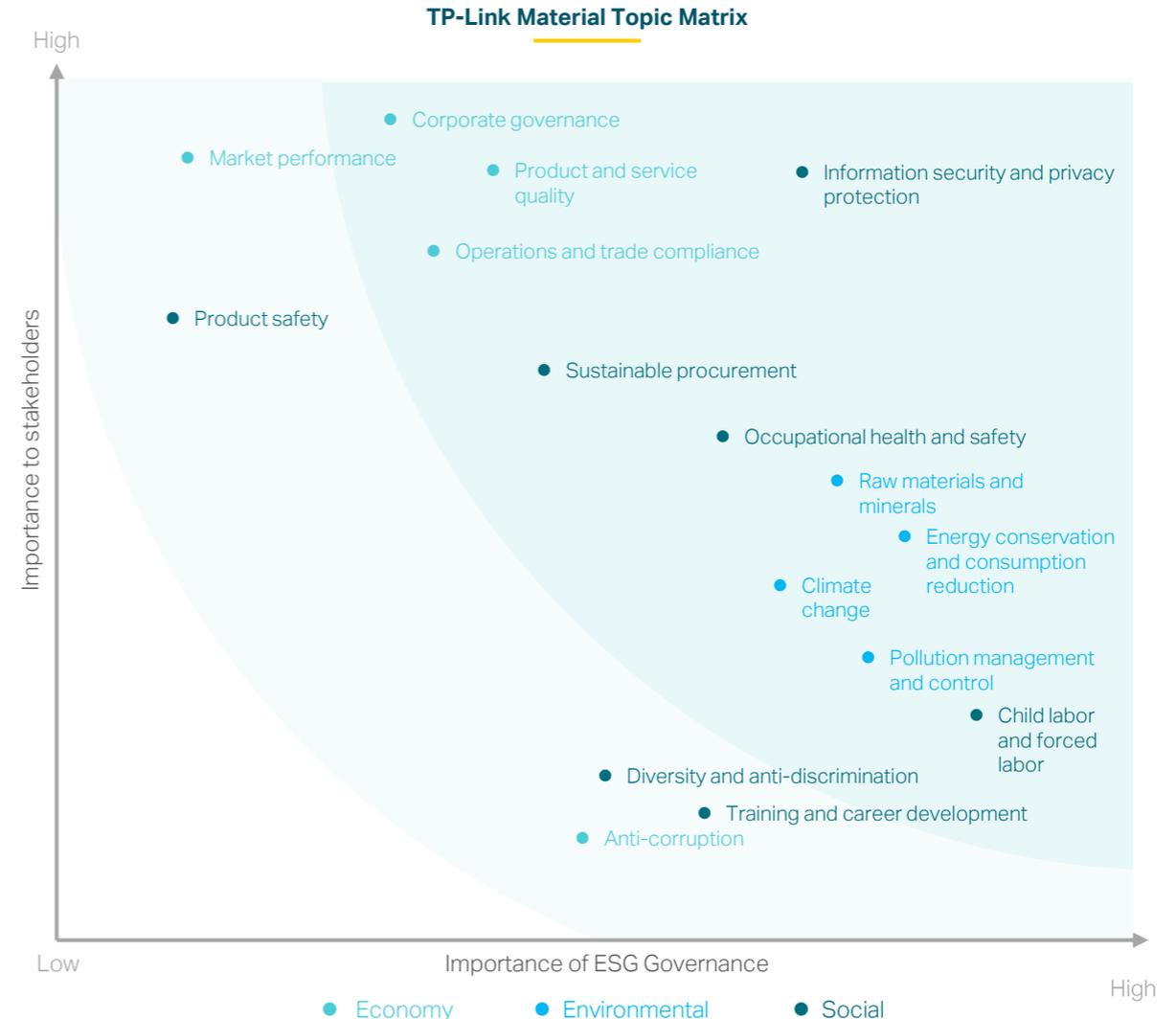
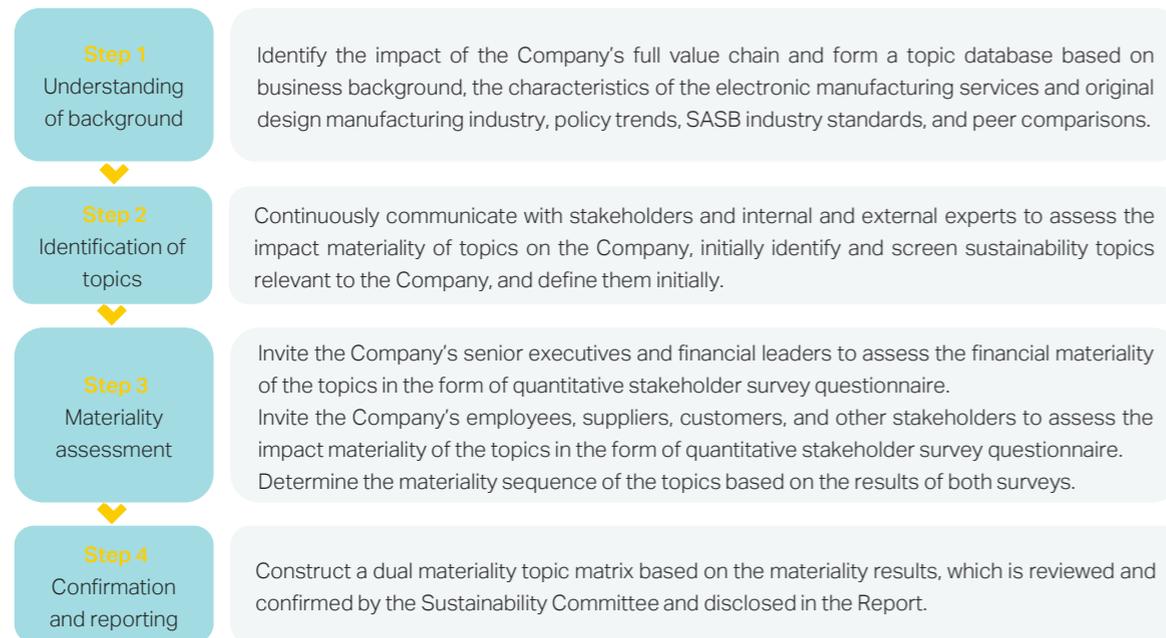
## List of Important Stakeholders, Issues, and Communication

Stakeholders	Issues of concerns	Response methods
 Customers	Business ethics; Information security; Supply chain management; Product quality service	Company official website; Customer satisfaction survey; Product launch event; Meeting; Phone; Email
 Employees	Salary and welfare; Occupational health and safety; Career development; Human rights protection	Suggestion box; Company official website; Wechat official account; Employee representatives
 Suppliers	Business ethics; Information security; Supply chain management; Products and services	Supplier management network; Phone; Email; Training
 Government and regulatory agencies	Business ethics; Information security; Green Development; Compliance operation	Company official website; External news
 Shareholders and executives	Compliance operation; Risk Management; Business ethics	Sustainability committee; Shareholders and executive meeting
 Community and public	Response to climate change; Energy saving and consumption reduction; Water Resources Management; Compliance operation	Company official website; External news
 Industry associations and concerned organization initiatives	Business ethics; Information security; Supply chain management; Products and services; Human rights protection	Company official website; External news

# Dual Materiality Analysis

Guangming Branch has communicated with stakeholders to understand the sustainability issues they are concerned about. At the same time, Guangming Branch identifies the risks, opportunities, and challenges faced by the Company through analysis of global political, economic, legal and social development trends, and combines the Company's operational strategies and development policies to comprehensively identify issues related to sustainability governance. With the help of the GRI substantive issue analysis method, it has analyzed and evaluated the Company's substantive issues related to sustainability.

## Dual Materiality Analysis Process of Topics



# 02

## Business Ethics

- › Governance
- › Policies
- › Management Control
- › Information Security
- › Compliance Supervision



## Governance

TP-Link's top management is directly responsible for and supervises matters related to business ethics, while entrusting the Sustainability Committee to work together with the top management to build a sound and effective business ethics management system. Through this governance structure, the formulation, implementation, and supervision of business ethics are comprehensively and strongly supported.

## Policies

In 2024, TP-Link updated and improved the *Business code of Conduct* and *Ethics and Anti-Bribery and Corruption Policy*, clarifying the policies and regulatory systems on a series of business ethics-related behaviors such as anticorruption, conflicts of interest, money laundering fraud, and fair competition. These policies, after being approved by top management, are simultaneously distributed to every employee and relevant stakeholders, aiming to clarify the professional ethics and business ethical standards that employees should adhere to, and to prevent corruption and improper competitive behavior from occurring at the source.

During the reporting period, the number of cases in which Guangming Branch was sanctioned by the relevant authorities for unfair competition practices in its operations or violations of antitrust laws (or anti-monopoly laws) was 0.

## Management Control

Guangming Branch follows TP-Link's management policies, conducts annual business ethics risk assessments to identify and address potential risks, and strengthens management control. It has supervision measures to penalize violations, upholding ethical standards and corporate reputation.

Guangming branch implements internal controls set by its parent company Lianzhou International. It ensures employee compliance with ethics via regular training, defines sensitive transactions, and requires strict OA approval for procurement, expense reimbursement and entertainment. In 2024, it completed 31 specialized ethics audits (covering supplier management, project bidding, key material procurement and frontline recruitment) to improve management and risk awareness. During the reporting period, 100% of employees received ethics training, with no confirmed corruption found in internal audits.

Externally, Guangming branch adopts Lianzhou International's supervision mechanisms. For new third-party collaborations, it requires integrity and confidentiality agreements, and conducts compliance checks on partners via public channels to ensure ethics and reduce risks.

### Fair Competition

TP-Link regards ensuring fair competition as its core value and implements compliant operations through regular training and internal audits.

- Regular training aimed at ensuring that employees have the necessary knowledge and awareness to comply with the competition rules of TP-Link and the industry. These training activities cover the basic concepts of fair competition, company policies, and the responsibility of employees to maintain fair competition in the business environment.

- Regular internal audits to review the compliance of business operations, with a particular focus on the implementation of fair competition. Internal audits aim to detect potential compliance issues, promptly correct improper behaviors, and assess the effectiveness of company systems in maintaining fair competition.



Business Ethics Compliance Training

# Information Security

## › Governance

As a pioneer of wireless connectivity technology, TP-Link considers data security as the enterprise lifeblood and places high importance on the protection of customers' trade secrets, data information, and privacy.

TP-Link strictly complies with relevant laws, regulations, policies, and industry guidelines. To achieve the standardization and uniformity of the information security system, TP-Link has established the Information Security Management Committee to lead and coordinate the information security management work comprehensively.

## › Policies

Guangming Branch adheres to the Group's 57 policies and regulations such as *Information Security and Privacy Management Manual*, *Personal Data Protection Policy*, *Internal Data Protection Guidelines*, *Data Subject Rights Specification*, *Data Leakage Notification Specification*, *Personal Information Security Management Procedure*, and *Compliance Implementation Procedures* to ensure the security of data and information. Starting from a combination of network and physical measures, strict internal process controls are implemented to ensure secure and controllable information collection, processing, transmission, storage, and use.

## › Management

Since April 2022, TP-Link has launched a data compliance system construction project based on the EU GDPR (General Data Protection Regulation). By 2023, TP-Link has established a four-level data protection management architecture, including DPO (Data Protection Officer), DPMO (Data Protection Management Office), DPR (Data Protection Representatives in various departments), and business departments.

Additionally, TP-Link successfully completed the audits and obtained certifications for ISO 27001 and ISO 27701 in May 2023. It further passed the surveillance audit and maintained the validity of the certifications in July 2024. These efforts have helped TP-Link elevate its information security and data privacy protection to higher standards. [Guangming Branch established an information security management system \(ISMS\) in line with ISO 27001. The company obtained its first certification in March 2024 and maintained its validity through a surveillance audit in July 2024.](#)

Guangming Branch attaches great importance to employees' information security awareness and ensures information security through the following measures:

- Enhancing employees' information security awareness: We provide regular training to boost their awareness and accountability. [In 2024, per the group's plan, Guangming branch held 219 general and 35 specialized personal information security trainings, covering 100% of employees.](#)
- Establishing an information security emergency response plan: We formulated and refined the *Information Security Emergency Response Plan* to respond quickly and effectively to potential information security incidents and emergencies. With clear protocols, the company can take prompt actions to minimize potential losses and risks. [In 2024, Guangming branch conducted 2 emergency drills to verify the plan's effectiveness.](#)
- Data backup and recovery mechanisms: We have established regular backup mechanisms to ensure data integrity and recoverability, thus safeguarding business continuity.
- Information processing and sharing restraint mechanisms: Strict restraint mechanisms are implemented in information processing and sharing. Information shared externally undergoes technical processing or masking of sensitive data, and can only be shared after obtaining approval via the OA process.
- Regular risk assessments: We conduct regular assessments to identify and address emerging information security risks, strengthening management effectiveness and supporting compliance with top information security standards.

# Compliance Supervision

TP-Link has established multiple public reporting channels, including an email address, hotline, mini-program, and suggestion box. It has also built a reporting mechanism to further improve its supervision system. TP-Link accepts reports from relevant parties, covering various violations including but not limited to breaches of business codes of conduct, job responsibility violations, non-compliant operations, human rights violations, information security breaches, and environmental incidents.

TP-Link will collect all reported clues and consolidate them for internal control team processing, with direct accountability to TP-Link's top leader. All reports will be responded to, and after verification of the case, an investigation report will be generated. Responsibility subjects found to have actual problems will be held accountable and disciplined according to TP-Link's regulations, with follow-up to improve effectiveness.

TP-Link follows the principle of "maintaining confidentiality for whistleblowers, rewarding reports, and protecting the legitimate rights and interests of whistleblowers". It has established detailed protection and management procedures in the *Business Code of Conduct* to strictly protect the personal information of whistleblowers, and prohibit retaliation against whistleblowers by reported entities.

As of the end of the reporting period, there were 0 complaints or reports of corruption or bribery received.



complaints and reports of corruption

0



TP-Link Complaint/Report Email: [TELLUS@tp-link.com](mailto:TELLUS@tp-link.com)



# 03

## Supply Chain Management

- › Governance
- › Policies
- › Management Control
- › Conflict Minerals Management



## Governance

TP-Link firmly believes that in today's rapidly changing world with increased social attention, implementing sustainable procurement is a necessary measure for the enterprise to fulfill social responsibilities, maintain brand image, and ensure long-term competitiveness.

To ensure the effective implementation of sustainable procurement, TP-Link has implemented a strategy of unified supply chain management, with the Group's Sustainability Committee coordinating with the procurement department to carry out the entire supply chain management work, achieving the integration and coordination of sustainable procurement in the supply chain, and ensuring that all procurement activities comply with TP-Link's sustainable procurement policies and standards

## Policies

TP-Link improved the *Sustainable Procurement Policy* and *Supplier Code of Conduct*, conveying the concept, principles, goals, and requirements of sustainability governance to TP-Link's suppliers, promoting sustainable procurement with the policy of "green procurement, responsible procurement", and building a sustainable supply chain system. At the same time, TP-Link commits to prioritizing suppliers who meet ethical and environmental standards in the procurement process to ensure sourcing raw materials from compliant and responsible channels.

## Management Control

### › Procurement personnel empowerment

TP-Link recognizes the key role of procurement personnel in sustainable procurement, therefore, TP-Link has provided targeted empowerment training for procurement personnel, covering mainly social responsibilities such as environment, labor, and business ethics, to ensure that procurement personnel fully understand the importance and impact of social responsibility on supply chain for sustainable procurement. [In 2024, 100% of procurement staff completed the sustainable procurement training.](#)

To further emphasize sustainable management of suppliers, TP-Link has incorporated annual management objectives for sustainable procurement into the routine assessment system of procurement personnel. This practice helps to ensure that procurement personnel can urge and supervise suppliers to fulfill their responsibilities in sustainable management, promoting the implementation of practical work.



Supplier Social Responsibility Training Materials



Supplier Social Responsibility Training

## ► Supplier risk management

TP-Link identifies and evaluates supply chain risks from multiple dimensions and takes corresponding measures to ensure the stable and orderly operation of the supply chain. Based on the risk identification and assessment of suppliers, TP-Link establishes and continuously improves the supply risk management mechanism, strives to eliminate or reduce risks by means of early warning and maintaining communication, and assists suppliers in formulating response strategies to ensure their business continuity.

Supplier risk identification and management content includes:

### Macro-environmental risks

■ TP-Link conducts research and analysis on the laws, regulations, and sustainable policies of the supplier's location and conveys the analysis results to the supplier, so as to prevent the supplier from stopping production and limiting production due to changes in laws, regulations, and policies, and consequently affecting the supply. TP-Link requires suppliers to actively search for alternatives to contaminated materials in accordance with TP-Link's environmental protection policies and relevant laws and regulations. Since 2006, TP-Link has required relevant suppliers to supply materials that meet RoHS and REACH requirements. In 2022, TP-Link started to promote the use of environmentally friendly ink by packaging material suppliers. By the end of 2023, 100% of TP-Link's packaging material suppliers were using environmentally friendly ink. [In 2024, the company began promoting packaging suppliers to use FSC-certified paper, paper made from 100% recycled materials, and 100% recyclable packaging solutions. By the end of the reporting period, among the color boxes used for its products, 23 materials adopted FSC-certified paper, 27 used paper from 100% recycled materials, and 1 material adopted 100% recyclable packaging solutions.](#)

### Ethical risks

■ TP-Link establishes a sound procurement process, implements bidding procurement for major engineering projects and key materials; before cooperating with new suppliers, the purchasing department conducts pre-cooperation Anti-Bribery and Anti-Corruption Due Diligence Questionnaire for integrity evaluation work, and signs Integrity Agreement to avoid violations of business ethics.

### Storage and transportation risks

■ TP-Link requires the suppliers to diversify their modes of transportation to cope with emergency supplies and ensure a stable supply. TP-Link carries out safety assessments on logistics suppliers to ensure their transportation safety.

### Operational risks

■ TP-Link evaluates the operational status of its suppliers (including legal and financial aspects) and reviews the sustainable governance of suppliers, including management systems, labor, safety and occupational health, environment, restricted substances, conflict minerals, etc.



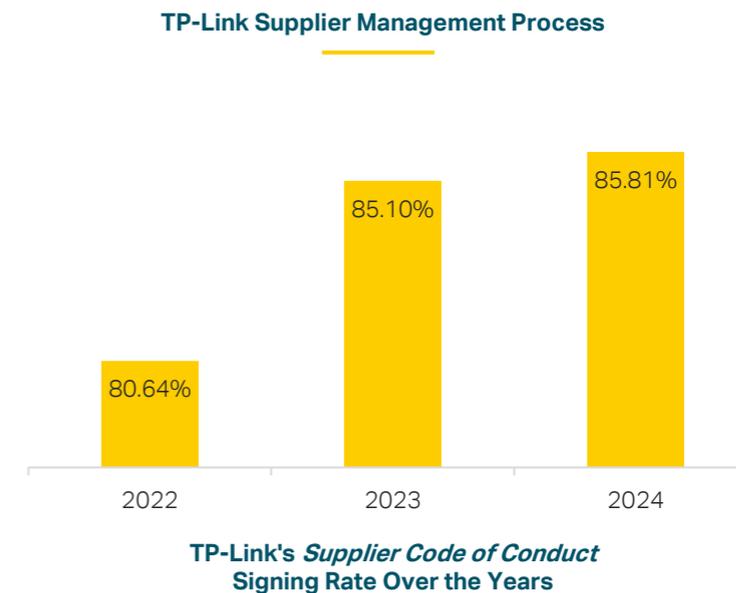
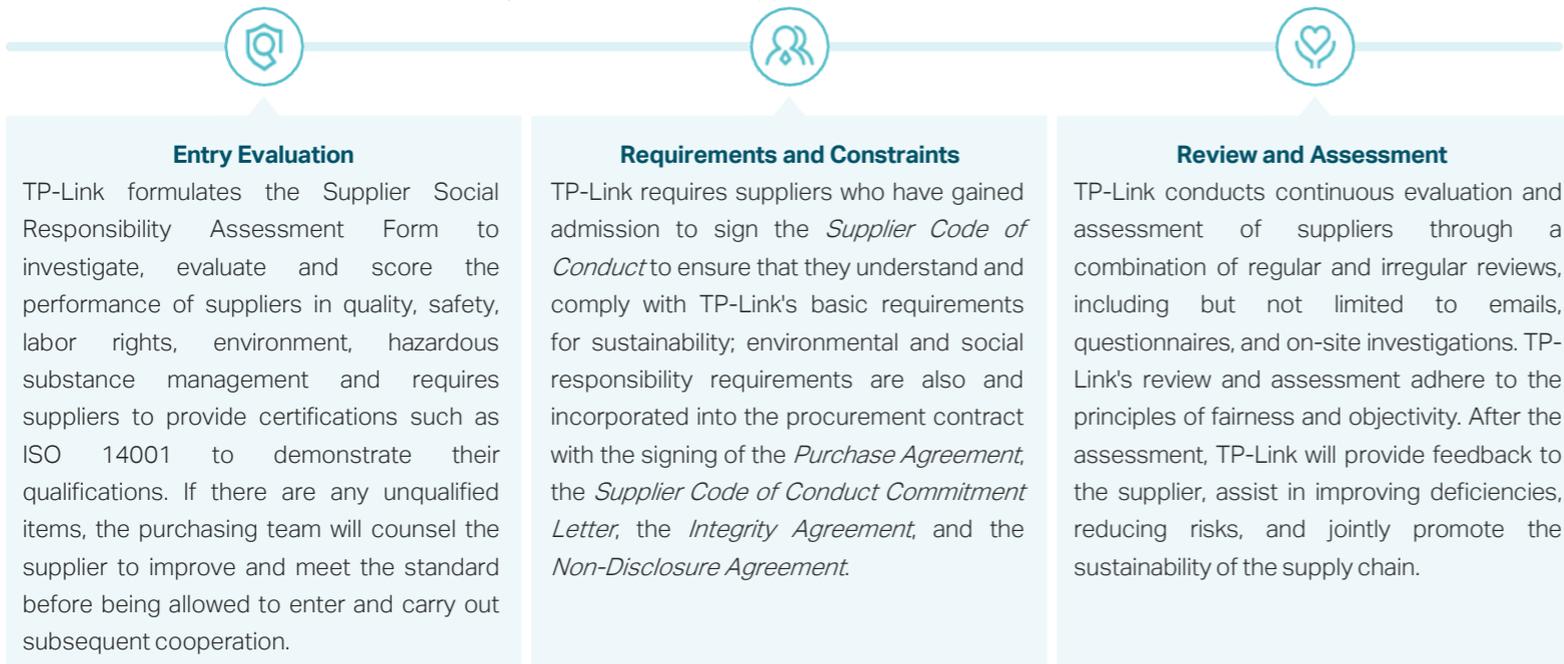
## Supplier admission and review

TP-Link has standardized the management requirements for suppliers and established corresponding management processes through institutionalized documents such as the *Supplier Management Standard* and the *Supplier Social Responsibility Management Procedure*.

Based on a comprehensive assessment of suppliers, TP-Link selects qualified suppliers and continuously assesses and evaluates them with the same standards to ensure the stability and sustainability of the supply chain.

In 2024, 85.81% of TP-Link’s suppliers completed the social responsibility questionnaire and signed the *Supplier Code of Conduct*, while 84.30% of target suppliers<sup>①</sup> passed on-site social responsibility audits. Additionally, 100% of new suppliers are screened against social responsibility standards and sign the social responsibility framework agreement.

"Quality, technology, price, and delivery" are the basic contents of supplier admission and review. Meanwhile, TP-Link incorporates sustainable factors such as "labor, environment, and society" into the criteria for supplier admission and review.



① Target Suppliers: Refer to new and key suppliers; the percentage is calculated as (the number of new and key suppliers that underwent on-site social responsibility audits in 2024) / (the total number of new and key suppliers in 2024).

### TP-Link Suppliers' CSR Audit Guidelines

In 2024, TP-Link designated acts violating human rights and labor laws—such as child labor and forced labor—as red-line requirements for supplier cooperation. During supplier audits, any red-line violations identified will adversely affect their cooperation with TP-Link.

With this initiative, TP-Link sends a clear signal to the supply chain: no violations of basic human rights and labor ethics will be tolerated. Long-term stable cooperation with TP-Link can only be established and maintained on the premise of complying with strict social responsibility standards.

#### TP-Link Supplier Management CSR Red-Line Requirements

- Strictly prohibit the use of child labor
- Prohibit forced labor and the use of prison labor
- Prohibit wage payment below the minimum wage standard and insufficient wage payment
- Failure to comply with laws and regulations in providing leave and contributing to social insurance
- Prohibit major environmental pollution incidents and risks
- Prohibit major health and safety incidents and risks
- Eliminate any social negative incidents

### ► Supplier training and communication

TP-Link and suppliers are equal and mutually beneficial partners. Therefore, TP-Link maintains continuous communication with suppliers with an open and trustworthy attitude. Through training and communication, TP-Link conveys expectations for suppliers in terms of economic and social responsibility, hoping to form a more consistent view on environmental, social, and governance aspects, and jointly build a sustainable green supply chain.

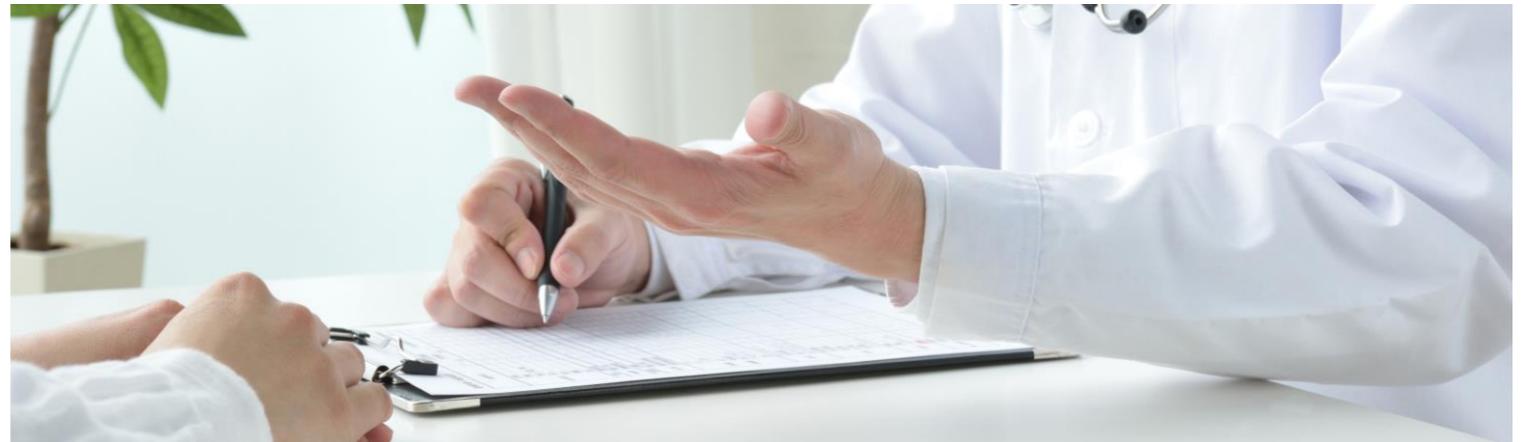
In communication, TP-Link provide daily feedback on cooperation issues and improvement suggestions to ensure smooth and optimized collaboration. In training, we conduct irregular activities covering quality, technology, business ethics, and sustainable development governance methods and strategies.

In 2024, TP-Link held 428 supplier training sessions—129 more than in 2023, representing a 30.14% growth.



Supplier Training Sessions in 2024

**428**



# Conflict Minerals Management

In the past few years, TP-Link has been working hard to improve its level of conflict minerals management and actively respond to conflict minerals-related regulations and customer requirements. To this end, TP-Link has coordinated relevant departments to formulate and improve the Conflict Minerals Policy, clarifying a [zero-tolerance](#) stance towards conflict minerals, and stipulating the cooperation principles and division of responsibilities with suppliers, emphasizing the importance of both parties complying with relevant laws, regulations, and international standards to maintain the sustainability and transparency of the supply chain.

To effectively manage and control the procurement and use of conflict minerals, TP-Link has specially formulated the *Conflict Minerals Management Procedure*. This procedure clearly establishes the setting of due diligence schemes for conflict minerals to ensure that raw materials are only sourced from suppliers who comply with regulatory requirements and ethical standards.

As of the end of 2024, TP-Link had 410 suppliers using tantalum (Ta), tin (Sn), tungsten (W), gold (Au), and cobalt (Co), having collected 369 CMRT (Conflict Minerals Reporting Template) forms and 360 EMRT (Extended Minerals Reporting Template) forms. In supply chain investigations, a total of 461 supplier-related smelters and refiners were identified, of which 436 have been certified under RMAP (Responsible Minerals Assurance Process).

According to this procedure, TP-Link's purchasing department specifies the scope of supplier investigations annually. The purchasing department sends CMRT and EMRT survey questionnaires to the cooperating suppliers with conflict mineral risks and rigorously reviews the collected investigation results.

Smelters and Refiners Certification Status	Conflict minerals					
	Tantalum	Tin	Tungsten	Gold	Cobalt	Total
Certified	38	99	37	184	78	436
Uncertified	2	2	2	1	18	25
Total	40	101	39	185	96	461



Conflict minerals response rate

**90%**



RMAP certified downstream suppliers

**436**

# 04

## Products and Services

- › Quality Management
- › Protection of Customer Rights and Interests

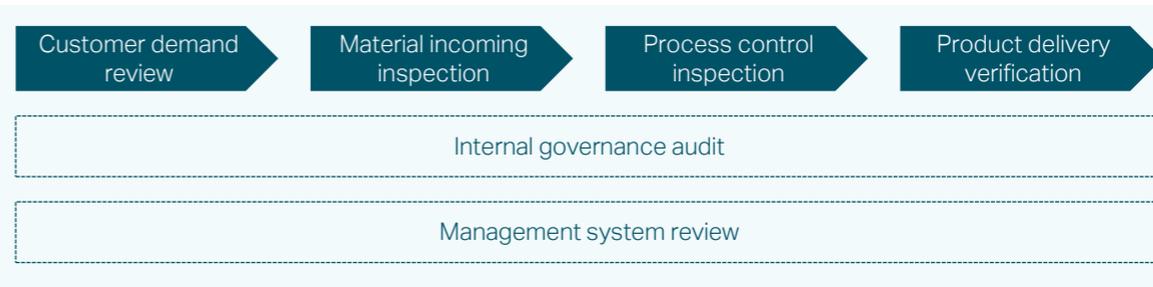


# Quality Management

Quality is the lifeline of TP-Link's sustainability. Based on TP-Link's quality concept of "ensuring more than just user satisfaction", Guangming Branch takes "follows up on the cutting-edge technology and creates an excellent team, creates customer value, and contributes to society" as the quality guideline, closely following the trend of world technological development, creating products with high-quality design, manufacturing products with high-quality materials, shaping products with high-quality service, and dedicating to continuous quality improvement with high-quality talents.

Following the ISO 9001 international standard, Guangming Branch has constructed a quality system that encompasses all business areas and operational processes. At the same time, Guangming Branch organically integrates the concept and strategy of sustainability into the quality system construction, promulgates and implements the *Quality and Environment Management Manual* to coordinate quality management and sustainable construction, and to achieve the coordinated promotion of continuous improvement of work, product, and service quality and sustainability goals.

Guangming Branch has been unremittingly conducting comprehensive, thorough, and precise research and analysis on aspects including customer needs, market trends and policy environment year after year, combining the results of technological progress and management improvement to continuously optimize and enhance the quality targets of Guangming Branch. We have incorporated 11 indicators such as "customer complaints resulting from product safety issues" into the annual quality target system, and through systematic and hierarchical decomposition and refinement, we have implemented product quality responsibilities in every department, position, and employee of the Company. During the operation of quality system, we have checked the quality link by link through customer demand review, material incoming inspection, process control & patrol inspection, product delivery inspection, internal quality audit, management system review and others. From micro-operation details to overall mechanism, the Company has stepped onto a new stage for quality gradually.



# Protection of Customer Rights and Interests

TP-Link consciously complies with legal requirements, takes "ensuring customer satisfaction rather than just customer satisfaction" as the action guide, and integrates the maintenance of various legal rights and interests of customers into corporate governance, cultural construction, and business development.

In accordance with the guidance provided in the *Quality and Environmental Management Manual*, TP-Link has developed a series of management systems, including the *Customer Satisfaction Management Procedure*, *Quantification Method for Customer Satisfaction*, and *Customer Complaint Handling Guidelines*. Through standardized processes, methods, and tools, TP-Link has established a comprehensive customer service system. These systems are followed and implemented by Lianzhou International.

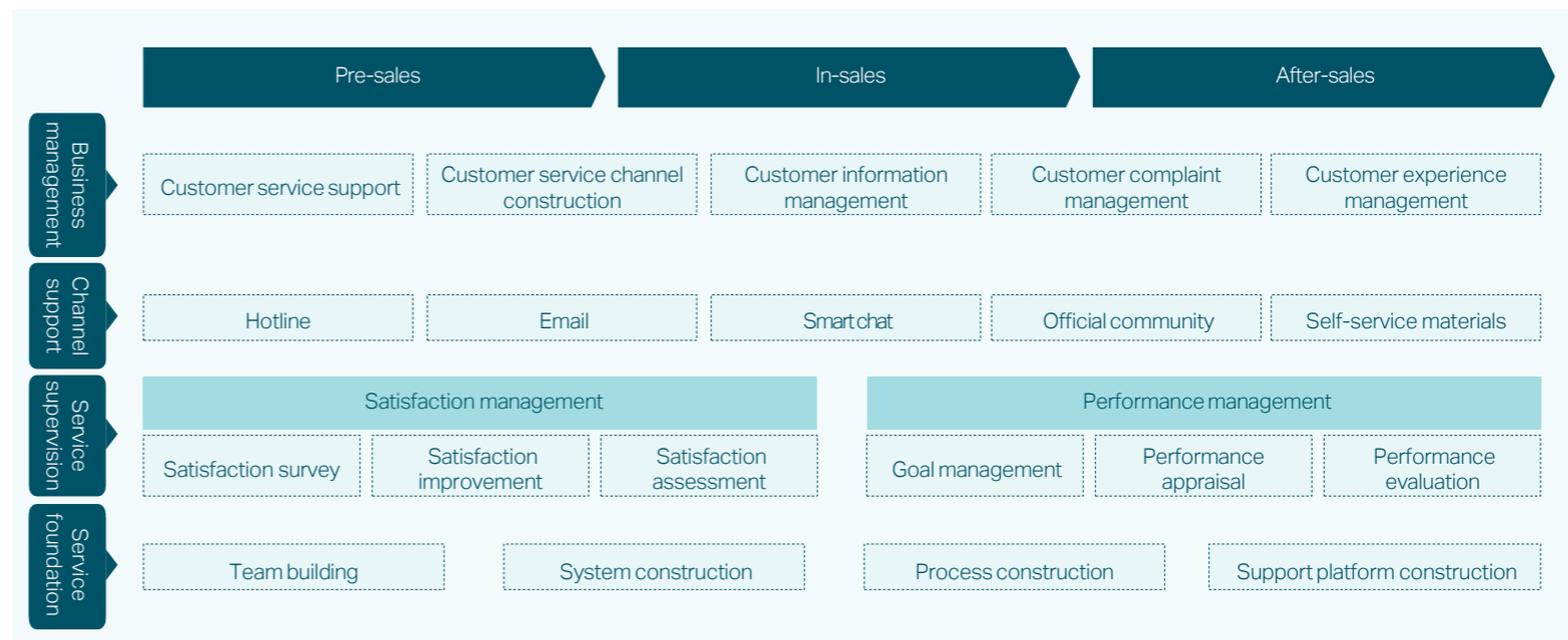
TP-Link always adheres to the concept of high quality and safety, striving to uphold the safety and health of our customers. Every product undergoes rigorous testing and evaluation procedures before being released for sale. [These products are certified according to relevant standards of the countries in which they are sold, including safety regulations and EMC certifications such as CE, FCC, UL, etc.](#)

① TP-Link official customer support website: <https://www.tp-link.com/en/support/contact-technical-support/>

TP-Link has established diversified communication channels on its official website, including hotline numbers, email, and online chat, aiming to ensure smooth communication for pre-sales inquiries, during transactions, and after-sales services. In the year 2023, we received a total of 24 customer complaints, all of which were promptly resolved following established procedures.

In terms of customer satisfaction, [Lianzhou International's overall satisfaction rate reached 96.45% in 2024](#), with 96.55% in H1 and 96.35% in H2, meeting the predefined target ( $\geq 95\%$ ).

## TP-Link customer service system



# 05

## Employees

- › Governance
- › Policies
- › Management Control



# Governance

TP-Link is committed to establishing a sound employee management system. Every year, the Sustainability Committee formulates strategies and annual work objectives, which are then planned and implemented by the Human Resource Department to improve the working environment for employees.

# Policies

TP-Link has established and implemented several core policies covering various aspects such as *Human Resources Management Policy*, *Human Rights Policy*, and *Health and Safety Policy*. In its daily operations, Guangming Branch strictly adheres to and implements the management policies and systems formulated by TP-Link Group, aiming to create a safe, fair, and inclusive working environment with comprehensive compensation and benefits packages, as well as opportunities for career advancement for employees.

# Management Control

## ➤ Recruitment

In the recruitment process, Guangming Branch always adheres to the principles of openness, transparency, and merit-based recruitment of TP-Link, especially emphasizing the comprehensive assessment of candidates' qualities. To ensure fairness and broad participation of candidates, we officially announce all job information through TP-Link's official website, WeChat public account (Lianzhou International Online Assistant), and third-party recruitment websites. Ensure that all job seekers have equal access to information and opportunities for application.



### Generous compensation package

Industry-leading salaries, comprehensive five social insurances and one housing fund, high annual bonuses, ensuring that every employee receives thoughtful protection.



### Abundant salary adjustment opportunities

More than two salary adjustment opportunities per year, focusing on employees' long-term career development.



### Impressive incentive bonuses

A variety of innovative rewards to encourage employees to strive for excellence and break through themselves.

## ➤ Rights and Equality

### Rights and interests protection

Guangming Branch always adheres to the regulations of the *Labor Law* and the *Labor Contract Law*, and is committed to providing full legal rights and interests protection for all employees on the basis of equality and voluntariness. We strictly follow the signing process of the labor contract to ensure the compliance and legality of the contract content. All employees participate in the social insurance system and enjoy comprehensive social security benefits. We have established a sound holiday management system to effectively respect for human rights to take leave and rest. In addition, we provide employees with corresponding personal protective equipment (PPE) based on their job responsibilities and characteristics to ensure their physical health at work.

Guangming Branch adheres to the principle of distribution according to work and has established a sound salary and welfare system. [Provide employees with a competitive total compensation system and a welfare system that exceeds legal requirements, including defined benefit plan obligations and other welfare plans.](#) At the same time, we provide employees with a comprehensive five social insurances and one housing fund, as well as high annual bonuses, to ensure that every employee receives full protection. In addition, we also care about the living needs and well-being of employees, providing them with holiday benefits, Employee Dormitory, birthday benefits, high temperature subsidies, work allowances, and allocating special budgets for team building every year.

### Human rights and equality

Guangming Branch strictly complies with international recognized guidelines such as the *United Nations Human Rights Protection Covenants* and the *International Labor Organization Covenants*, and has implemented more than 20 systems and norms such as *TP-Link's Human Rights Management Policy* and *Labor Standards Code of Conduct*. These systems and norms cover key risk points such as child labor, forced labor, diversity and inclusion, anti-discrimination and anti-harassment, aiming to respect, protect and promote equal human rights.

In response to these key risk points, Guangming Branch regularly conducts publicity and training on human rights protection internally, aiming to enhance employees' awareness and ability to protect their own rights and interests. At the same time, we regularly conduct human rights risk assessments and establish corresponding response mechanisms and control procedures to prevent potential risk events.

In order to comprehensively assess and manage human rights risks, we invite external organizations to audit our internal human rights management work every year to ensure the effectiveness of internal controls. Furthermore, we closely cooperate with the TP-Link Group's procurement department to jointly build a sustainable procurement, identify and assess external potential human rights risks. [In 2024, our human rights risk audit covered 100% of all work areas and departments in Guangming Branch.](#)



Employee social insurance coverage rate

**100%**



HR compliance management training rate

**100%**



Human rights violations incidents

**0** cases



Employee human rights training rate

**100%**



Human Rights Protection Training

### **Prohibition of Child Labor**

In our recruitment process, we utilize personal identity verification devices to authenticate the age and identity card authenticity of applicants, thereby preventing incidents of child labor and hiring underage employees. Additionally, we have established emergency remediation procedures. In the event of discovering instances of employing child labor or underage workers, we will promptly initiate the remediation process to ensure the maximum protection of the rights and safety of the individuals involved.

### **Anti-Discrimination and Anti-Harassment**

To ensure the implementation of this stance, we have adopted source control measures. We provided in-depth professional training on human rights awareness to HR and management teams, aiming to enable them to strictly comply with and implement the company's internal systems, while setting an example through their daily work and establishing a positive model. These trainings have achieved certain results: the proportion of female employees and elderly employees in 2024 both increased compared with 2023. In addition, we also provided necessary awareness training for general employees to enhance their awareness of safeguarding their rights and jointly foster a safe, respectful, and harmonious work environment. Through these measures, we expect every employee to fully realize their potential in a fair and equal environment.

### **Diversity and Inclusion Culture**

We are committed to building a diverse and inclusive work environment and atmosphere to promote organizational innovation and outstanding performance. We adhere to the principles of distribution according to work, equality for all, and equal pay for equal work, with special attention to the rights and interests of employees who are working parents, pregnant, disabled, and other minority groups, ensuring that every employee feels respected and understood at work. For female employees, we particularly focus on protecting their legitimate rights during special periods such as menstruation, pregnancy, and lactation. To this end, we have specifically set up mother-and-baby rooms and provided other family-friendly support measures. We offer lactation leave to lactating employees in compliance with relevant regulations. This initiative aims to help employees better balance work and family life, ensure they receive adequate support and care at work, and thereby create a more humanized and caring work environment.

Through the above measures, we resolutely eliminate the occurrence of child labor and forced labor both internally and externally, and firmly prohibit any form of discrimination and harassment. We effectively safeguard the legitimate rights and interests of employees in various aspects such as inclusiveness and equality, openness and diversity, job selection and employment, association and assembly, religion and belief, etc., to ensure the compliant operation of Guangming Branch.

During the reporting period, Guangming Branch had no violations involving human rights abuses. The company did not employ child labor or minors under the legal working age, and achieved 100% coverage of human rights training and management for all employees.

### **Prohibition of Forced Labor**

The company has a clear system for the prohibition of forced labor to prevent the occurrence of forced labor incidents in the management process. We have established handling procedures, and in the event of a forced labor incident, we will immediately activate management procedures to ensure that employees' rights and interests are not violated.

### **2024 Employee data of Guangming Branch**

Category		Number	Proportion
Total Employees		5,372	100%
Gender	Male	2,294	42.70%
	Female	3,078	57.30%
Age	< 30 years old	2,803	52.18%
	30-50 years old	2,547	47.41%
	≥ 50 years old	22	0.41%

## ► Empowerment, Assessment and Development

### Employee empowerment

Guangming Branch has always regarded the growth and development of employees as a top priority. To achieve this goal, we have carefully designed a set of personalized training courses aimed at enhancing employees' knowledge and skills, promoting career development, and realizing personal value. Whether it is campus recruitment or social recruitment, regardless of the nature of the position, we will tailor training programs to meet the specific needs and abilities of each employee, and to help them grow better.

Our goal is to establish a learning organization, by integrating a teaching system of "general knowledge + expertise + management", to help employees comprehensively improve their abilities. At the same time, we combine flexible and diverse training methods and mechanisms to continuously enrich employees' knowledge, improve skills, broaden horizons.

In order to better serve our employees, we have introduced an internal online learning system called TP-Link Learning, providing convenient learning resources for each employee and fostering an environment for "lifelong learning". We believe that through this training system, our employees can continuously enhance their abilities.

In 2024, Guangming Branch invested a total of 207,000 yuan in training, conducting 831 sessions attended by 67,186 participants. The total training hours amounted to 203,833.5 hours, averaging 37.94 hours per participant. Notably, employee skills training achieved 100% coverage.

Training methods	Responsible or personnel	Main content	Objectives and effects
Internal training	Internal experts or experienced employees	Products, technologies, processes, standards, etc.	To enhance employees' deep understanding of the Company's core business and integration into the Company culture
External training	External professional organizations or individuals	Industry dynamics, trends, standards, etc.	To gain broader industry knowledge to cope with market changes and industry challenges
Online training	Online learning platform or resources provided by the Company	General knowledge, skills, methods, etc.	Flexible learning methods to meet individual learning needs of employees
Practical training	Actual work or projects arranged by the Company	Solving problems, facing challenges, improving efficiency, etc.	To apply theoretical knowledge to practical work through participating in business activities
Continuing education	Academic courses and refresher programs provided by the Company	Deep subject knowledge and leadership development	To support employees to continuously deepen their professional knowledge and enhance their overall quality

#### Management training



#### Product training



#### New employee training



#### Employee skills training



## ► Assessment, development and incentives

Guangming Branch actively leverages TP-Link platform resources to carefully construct a diversified development path for employees. By providing a comprehensive business perspective, employees can fully grasp various aspects of product development, production, sales, etc. through rotation experiences, thereby deepening their overall understanding of the business. Based on TP-Link's global business layout, we provide employees with a broad international development stage to help them fully showcase their personal talents. The Company is always committed to building a comprehensive platform that integrates knowledge and skills enhancement, career development, and personal value realization. [We have specially designed a dual channel career development mechanism of "professional + management" to create more diverse and promising career development opportunities and paths for employees.](#)

Guangming Branch has formulated the *Performance Evaluation System* to standardize the employee performance evaluation process. This system requires the Company to regularly assess the performance of employees and set corresponding position performance evaluation forms based on the responsibilities of each department and position. This is aimed at encouraging managers at all levels to discover, cultivate, and promote employees with outstanding abilities. The Company attaches great importance to the organic integration of employees' personal value pursuits and TP-Link's strategic goals, committed to stimulating the potential for employees and the Company to grow and develop rapidly together. To motivate employees to make continuous progress, we provide opportunities for salary adjustments and focus on employees' long-term career development plans. In addition, the Company has established generous incentive bonuses and diverse innovative rewards to encourage employees to pursue excellence and constantly challenge themselves. By 2024, Guangming Branch has achieved the goal of conducting regular performance and career development assessments for all employees, ensuring all-round support for employee growth. We will continue to strive to provide more career development opportunities for employees, assisting them in achieving personal growth and career goals.

In 2024, Guangming Branch continued to deepen mutual learning and exchange among employees, improve the skill level and career development of all employees. To achieve this goal, the Company carefully planned and implemented internal skills courses, while encouraging employees to take on the role of lecturer voluntarily and share their professional knowledge and rich experience. In order to fully stimulate employees' enthusiasm and spirit of contribution, the Company has specially launched a lecturer incentive plan, providing corresponding bonus incentives to employees who serve as lecturers. [In 2024, the company's total investment in rewards for employees serving as trainers reached 82,100 yuan, representing a year-on-year increase of 74.54% compared with 2023. This fully reflects the company's emphasis on and support for employees' personal growth and team development.](#)



Employee performance and career development assessment rate in 2024

**100%**



The incentives for internal trainers in 2024 increased compared with 2023 by

**74.54%**



Job Skills Competition



Overall Improvement Recognition

## ► Health and Safety

Occupational health and safety is a core element for the sustainability of Guangming Branch. As the TP-Link Group's final products manufacturing base, the Company is well aware of the importance of maintaining occupational health and safety in ensuring the stability of production processes, improving work efficiency, and reducing the legal risks of the enterprise.

In terms of environmental, health, and safety (EHS) management and emergency system compliance, we have established a complete licensing system, including the *Occupational Disease Status Assessment Report*, and *Emergency Response Plan for Production Safety Accidents*, etc. At the same time, we strictly follow regulatory requirements to regularly conduct assessments of occupational hazards, safety emergency drills, occupational disease examinations, and annual inspections of special equipment, among other key activities. Furthermore, based on relevant regulatory guidelines, we have constructed a comprehensive and efficient daily risk management system and ensure its strict implementation.

### Policy and Management System

Guangming Branch upholds the "safety responsibility first" bottom line and "life first, safety first" principle. Guided by these, it continuously optimizes its safety management system, prioritizes boosting all employees' safety awareness, and drives safety management toward institutionalization, systematization, and standardization. Strictly following ISO 45001, it fully reviews and enhances its occupational health and safety management system. [By the end of the reporting period, it had successfully passed the ISO 45001 surveillance audit and maintained the Three-Level Work Safety Standardization Enterprise certification, solidifying its work safety foundation.](#)

### Occupational Disease Prevention

We regularly assess workplace occupational disease hazards and occupational health surveillance, and take targeted measures for identified hazards to reduce employees' occupational disease risks. For employees in hazard-related positions, we sign a *Notice of Occupational Disease Hazards* with them, post on-site hazard notification cards to boost their hazard awareness, and arrange pre-employment, on-the-job, and post-employment health checks per the *Technical Specifications for Occupational Health Surveillance*. We monitor employees' health to promptly identify and address potential occupational disease issues, transfer those with occupational contraindications, and fully safeguard their occupational health. [By the end of 2024, Guangming Branch had completed occupational disease checks for all employees in high-risk positions, with no cases detected.](#)

Furthermore, to ensure the well-being of our employees and prevent them from experiencing repetitive stress injuries while on the job, we have made a dedicated effort to streamline our production process and incorporate cutting-edge automated machinery. By implementing these devices, we are able to alleviate some of the monotonous manual labor, work in tandem with our employees to reduce physical strain, minimize the likelihood of injuries, and enhance overall work productivity and quality.

#### Case 1 Anti-Pinch Improvement for JUKI SMT Placement Machine (MTS)



In 2024, Guangming Branch conducted safety modification on MTS (Matrix Tray Server). The mounted buttons were changed to normally closed status, effectively eliminating the potential hazard where employees' fingers might be scratched or crushed when pressing the buttons—due to their location in the gap between the SMT placement machine and MTS.

#### Case 2 Safety Experience Optimization by Installing Baffles at Joints



In 2024, during the identification of occupational health and safety risk factors for employees, Guangming Branch found that the production line transfer table posed a risk of employees being accidentally touched and caught in gaps. To mitigate this risk, baffles were added to prevent potential hazards.

#### Case 3 Safety Door Lock Install & Op Experience Optimization



In 2024, to prevent electric shock risks from employees arbitrarily opening aging cabinet doors to touch or take bulbs, Guangming Branch installed safety door locks on automatic aging bulb cabinets, thus eliminating such risks from accidental contact.

## Employee Safety Management

### Workplace Safety

We have various workplace safety inspection systems and conduct regular inspections to identify/assess hazards, detect potential safety risks promptly, develop response measures, and implement improvements. Additionally, we document issues in the *Issue Tracking Table* to ensure effective resolution. Inspections cover daily, monthly, quarterly, annual, comprehensive, rainy season, holiday, and special checks (including electrical, fire protection, chemicals, hazardous positions, special equipment, and special operations personnel). In 2024, Guangming Branch's safety risk assessment and investigation achieved 100% coverage of all its workplaces.

### Employee Safety Awareness

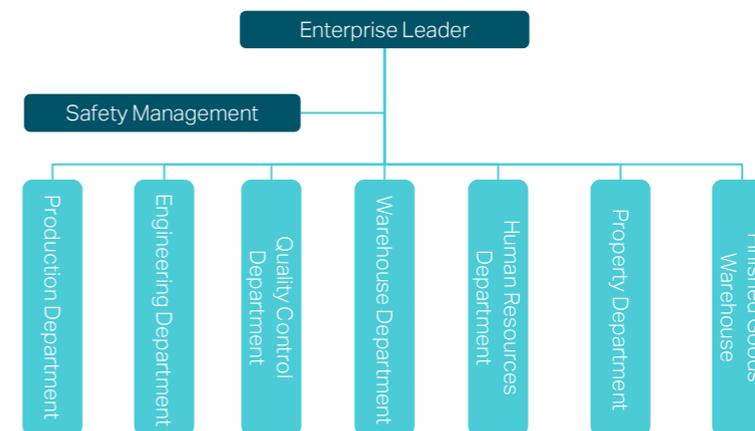
We regularly hold safety training and education to boost employees' safety awareness and skills (including emergency response and fire safety knowledge). For safe operation, all employees must be certified to work: general employees require a Level 3 Safety Training Card, while those operating special equipment or needing specific skills must hold relevant certifications. We also require employees to wear proper PPE at work, with regular inspection and replacement of PPE to ensure effectiveness and safety. Any PPE non-compliance is corrected promptly to safeguard employees' safety and health.

In 2024, Guangming Branch invested 2.12 million yuan in work safety, with no work-related fatalities. It provided safety training to 26,260 on-duty personnel, with an average of 29 training hours per person and 100% safety training coverage for employees.

### Safety Communication

At the work site, we've posted the safety manager's contact information to let employees report safety issues/suggestions anytime and get timely feedback and resolution. We've also set up a Safety Committee: grassroots safety staff collect daily employee safety feedback, report to the top committee for decision-making, and resolve raised issues. We value all safety matters, hold regular safety communication meetings to share management updates with employees, and take targeted measures to fix problems, ensuring a safe workplace — these enhance employees' safety awareness and participation, and strengthen safety management.

In 2024, the percentage of Health and Safety Committee members among all employees at Guangming Branch was 7.2%.



Safety Committee Structure



Wearing of PPE



Safety Training and Drills

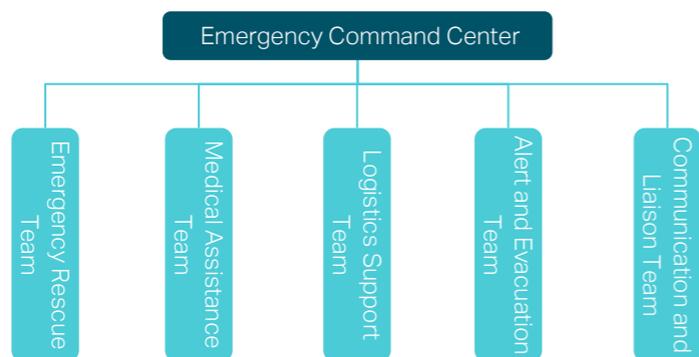


## Safety emergency management

Guangming Branch has established the Emergency Command Center composed of factory-level, department-level, and important members to establish emergency rescue teams, medical assistance teams, logistics support teams, alert and evacuation teams, and communication and liaison teams in terms of safety emergency management, with the emergency command center responsible for daily organizational operations.

The Company's emergency response plans include Emergency Response Plan for Production Safety Accidents, covering a variety of production safety accidents, including object impact, vehicle injury, mechanical injury, electric shock, drowning, scalding, fire, fall from height, container explosion, other explosions, lifting injury, poisoning and suffocation, and other injuries. These response plans are applicable to workshop-level, company-level, and society-level emergency responses, and are subordinate to higher-level plans when necessary, forming an integral part of them.

To ensure the effectiveness of emergency response, we organize various emergency drills every six months, including emergency evacuation and fire drills, chemical leakage drills, environmental emergency drills, special equipment emergency drills, electric shock rescue emergency drills, etc. These drills not only help enhance employees' emergency awareness and operational skills, but also form records through summarization and evaluation, providing strong support for future plan updates and improvements.



**Safety Emergency Response Structure**

## Emergency Response Emergency Response Mechanism

Response level	Response conditions	Response measures
Workshop level	The accident hazards and impacts are limited to a single area or a single position, and do not require the Company to allocate resources.	Initiate on-site disposal plan, organize emergency disposal by workshop, and report to the Company, and be prepared for expanding response.
Company level	The accident hazards and impacts exceed a single area, but are still limited to the Company's scope, and can be handled by mobilizing internal resources.	Initiate the Company's comprehensive emergency response plan, immediately organize emergency disposal, and report to regulatory authorities as appropriate, while the Company prepares for expanding emergency response.
Society level	Accidents with hazards and impacts beyond the Company's scope, requiring the coordination of social resources by the local government for disposal.	Initiate the Company's comprehensive emergency response plan, carry out preliminary disposal, report to the local government, and request external social emergency response (rescue). After the local intervention, obey unified command.



Special Equipment Emergency Drill



Fire Safety Emergency Drill



Medical First Aid Emergency Drill

## Employee communication

Guangming Branch prioritizes friendly, adequate employee communication as a key operational task, using multiple channels and mechanisms for this. Guangming Branch has an anonymous suggestion box for employees to submit suggestions, opinions or concerns anytime, plus a staff representative system—elected reps hold regular meetings to discuss company development, policies and employee welfare. These platforms let employees voice views and the company grasp their needs timely.

In 2024, Guangming Branch’s formally elected staff reps covered 0.59% of total employees, who dialogue equally with the company on behalf of all staff. We also signed collective agreements with all employees to ensure their voices are heard and valued.

The branch regularly distributes satisfaction questionnaires to collect employee feedback. Our 2024 survey showed 92% overall employee satisfaction and 94% satisfaction with direct supervisors — reflecting employee recognition, trust and smooth management-staff communication. For unsatisfactory items, Guangming Branch commits to targeted optimization to boost performance and improve the workplace.

In 2024, Guangming Branch resolved 100% of employee complaints and feedback. Guangming Branch will remain open, listen to employees, fix shortcomings and pursue mutual growth of employees and the company.

### Case

After full communication and negotiation with department representatives in 2024, the company decided to adjust employee birthday benefits. Based on their input, it increased the birthday benefit standard from the original RMB 22/person to RMB 50/person. This adjustment is aimed at better meeting employees' needs and expectations, improving their benefits, and further enhancing trust and cooperation between the company and employees.



overall satisfaction with the company

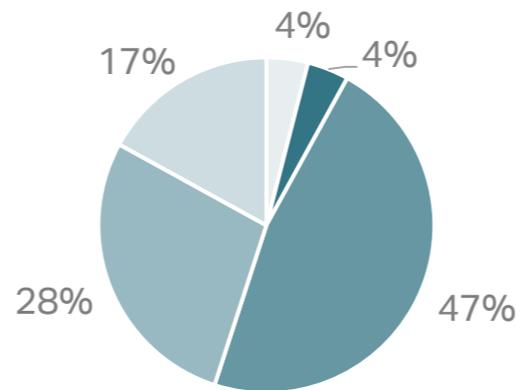
92%



Direct supervisor satisfaction

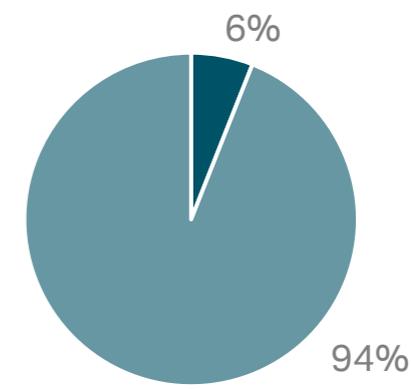
94%

Satisfaction with the overall company



- Dissatisfied
- Somewhat Dissatisfied
- Basically Satisfied
- Somewhat Satisfied
- Very Satisfied

Satisfaction with direct supervisors



- Dissatisfied
- Satisfied

## Employee care

Employee care is one of the important tasks in our company's operation. Every New Year's Day, we hold an annual year-end party, inviting workshop team leaders and employees to participate. This is a reunion opportunity where we commend outstanding employees for their annual performance and arrange various programs and lucky draw sessions to enhance communication and emotions among employees.

In order to help employees relieve psychological anxiety, alleviate mental stress, and protect their physical and mental health, we organize 1-2 employee outings every year to help them relax and enhance team cohesion. We regularly organize various cultural and sports activities, such as carnivals, badminton competitions, and King of Glory championship, allowing employees to relax and strengthen relationships between teams in their spare time, thus improving work enthusiasm and happiness.

## Violation management

In order to ensure the effective implementation and protection of employees' rights, Guangming Branch has established targeted reporting channels for employees. Not only has it set up public email addresses and internal employee suggestion boxes on the Company's official website, but it has also established a public WeChat account (Lianzhou International Online Assistant) to collect feedback from employees, so that employees and external stakeholders can easily lodge complaints and reports. The establishment of these channels aims to provide employees with diversified choices, enabling them to express concerns and discover violations in ways that suit their own situations.

At the same time, the Company has established a remediation and punishment procedure for violations to address all violations. The Company promises to conduct comprehensive and immediate investigations into every violation report, and to take necessary preventive, remedial, and punitive measures based on the investigation results. It also promises to protect the rights of whistleblowers, prohibit retaliation, emphasize privacy protection, and ensure that complainants' information is not disclosed.



Lianzhou Talent Show



Fun Sports Meeting



Annual Recognition Ceremony



Carnival



Honor of Kings Tournament



Improvement Recognition Ceremony



联洲深圳工厂小管家

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# 06

## Green Development

- › Climate Change Response
- › Resources Management
- › Environmental Management
- › Green Operation



# Climate Change Response

Addressing climate change is key for society and businesses. TP-Link recognizes reducing carbon emissions and promoting renewable energy is crucial, and actively responds to the Paris Agreement and related climate initiatives. In March 2025, SBTi (Science Based Targets initiative) approved our Scientific Carbon Targets (SCT). With 2023 as the base year, TP-Link commits to cutting Scope 1&2 greenhouse gas emissions by 42% and Scope 3 by 25% by 2030; 90% for Scope 1&2 by 2040, 90% for Scope 3 by 2050, and net-zero by 2050.

TP-Link uses ISSB (International Sustainability Standards Board) guidelines to strengthen climate-related ESG work, build a management system, identify climate risks/opportunities, develop measures, and integrate them into internal control — ensuring effective response to climate challenges.

## ► Strategy

After realizing the impact of global climate change on TP-Link's business continuity and long-term development, TP-Link recognizes the urgency of reducing carbon emissions and addressing climate change risks.

TP-Link has organized key functional departments to conduct preliminary interviews and discussions on climate change risks and opportunities, identified a related list, and after considering its internal/external factors, business traits, long-term goals, location and industry impacts, selected RCP 8.5 (Representative Concentration Pathway 8.5) for  $\geq 4^{\circ}\text{C}$  scenarios and a customized physical climate scenario for  $\leq 1.5^{\circ}\text{C}$  scenarios.

Through scenario analysis of these climate scenarios, TP-Link has sorted out and formulated corresponding response strategies for the list of climate change risks and opportunities. These contents will gradually be incorporated into TP-Link's carbon reduction path, strategic development planning, and internal control management system in the future, to ensure that TP-Link can adapt to the challenges of climate change, safeguard business continuity and sustainability.

## ► Governance

TP-Link has incorporated climate change-related issues into its sustainability focus topics and management framework.

Management framework	Responsible department	Responsibilities
Top management	Board of directors	<ul style="list-style-type: none"> <li>Functioned as the governance level.</li> <li>Be responsible for guiding and supervising the Company's climate change-related strategies, policies, and performance goals.</li> <li>Be responsible for monitoring and supervising the, ensuring that the Company's actions on climate change are fully supervised and transparent.</li> <li>Promote sustainability, and enhance transparency and accountability in corporate governance.</li> </ul>
Sustainability committee	Heads of main functional departments	<ul style="list-style-type: none"> <li>Develop strategies, policies, goals, and roadmaps for climate change development, make decisions on key issues and major problems related.</li> <li>Be responsible for assessing climate risks and opportunities, developing strategies, policies, and goals for climate change in the company, coordinating the planning of climate change management work, and reporting to the top management regularly.</li> </ul>
Executive sustainability team	President's office and management system team	<ul style="list-style-type: none"> <li>Be responsible for implementing the strategies, policies, and goals for climate change development, developing specific implementation plans, supervising, evaluating, and promoting their progress, ensuring that the implementation plans are consistent with the Company's sustainability goals.</li> <li>Be responsible for implementing the climate change management work plan and action plan, ensuring active promotion of climate change-related work within their respective business areas.</li> <li>Collaborate with other departments to coordinate the implementation of climate change management work, regularly report on the progress of work to superior departments.</li> </ul>

## ► Analysis of climate change risk impacts and response strategies

Type	Risks faced	Potential impact description	Potential impact level			Response strategy	
			Baseline	2030	2050		
Physical risks	Acute	Floods	<ul style="list-style-type: none"> <li>Floods can damage an enterprise's infrastructure (e.g., equipment, warehouse goods), causing production disruptions, asset losses, and financial impacts. They can also disrupt the supply chain in the enterprise's location (e.g., raw material supply, logistics), impacting its production and delivery capabilities.</li> </ul>	Moderate	Moderate	Low	<ul style="list-style-type: none"> <li>Enhance infrastructure protection and improve flood resistance, such as building flood walls, reinforcing warehouses, etc.</li> <li>Develop disaster emergency response plans and measures to ensure the continuous operation of the business.</li> <li>Diversify the supply chain and reduce reliance on a single region or supplier.</li> </ul>
		Tropical cyclone	<ul style="list-style-type: none"> <li>More frequent and intense tropical cyclones may bring strong winds and heavy rainfall, impacting international shipping, causing flight delays/cancellations, and leading to delayed deliveries, supply chain disruptions, and lower business revenue.</li> </ul>	Moderate	Moderate	Low	<ul style="list-style-type: none"> <li>Continuously monitor weather alerts, and adjust production plans and supply chain arrangements in a timely manner.</li> <li>Sign disaster emergency contracts with suppliers to clarify responsibilities and obligations in dealing with tropical cyclones.</li> </ul>
		Extreme weather conditions	<ul style="list-style-type: none"> <li>Extreme high temperatures may lead to excessive or insufficient temperatures in production facilities, affecting the operation of production equipment, increasing energy consumption, impacting the efficiency and safety of employees, reducing production efficiency, and increasing production costs.</li> </ul>	Moderate	Low	Low	<ul style="list-style-type: none"> <li>Optimize the design of production facilities to enhance their resilience to extreme weather.</li> <li>Strengthen equipment maintenance and upkeep to ensure the normal operation of equipment.</li> </ul>
		Typhoon	<ul style="list-style-type: none"> <li>Typhoons can cause damage to infrastructure and assets, which will increase repair costs and production downtime; they lead to supply chain disruptions, thus affecting raw material supply and product delivery and increasing enterprise costs and customer satisfaction. They also affect employee safety, thus leading to business interruptions.</li> </ul>	Moderate	Low	Low	<ul style="list-style-type: none"> <li>Develop comprehensive typhoon prevention plans and emergency response plans, and take precautions to protect equipment and assets in advance. Enhance employee safety awareness, strengthen employee training and typhoon emergency drills.</li> <li>Establish a disaster emergency contact mechanism with suppliers to ensure smooth supply chain operations.</li> </ul>
	Long-term	Drought and water scarcity	<ul style="list-style-type: none"> <li>Drought and water scarcity may lead to production interruptions, supply chain disruptions, and increased production costs for industries that rely on water resources, such as agriculture and manufacturing.</li> </ul>	Low	Low	Low	<ul style="list-style-type: none"> <li>Implement water-saving measures and optimize production processes and water supply systems to reduce water consumption.</li> <li>Collaborate with the government and local communities to develop emergency plans and resource-sharing mechanisms to address drought.</li> </ul>
		Temperature rising	<ul style="list-style-type: none"> <li>Rising temperatures may lead to a decrease in production efficiency, an increase in energy consumption, and damage to production equipment, increasing the operating costs and financial pressure of the enterprise.</li> </ul>	Moderate	Low	Low	<ul style="list-style-type: none"> <li>Enhance the heat resistance of buildings and production equipment, take cooling measures, and maintain the comfort of production facilities.</li> <li>Strengthen energy management, energy conservation and emission reduction, adopt efficient energy-saving equipment and clean energy, so as to reduce energy consumption and emissions.</li> </ul>

Type	Risks faced	Potential impact description	Potential impact level			Response strategy
			Baseline	2030	2050	
Transition risks	Policies and regulations	<p>GHG emission reduction policy pressure</p> <ul style="list-style-type: none"> <li>The government's increased restrictions on greenhouse gas (GHG) emissions and emission reduction policies may increase cost pressure and compliance risks for the enterprise, affecting their production and operations.</li> </ul>	High	Moderate	Low	<ul style="list-style-type: none"> <li>Deeply understand and comply with government emission reduction policies and regulatory requirements, and develop emission reduction plans and implementation plans that meet standards.</li> <li>Actively transform production processes and equipment to save energy and reduce emissions of greenhouse gases, and enhance the environmental image and market competitiveness of the enterprise.</li> </ul>
	Market and technology	<p>Increasing demands from customers for low-carbon products and services</p> <ul style="list-style-type: none"> <li>The increasing demands from customers for low-carbon products and services may lead to the transformation of production and intensified market competition for the enterprise, affecting product positioning and sales strategies. This will result in increased production costs.</li> </ul>	High	Moderate	Low	<ul style="list-style-type: none"> <li>Actively research and promote low-carbon products and services to meet the growing environmental protection needs of customers, so as to enhance product added value and market competitiveness.</li> <li>Establish an environmental brand image, strengthen communication and interaction with customers, and improve customer satisfaction and loyalty.</li> <li>Promote the sales of low-carbon products and services, and gradually optimize costs with the continuous development of business volume.</li> </ul>
	Reputation	<p>Requirements for environmental information disclosure</p> <ul style="list-style-type: none"> <li>The enhancement of requirements for environmental information disclosure may increase the information disclosure costs and management pressure of the enterprise, affect the image and reputation of the enterprise, as well as the trust of investors and consumers in the enterprise.</li> </ul>	Moderate	Low	Low	<ul style="list-style-type: none"> <li>Disclose the process and content according to the relevant standards of GRI and ISSB to ensure that the disclosure is true, accurate, and comprehensive.</li> <li>Enhance communication and cooperation with stakeholders, improve the transparency and credibility of information disclosure, so as to enhance the social reputation and brand value of the enterprise.</li> </ul>

## ► Analysis of the impact of climate change opportunities and response strategies

Type	Description of potential opportunities	Potential impact level			Response strategy
		Baseline	2030	2050	
Transition risks	Resource efficiency	Moderate	Low	Low	<ul style="list-style-type: none"> <li>Improving the energy efficiency of network equipment: Continuously improve the energy efficiency of network equipment, and reduce energy consumption and carbon emissions. By adopting advanced energy-saving technologies and materials, optimize equipment design and manufacturing processes, reduce equipment energy consumption, and improve energy utilization efficiency, thus achieving the goal of energy saving and emission reduction.</li> <li>Optimizing the supply chain and production processes: Optimize the supply chain and production processes, reduce resource waste, and improve resource utilization efficiency. By optimizing logistics and warehousing management, reduce energy consumption and emissions during transportation and storage processes, optimize production processes and production line layout, and improve production efficiency and resource utilization, thus achieving resource conservation and environmental protection.</li> <li>Promoting the use of energy-saving technologies and environmentally friendly materials: Promote the use of energy-saving technologies and environmentally friendly materials to reduce corporate carbon emissions and environmental impact. By adopting energy-saving equipment and green materials, such as low-energy chips and energy-saving plastics, reduce product energy consumption and carbon emissions, and improve product environmental performance, meeting consumer demand for environmentally friendly products, and enhancing brand image.</li> </ul>
	Energy sources	Moderate	Low	Low	<ul style="list-style-type: none"> <li>Investing in and developing renewable energy technology: By investing in and developing renewable energy technologies such as solar, TP-Link can achieve energy self-sufficiency and reduce dependence on traditional fossil fuels. This not only reduces the carbon emissions of the enterprise and mitigate the impact of climate change, but also brings long-term stable energy supply to the enterprise.</li> <li>Promoting the application of clean energy: Apply clean energy to the production and operation of the enterprise, such as using solar power systems to provide electricity for office buildings, or using wind power systems to power production equipment. Such measures not only reduce the energy costs of the enterprise, but also reduce environmental pollution and enhance the sustainability image of the enterprise.</li> <li>Developing energy-efficient network equipment and smart control systems: Develop energy-efficient network devices and smart control systems to reduce the energy consumption and carbon emissions of devices. For example, design routers and switches with low power consumption, or develop smart energy management systems to effectively monitor and manage the energy consumption of devices, thus achieving the goal of energy saving and emission reduction.</li> </ul>

Type	Description of potential opportunities	Potential impact level			Response strategy
		Baseline	2030	2050	
Transition opportunities	Products / services	High	Moderate	Low	<ul style="list-style-type: none"> <li>Developing environmentally friendly network equipment: Develop network equipment that meets environmental standards, such as low-power routers, smart energy-saving switches, etc., to meet consumers' demands for environmentally friendly products. These products have the characteristics of low energy consumption and high efficiency, which can help users reduce energy consumption and carbon emissions, thereby achieving the goal of energy conservation and emission reduction.</li> <li>Provide network equipment recycling and remanufacturing services: In the future, introduce network equipment recycling and remanufacturing services, to extend the product's lifecycle, reduce waste generation, and achieve resource recycling and environmental protection through old equipment recycling, reprocess and reuse resources, This service is not only beneficial for environmental protection, but also can bring additional income sources to the enterprise.</li> </ul>
	Resilience	Moderate	Moderate	Low	<ul style="list-style-type: none"> <li>Establishing resilient supply chains: Establish a resilient supply chain network to address risks posed by climate change and extreme weather events. By diversifying suppliers and logistics channels, reduce reliance on a single source, mitigate the risk of supply chain disruptions, thus ensuring the stability and sustainability of product supply.</li> <li>Enhancing crisis management and business continuity planning: Enhance crisis management and business continuity planning, and establish sound crisis response mechanisms and business recovery plans. Timely identify and assess potential climate risks, develop corresponding crisis management strategies and business continuity plans, and enhance the enterprise's adaptability and response capabilities to climate change and extreme weather events.</li> <li>Strengthening employee training and awareness enhancement: Strengthen employee training and awareness enhancement, improve employees' understanding and response capabilities to climate change and extreme weather events. Through regular training and drills, enhance employees' sensitivity and response capabilities to climate risks, and improve the overall resilience and response capabilities of the enterprise.</li> </ul>

## ➤ Risk management

In response to the climate risks and opportunities, TP-Link will adopt comprehensive management strategies, including establishing a close monitoring system, assessing the likelihood and impact of climate-related risks, and developing corresponding early warning and response plans. In addressing risks, TP-Link will prioritize strengthening the resilience of infrastructure and improving the resilience of production lines to ensure the sustainability of the supply chain, and enhancing emergency response mechanisms to quickly respond to potential emergencies. At the same time, TP-Link will actively seize the opportunities brought by climate change, achieve sustainability and market competitiveness through methods such as improving resource efficiency, transitioning to clean energy, and developing low-carbon products and services. In addition, TP-Link will strengthen cooperation with stakeholders to jointly promote climate action, facilitate the achievement of carbon neutrality goals, and continuously improve and optimize our management measures, to adapt to the changing climate environment and market demands.

## ➤ Target indicators

In March 2025, the Science Based Targets initiative approved TP-Link's science-based carbon targets. TP-Link commits to using 2023 as the base year, striving to achieve a 42% reduction in Scope 1 and Scope 2 greenhouse gas emissions, and a 25% reduction in Scope 3 greenhouse gas emissions by 2030; a 90% reduction in Scope 1 and Scope 2 greenhouse gas emissions by 2040; a 90% reduction in Scope 3 greenhouse gas emissions by 2050; and ultimately reaching net-zero emissions by 2050.

To better achieve these targets, TP-Link conducted a comprehensive carbon emission inventory across all the companies and factories in 2024, while also completing Life Cycle Assessment verification for three products and carbon footprint verification for two products. In 2024, TP-Link submitted details of the climate management strategic planning, implementation and performance to the Carbon Disclosure Project for the first time, earning a Grade B. This has enhanced the company's reputation and made positive contributions to promoting global sustainable development.

Guangming Branch is also actively planning a photovoltaic power generation project, which is expected to be put into use in 2025. Meanwhile, in line with the minimum requirements for meeting the Science Based Targets initiative's standards, we planned annual green electricity procurement volumes to achieve the Scope 1 and Scope 2 emission reduction targets.

Guangming Branch Greenhouse Gas Emission				
Indicator	Unit	2022	2023	2024
Total GHGs emissions	tCO <sub>2e</sub>	2,429,660.41	4,426,501.74	3,914,188.88
- Direct GHGs emissions (Scope 1)	tCO <sub>2e</sub>	736.08	8,691.63	1,379.96
- Indirect GHGs emissions (Scope 2)	tCO <sub>2e</sub>	18,504.98	19,753.18	18,915.84
- Indirect GHGs emissions (Scope 3 <sup>①</sup> )	tCO <sub>2e</sub>	2,410,419.35	4,398,056.93	3,893,893.07

<sup>①</sup> The International Energy Agency database covers key energy statistics for over 150 countries and regions. Given the group's global presence, it adopted the agency's emission factors (replacing ecoinvent's) to recalculate product use carbon emissions in 2023, with the same source retained in 2024. In 2024, Guangming Branch was incorporated into the group's unified carbon inventory. Emissions from internal material supply are excluded within the group's operational boundary, resulting in a significant drop in Scope 3 emissions compared with 2023.

# Resources Management

## › Energy management

Guangming Branch implemented an energy management system, aiming to reduce energy consumption and improve efficiency. We formulated 40 policies and regulations, including the *Production Equipment Energy Conservation Management System*, *Air Conditioning System Energy-Saving Operation Management System*, *Office Energy Conservation Management System*, and *Air Compressor Energy Conservation Management System*. Key energy-consuming equipment was equipped with measuring instruments; Guangming Branch prioritized energy conservation, adopted new technologies, and advanced energy-saving efforts. **In 2024, We passed the ISO 50001 Energy Management System audit for the first time and obtained the certification.**

The company's energy consumption primarily consists of electricity, natural gas, and diesel. Specifically, natural gas is mainly used in the company's canteen, while diesel serves as an emergency energy source during power outages and for routine equipment startup checks. **In 2024, the electricity consumption for the Guangming Branch was 35,251,301 kWh, natural gas usage amounted to 70,579 m<sup>3</sup>, and diesel consumption reached 128,032.09 liters.**

The company has implemented a series of energy-saving projects. At the same time, the Company is also working on the planning of renewable energy and clean energy, planning to carry out the rooftop photovoltaic power generation system project. Through the preliminary work of surveying, measuring, energy consumption, environmental assessment, etc. on the factory roof, it is estimated that a rooftop photovoltaic power generation system with a capacity of 0.9 MW can be built, and the annual electricity generation is expected to reach 9,504,000 kWh.

In addition, the Company actively carries out energy conservation promotion and training activities to enhance employees' awareness and participation. The Company will continue to uphold the concept of energy conservation and emission reduction, continuously promote energy management work, and strive to achieve the goal of green and low-carbon development.

## › Water resources management

Guangming Branch's water consumption is mainly domestic use, all supplied by municipal tap water. We consumed 401,770 cubic meters of water in 2024. To further improve water use efficiency, Guangming Branch will continue to promote water conservation through publicity, replacement of water-saving fixtures, and pipeline leakage inspection and control.

### Case Automatic frequency conversion energy-saving improvement

In 2024, we installed frequency converters and designed secondary control circuits for exhaust fans. Using time switches, contactors and pushbuttons for automatic time-based control of the converters, the fans automatically adjust operating frequency according to working hours. Each exhaust fan saves electricity consumption at 15Hz for 9 hours daily, delivering significant energy savings while extending service life, with an estimated annual energy saving of 453,120 kWh.



Production Exhaust Gas Purification and Treatment Facilities

# Environmental Management

## ► Policy and management system

Adhering to the environmental policy of "protecting the environment, preventing pollution, operating legally and compliantly, and promoting development", the Company is committed to environmental protection and sustainability. To this end, we have established strict environmental management standards and continuously improve the Company's environmental management system in accordance with the ISO 14001 international standard. TP-Link has issued the *Quality and Environmental Management Manual* and authorized the Sustainability Committee to coordinate environmental management work to ensure the implementation of environmental management responsibilities. In 2024, the Company passed the supervision and audit and obtained the certification of the ISO 14001 management system.

The Company always pays attention to ecological environmental protection, actively responds to international environmental governance initiatives, and strictly complies with environmental protection laws and regulations. We use environmentally friendly facilities, dedicate ourselves to green environmental protection and pollution prevention, promote resource recycling and industrial waste reduction, in order to reduce the impact of production, operation, and the entire lifecycle of products and services on the environment.

In addition, we emphasize environmental awareness training for employees, regularly organizing environmental affairs training to ensure that employees understand environmental issues and enhance their awareness of environmental protection and their ability to respond to environmental risks. In 2024, environmental awareness and environmental risk training at Guangming Branch achieved 100% coverage of employees.

## ► Environmental risk control

The company has taken a series of measures to control the environmental risks, aiming to achieve environmental compliance.

For construction projects, we invite external organizations to conduct pre-project environmental risk assessments to ensure project compliance and environmental friendliness.

In response to sudden environmental incidents, we have established an *Emergency Environmental Incident Preparedness Plan*. This plan outlines emergency teams, process mechanisms, responsibilities, and resource allocation arrangements. It is also officially recorded with government agencies.

As of the end of the reporting period, all operational and construction projects of the Guangming Branch have undergone environmental risk assessments and are considered compliant.



Emergency Drill



Emergency Training



Environmental Training and Slogan  
(Water-saving Signs)



Environmental Training and Slogan  
(Paper-saving Signs)

## ► Environmental impact factor management

### Wastewater

The wastewater generated by Guangming Branch is domestic sewage, with no industrial wastewater generated. Domestic sewage is pre-treated through septic tanks and discharged through the factory's outlet into the local sewage treatment plant via the municipal pipeline network. Guangming Branch regularly commissions qualified third-party organizations to conduct discharge testing on wastewater outlets, and the test results all meet the requirements of the local standard of *Guangdong Province Water Pollutant Discharge Limits (DB44/26-2001)*.

Guangming Branch's factory area has built a "rainwater and sewage diversion" system, which separates and treats rainwater and sewage, reducing the impact of sewage on water bodies, avoiding pollution to rivers and channels.

In 2024, the company's total wastewater discharge was 317,192.40 m<sup>3</sup>, all of which was domestic sewage with no industrial wastewater generated.

### Noise

The Company is committed to reducing noise pollution and taking a series of measures to mitigate the negative impact of noise on the environment, such as using high-performance low-noise equipment, optimizing equipment and workshop layout, installing soundproof doors and windows, and conducting shock absorption treatment. The company regularly entrusts qualified third-party institutions to conduct noise testing, and the testing results meet the requirements of Class 3 standards in the *Emission Standard for Industrial Enterprise Noise at Boundary (GB12348-2008)* at Boundary.

### Waste gas

The waste gases generated during the production process of Guangming Branch mainly include tin and its compounds, VOCs non-methane total hydrocarbons, which are purified by environmental protection waste gas treatment facilities (such as gas collection hood exhaust fans, activated carbon adsorption units, centrifugal fans) before being discharged. We regularly entrust qualified third-party organizations to conduct waste gas emission testing. During the reporting period, the Company's waste gas emissions met the emission limit requirements of the local standard of *Guangdong Province Emission Standards for Air Pollutants (DB44/27-2001)*, the emission limit requirements of the *Emission Standard of Pollutants for Synthetic Resin Industry (GB31572-2015)*, as determined by testing.

In 2024, the company's total pollutant emissions from waste gas were 17,827.00 kg. Of which, tin and its compounds emissions were 21.81 kg, volatile organic compounds (VOCs) emissions were 10,001.33 kg, and non-methane hydrocarbons (NMHC) emissions were 7,786.70 kg. Guangming Branch will continue to take measures to control exhaust emissions, reduce environmental impact, and protect the quality of the atmospheric environment.

#### Case

In 2024, we added one set of new exhaust gas treatment facilities, adopting filtration + secondary activated carbon for purification. We implemented centralized collection and compliant emission of waste gas from manual welding and dispensing stations in the workshop, continuously improving the quality of workshop waste gas emissions.



Production Exhaust Smoke Purification Facilities

## Waste

The Company's solid waste includes general solid waste and hazardous waste, with general solid waste being recycled or treated by qualified recycling units. Hazardous waste mainly includes waste circuit boards, chemical waste packaging materials, waste activated carbon, waste organic solvents, etc. Hazardous waste is disposed of by qualified third-party companies according to regulations.

The Company has established a sound hazardous waste management system. In accordance with the requirements of the *Standard for Pollution Control on Hazardous Waste Storage*, it has established a clear and complete hazardous waste management ledger to implement hazardous waste declaration registration, hazardous waste labeling, hazardous waste storage and transportation, hazardous waste transfer manifest, and other full-process management. During the temporary storage of hazardous waste, measures such as installing spray devices, flammable gas detectors, automatic fire extinguishing devices, etc. are taken to prevent environmental safety accidents such as fires.

The Company has also established special *Emergency Response Plan for Unexpected Environmental Pollution Incidents Caused by Hazardous Waste*, to set up and improve the emergency mechanism for hazardous waste pollution incidents, organized training and emergency drills to enhance employees' emergency response capabilities to unexpected incidents caused by hazardous waste.

In 2024, the company's total general waste generation was 3,435.62 t, with a 100% comprehensive disposal rate. As of January 2025, the combined storage and total generation of hazardous waste reached 206.83 t, with 198.09 t transferred and a disposal rate of 95.77%. Guangming Branch will continue to make efforts to improve the comprehensive disposal rate of waste, and strengthen the safe disposal and transfer management of hazardous waste to ensure environmental health and safety.

## Chemical management

Guangming Branch conducts detailed management of chemicals in daily use, disposal, procurement, and other aspects. The Company has issued normative documents such as the *Chemical Management Specifications* and the *Chemical MSDS Control Requirements*. At the stage of chemical procurement and selection, we try to use chemicals with minimal environmental and safety impact while ensuring safe use and process requirements.

We require personnel handling chemicals to be certified for their positions, adhere to operating standards, and wear personal protective equipment. The company also conducts regular chemical management training for operators and updates hazard identification sheets and safety operating procedures based on the introduction of chemicals.

We conduct regular qualification audits of chemical suppliers to ensure that the chemicals we use comply with safety, environmental quality, and other related, on the other hand, the transport of chemicals needs to be reported to the company in advance, and the transport qualifications and goods are verified upon arrival. We have dedicated chemical storage facilities equipped with hazard warning cards and compliant placement signs, conducting daily inspections on storage conditions and status to ensure safety, and establishing chemical inventory records to regulate usage.

Chemical waste liquid, containers, and contaminants generated in production are managed as hazardous waste, and are handed over to qualified professional organizations for unified disposal to avoid environmental impact or safety incidents caused by non-compliant disposal. In terms of chemical leakage emergency response, the Company has formulated the *Chemical Leakage Emergency Response Plan*, equipped with emergency rescue materials, and regularly organizes employees to conduct chemical leakage emergency drills.



Compliant Storage of Hazardous Chemicals



Automatic Fire Suppression System



Proper placement and labeling of chemicals



Chemical Leakage Drills

# Green Operations

TP-Link always upholds the concept of green environmental protection, carries out green innovation in product development, continuously reduces the harmful impact of products on the natural environment and users, and provides customers with leading green environmental products and solutions. Guangming Branch actively implements TP-Link's green and environmentally friendly concept into the entire production process.

## ▶ Green product design

TP-Link introduces the concept of product lifecycle management in the product design and development stage to ensure that the design, quality, function, and production process of the product meet the requirements of green products. In terms of product design, TP-Link fully considers the recyclable design, universal design, and minimization design, and actively develops high value-added, low-emission, low-power consumption high-quality environmentally friendly products following the principles of lessening energy and resource consumption, minimizing ecological environmental impact, and maximizing renewability.



### Case 1 Low-power product innovation

Under the Tapo brand launched a battery camera kit with solar panels. Through deep optimization of hardware and software algorithms, standby power consumption was significantly reduced (up to 56%), effectively extending device battery life and reducing user charging frequency and energy consumption.



Tapo Solar Cell Camera Kit

### Case 2 Application of eco-friendly materials

In 2024, TP-Link developed an environmentally friendly 5G Outdoor Unit product with significant improvements in hardware and structural materials. On top of complying with EU RoHS directives, the percentage of lead-free electronic materials increased from 61.5% to 94%. The product also underwent corrective actions for 22 items of SVHC (Substances of Very High Concern) to ensure it does not contain PVC (Polyvinyl chloride), and that gold, mercury, beryllium, antimony, and other elements meet the TUV Green Mark certification limits. Additionally, all paper used in the product was FSC certified, and the plastic housing was made from PCR (Post-Consumer Recycled) materials, with up to 90% of the housing mass made from PCR materials.



5G Outdoor Unit Product

## ➤ Green raw materials

TP-Link practices the green product lifecycle management concept, actively seeking alternative materials for harmful substances in the product design phase. Currently, all raw materials used by the Guangming Branch comply with environmental regulations and chemical registration, evaluation, licensing, and restriction rules, and is in line with relevant provisions that producers should take measures to gradually reduce and eliminate the content of lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB), polybrominated diphenyl ethers (PBDE), and other toxic and harmful substances in electronic information products.

As of the end of the reporting period, TP-Link has switched a total of 68 product models to use non-foamed materials, with 43 models under evaluation and transition to environmentally friendly materials.

### Case Use environmentally friendly raw materials

In 2024, TP-Link actively practiced environmental protection while ensuring plastic materials fully meet product performance requirements. The company recycled injection runner waste for pelletizing and reuse, mainly in internal component production, achieving 100% recycling rate of such waste. Additionally, a large number of product casings adopted renewable or recycled post-consumer recycled (PCR) materials, with plastic recycling accounting for up to 95% of total plastic usage.

## ➤ Green manufacturing

TP-Link focuses on green control and improvement in the manufacturing process. During the production process, Guangming Branch continuously optimizes process parameters and equipment status, encourages the implementation of energy-saving technology renovation projects and measures, and achieves emission reduction and consumption reduction goals.

### Case 1 Co-board design of main board and WiFi board

In 2024, TP-Link conducted co-board evaluation of the main board and WiFi board for Tapo C500 and its series products. By streamlining and optimizing the housing structure, PCB, related electronic components and assembly materials, the manufacturing process was simplified, saving approximately 8,040kg of PCB usage annually.

### Case 2 Archer AX10(US)3.0 design optimization project

Archer AX10/AX1500 achieved all-round optimization in hardware, structure and process through measures including canceling switch buttons, replacing integrated transformers with discrete ones, optimizing chip solutions to adjust PCB layout and reducing PCB size, cutting annual PCB usage by approximately 1,228kg.

### Case 3 Simplification of Bottom Case Assembly Design

In 2024, Guangming Branch optimized the assembly process of Tapo C5 series products. By saving assembly materials, production efficiency was improved accordingly, and the same design concept was applied to derivative models of the series, including Tapo C510W 2.0, Tapo C520WS 2.0, TC40 2.0, TC41 2.0 and TC42 2.0. This initiative saves approximately 89,697kg of plastic and other materials annually.

### Case 4 Size Change of Main Board PCB

In 2024, the company implemented a motherboard size reduction scheme for the upgraded version of Tapo C200 (5.0), improving PCB space utilization, reducing PCB area and effectively cutting PCB material usage by approximately 16,561kg annually.

## ➤ Green packaging

Starting from both materials and products, TP-Link vigorously promotes green packaging.

In 2024, TP-Link has signed the *Supplier Packaging Recycling Agreement* with 58 suppliers, agreeing to recycle and reuse recyclable packaging materials according to the agreement.

### Case Material reduction and optimization

We replaced traditional packaging materials such as pearl cotton and double-sided tape with fully paper-based and easily recyclable designs by modifying the paper tray structure of the Deco clock series products. While preserving product protection and unboxing experience, achieve a fully paper-based and easily recyclable design. This is expected to reduce material consumption by approximately 221,104 kg per year.



New Packaging

## ➤ Green logistics

TP-Link products are sold globally, and logistics has become an important aspect of the Company's promotion of green economy. TP-Link mainly strengthens cooperation with partners to enhance the meticulousness of storage and transportation planning, collaboratively promotes the logistics method of "mainly by sea, supplemented by air", strives to increase the proportion of sea transportation, save transportation costs, improve energy efficiency, and reduce environmental impacts such as greenhouse gas emissions caused by air and other transportation methods. Therefore, compared to 2023, the proportion of TP-Link's sea transportation in 2024 increased by about 0.63%. As the main role of TP-Link in foreign sales, Guangming Branch also saw a corresponding increase in the proportion of sea transportation in 2024.

Meanwhile, TP-Link is promoting the construction of green logistics across the entire group:

By adopting multi-modal transport, we can solve the "last kilometer" problem, reduce the transfer links of products, and improve the efficiency and social benefits of product transportation.

By recycling and reusing product loading tools, we practice green and low-carbon actions in the details.

Year	Shipping method	Proportion
2022	Sea transportation	87.53%
	Air transportation	3.03%
2023	Sea transportation	89.10%
	Air transportation	3.04%
2024	Sea transportation	89.73%
	Air transportation	3.69%

# Prospects



In the future, under the leadership of TP-Link, Guangming Branch will continue to focus on high-quality technology products, assisting the TP-Link brand to continuously climb to new heights in the global industry. At the same time, we will adhere to business ethics and work with partners and all sectors of society to jointly maintain the market value system of fair competition. We will proactively identify and prevent operational risks, strengthen internal controls, follow international rules and conventions, and ensure the stable, healthy, and sustainability of the Company's various businesses.

Guangming Branch will continue to maintain friendly communication with customers, suppliers, employees and other stakeholders, steadfastly take the initiative to assume and fulfill corporate social responsibility, and contribute to the achievement of the United Nations Sustainability Goals. In response to climate change, actively respond to TP-Link's strategic planning, implement TP-Link's emission reduction measures, actively promote low-carbon technologies, strengthen energy transformation, improve energy structure, and enhance energy and resource efficiency.

We will continue to follow international rules such as GHG Protocol to understand the "carbon footprint", conduct carbon verification and evaluation analysis in accordance with international standards such as ISO 14064 and ISO 14067. Additionally, we will utilize the Science Based Targets initiative (SBTi) net zero emission standard as the guiding principle. By combining these standards with TP-Link's operational profile, we aim to craft a tailored action plan to tackle climate change and swiftly work towards a brighter future for the world.

# ESG Data Sheet

## Business Conduct and Compliance Data Sheet

Indicators		Units	2022	2023	2024
Number of participants in compliance training		Person(s)	—	5,172	5,372
Number of conducted compliance training		Time(s)	—	—	225
Total amount of fines incurred due to violations of anti-corruption laws and regulations		US Dollar(s)	0	0	0
<b>Number of employees participating in anti-corruption training</b>		<b>Person(s)</b>	<b>—</b>	<b>5,172</b>	<b>5,372</b>
By gender	Female	Person(s)	—	2,290	2,294
	Male	Person(s)	—	2,882	3,078
By level	Base-level employee and Junior management	Person(s)	—	5,168	5,352
	Middle management	Person(s)	—	4	2
	Senior Management	Person(s)	—	0	0
Proportion of operational sites had undergone corruption risk assessments <sup>①</sup>		%	100	100	100
Percentage of operational sites for which a review concerning business ethics issues had been conducted <sup>②</sup>		%	—	100	100
Number of operational sites with certified business ethics		Sites(s)	0	0	0
Percentage of operational sites with certified business ethics <sup>③</sup>		%	0	0	0
Number of employees who have been disciplined for other violations (such as conflicts of interest, information leaks, etc.)		Person(s)	0	0	0
Number of employees who have been disciplined for corruption (including embezzlement, bribery, and misuse of position)		Person(s)	0	0	0
Total number of confirmed corruption incidents		Case(s)	0	0	0
Total number of confirmed incidents (where employees were terminated or disciplined due to corruption)		Case(s)	0	0	0

Indicators	Units	2022	2023	2024
Total number of confirmed incidents (where contracts with business partners were terminated or not renewed due to violations related to corruption)	Case(s)	0	0	0
Percentage of board members who have been informed about the Company's anti-corruption policies and procedures <sup>④</sup>	%	100	100	100
Percentage of employees who have been informed about the Company's anti-corruption policies and procedures <sup>⑤</sup>	%	100	100	100
Percentage of business partners who have been informed about the Company's anti-corruption policies and procedures <sup>⑥</sup>	%	100	100	100
Percentage of suppliers who have been informed about the Company's anti-corruption policies and procedures <sup>⑦</sup>	%	100	100	100
Number of cases in which the Company has been sanctioned by relevant authorities for unfair competitive practices or violations of antitrust and competition laws	Case(s)	0	0	0

① [Calculation method] Proportion of operational sites had undergone corruption risk assessments = Number of the operational sites that had undergone corruption risk assessments / Total number of the operational sites × 100.

② [Calculation method] Percentage of operational sites for which a review concerning business ethics issues had been conducted = Number of operational sites where a review of concerning business ethics issues had been conducted / Total number of operational sites × 100.

③ [Calculation method] Percentage of operational sites with certified business ethics = Number of operational sites with certified business ethics / Total number of the operational sites × 100.

④ [Calculation method] Percentage of board members who have been informed about the Company's anti-corruption policies and procedures = Number of board members who have been informed about the Company's anti-corruption policies and procedures / Total number of board members × 100.

⑤ [Calculation method] Percentage of employees who have been informed about the Company's anti-corruption policies and procedures = Number of employees who have been informed about the Company's anti-corruption policies and procedures / Total number of employees × 100.

⑥ [Calculation method] Percentage of business partners who have been informed about the Company's anti-corruption policies and procedures = Number of business partners who have been informed about the Company's anti-corruption policies and procedures / Total number of business partners × 100.

⑦ [Calculation method] Percentage of suppliers who have been informed about the Company's anti-corruption policies and procedures = Number of suppliers who have been informed about the Company's anti-corruption policies and procedures / Total number of suppliers × 100.

## Employee Recruitment Data Sheet

Indicators		Units	2022	2023	2024
<b>Total number of employees</b>		<b>Person(s)</b>	<b>4,580</b>	<b>5,172</b>	<b>5,372</b>
By gender	Female	Person(s)	2,043	2,290	2,294
	Male	Person(s)	2,537	2,882	3,078
By age	Under 30	Person(s)	2,470	2,820	2,803
	Between 30 and 50	Person(s)	2,074	2,310	2,547
	Over 50	Person(s)	36	42	22
By employment type	Full-time	Person(s)	4,580	5,172	5,372
	Part-time	Person(s)	0	0	0
	Consultant	Person(s)	0	0	0
By educational background	Doctorate	Person(s)	0	0	0
	Master's degree	Person(s)	7	14	16
	Bachelor's degree	Person(s)	80	124	197
	Associate degree and below	Person(s)	4,493	5,034	5,159
By work area	US	Person(s)	0	0	0
	Mainland China	Person(s)	4,578	5,070	5,286
	Hong Kong, Macao, Taiwan, and other countries and regions	Person(s)	2	102	86
By level <sup>①</sup>	Base-level employee	Person(s)	4,571	5,158	5,352
	Junior management	Person(s)	9	10	18
	Middle management	Person(s)	0	4	2
	Senior Management	Person(s)	0	0	0

Indicators		Units	2022	2023	2024
Management by gender	Female	Person(s)	1	1	1
	Male	Person(s)	8	13	19
Number of ethnic minorities employees <sup>②</sup>		Person(s)	1,119	1,316	1,359
Percentage of ethnic minority in senior management <sup>③</sup>		%	0	0	0
Number of employees with disabilities		Person(s)	0	0	0
Percentage of disabilities in senior management <sup>④</sup>		%	0	0	0
Percentage of female employees in senior management <sup>⑤</sup>		%	0	0	0
<b>Total number of newly hired employees</b>		<b>Person(s)</b>	<b>2,109</b>	<b>2,165</b>	<b>10,688</b>
Percentage of newly hired employees by gender <sup>⑥</sup>	Female	%	40.40	42.68	38.02
	Male	%	59.60	57.32	61.98
Percentage of newly hired employees by age	Under 30	%	67.47	69.88	64.38
	Between 30 and 50	%	31.77	29.65	35.56
	Over 50	%	0.76	0.46	0.06
Percentage of newly hired employees by work area	Under 30	%	0	0	0.00
	Between 30 and 50	%	100	100	99.94
	Over 50	%	0	0	0.06
Monthly average employee turnover rate		%	16.31	11.76	13.58
<b>Number of resignations for the whole year</b>		<b>%</b>	<b>208.47</b>	<b>143.70</b>	<b>177.38</b>
By gender	Female	%	—	—	156.93
	Male	%	—	—	192.63

Indicators	Units	2022	2023	2024
Number of labor dispute incidents <sup>⑦</sup>	Case(s)	—	—	1
Number of legal issues in hiring, firing, pay, benefits, hours, holidays, equal chances, and anti-discrimination	Case(s)	0	0	0
Percentage of the employees who received training on diversity, discrimination and/or harassment <sup>⑧</sup>	%	100	100	100

① Due to the unified preparation of the group report, the group-wide staff hierarchy classification method is adopted, which differs from that in Guangming Branch's 2023 Sustainability Report. The 2024 Report will disclose information in accordance with unified standards.

② Ethnic minorities refer to ethnic groups in China other than the Han nationality and ethnic groups in Vietnam other than the Kinh nationality.

③ [Calculation method] Percentage of ethnic minority in senior management = Number of ethnic minority employees in senior management / Number of employees in senior management × 100.

④ [Calculation method] Percentage of disabilities in senior management = Number of disabled employees in senior management / Number of employees in senior management × 100.

⑤ [Calculation method] Percentage of female employees in senior management = Number of female employees in senior management / Number of employees in senior management × 100.

⑥ [Calculation method] Percentage of newly hired employees by a certain category = Number of newly hired employees for that category / Total number of newly hired employees × 100.

⑦ The labor dispute has been properly handled, and the Company ultimately prevailed in the case.

⑧ [Calculation method] Percentage of the employees who received training on diversity, discrimination and/or harassment = Number of the employees who received training on diversity, discrimination and/or harassment / Total number of employees × 100.

## Employee Occupational Health and Safety Data Sheet

Indicators	Units	2022	2023	2024
Number of work-related injuries	Time(s)	12	10	13
Recordable injury rate per million work hours	Time(s)/million hours	1.62	0.56	0.66
Lost workday rate per million work hours	Time(s)/million hours	1.62	0.56	0.66
Number of fatalities resulting from work-related injuries	Person(s)	0	0	0
Number of employees exposed to occupational disease risks	Person(s)	—	1,138	969
Number of employees in occupational hazard factor positions who underwent physical examinations	Person(s)	—	1,138	969
Coverage rate of occupational health examinations	%	—	100	100
Employee occupational disease incidence rate	%	0	0	0
Number of occupational health and safety training	Time(s)	352	469	517
Hours of occupational health and safety training	Hour(s)	72,455.60	97,130.16	128,009.39
Number of participants in health and safety training	Participants(s)	9,577	16,431	19,605
Average occupational health and safety training hours per employee	Hour(s)	15.82	18.78	23.83
Percentage of manufacturing centers for which employee health and safety risk assessment has been conducted	%	100	100	100.00
Total recordable incident rate (TRIR) of full-time employee	N/A	0.32	0.11	0.70
Near miss frequency rate (NMFR) of full-time employee	Time(s)	—	—	36
Percentage of entity's facilities audited in the RBA Validated Audit Process (VAP) or equivalent, by all facilities	%	0	100	100
Associated corrective action rate for priority non-conformances, disaggregated by the entity's facilities <sup>①</sup>	%	—	—	—
Associated corrective action rate for other non-conformances, disaggregated by the entity's facilities	%	—	—	—

<sup>①</sup> No priority non-conformities identified in the RBA audit.

## Employee Rights and Benefits Data Sheet

Indicators		Units	2022	2023	2024
Rate of employment contract signings <sup>①</sup>		%	100	100	100
Number of employees participating in social insurance		Person(s)	4,580	5,172	5372
Rate of social insurance coverage <sup>②</sup>		%	100	100	100
Employee physical examination coverage rate		%	100	100	100
Number of labor disputes and litigation cases		件	0	0	1
<b>Employees entitled to parental leave</b>		<b>Person(s)</b>	<b>—</b>	<b>—</b>	<b>80</b>
By gender	Female	Person(s)	—	—	47
	Male	Person(s)	—	—	33
<b>Number of employees taking parental leave</b>		<b>Person(s)</b>	<b>31</b>	<b>39</b>	<b>60</b>
By gender	Female	Person(s)	31	31	28
	Male	Person(s)	0	8	32
<b>Number of employees who returned to work within the period after parental leave</b>		<b>Person(s)</b>	<b>28</b>	<b>34</b>	<b>51</b>
By gender	Female	Person(s)	28	26	19
	Male	Person(s)	0	8	32
<b>Rate of employees returning to work after parental leave <sup>③</sup></b>		<b>%</b>	<b>90.32</b>	<b>87.18</b>	<b>82.35</b>
By gender	Female	%	90.32	83.87	67.86
	Male	%	0	100	100
<b>Number of employees who returned to work after parental leave and remained employed after 12 months</b>		<b>Person(s)</b>	<b>19</b>	<b>27</b>	<b>50</b>
By gender	Female	Person(s)	19	20	18
	Male	Person(s)	0	7	32

Indicators		Units	2022	2023	2024
<b>Retention rate of employees who took parental leave <sup>④</sup></b>		<b>%</b>	<b>61.29</b>	<b>69.23</b>	<b>80.39</b>
By gender	Female	%	67.86	64.52	64.29
	Male	%	0	87.50	100
<b>The ratio of the basic salary of workers to the local statutory minimum wage</b>		<b>%</b>	<b>—</b>	<b>—</b>	<b>1.03</b>
By gender	Female	%	—	—	1.03
	Male	%	—	—	1.03
Number of operational sites which have received human rights impact and risk assessment <sup>⑤</sup>		%	100	100	100
Number of operational sites got labor and human rights certification		Site(s)	0	0	0
Percentage of operational sites got labor and human rights certification <sup>⑥</sup>		%	0	0	0
Number of work stoppages		Time(s)	0	0	0
Total days idle		Day(s)	0	0	0

① [Calculation method] Rate of employment contract signings = Number of employees who had signed contracts / Total number of employees × 100.

② [Calculation method] Rate of social insurance coverage = Number of employees participating in social insurance / Total number of employees × 100.

③ [Calculation method] Rate of employees returning to work after parental leave = Number of employees returning to work after parental leave / Number of employees taking parental leave × 100.

④ [Calculation method] Retention rate of employees who took parental leave = Number of employees who returned to work after parental leave and remained employed after 12 months / Number of employees taking parental leave × 100.

⑤ [Calculation method] Percentage of operational sites which have received human rights impact and risk assessment = Number of operational sites which have received human rights impact and risk assessment / Number of operational sites × 100.

⑥ [Calculation method] Percentage of operational sites got labor and human rights certification = Number of operational sites got labor and human rights certification / Number of operational sites × 100.

## Employee Training and Development Data Sheet

Indicators		Units	2022	2023	2024
Total expenditure on employee training		USD'000	1.80	27.10	29.07
Number of employee training participant sessions		Person(s)	5,658	42,752	67,186
Number of employees covered by training		Person(s)	4,580	5,172	5372
<b>Employee training coverage rate <sup>①</sup></b>		<b>%</b>	<b>100</b>	<b>100</b>	<b>100</b>
By gender	Female	%	100	100	100
	Male	%	100	100	100
Total duration of employee training		Hour(s)	19,860.00	203,363.04	203,833.50
<b>Average training hours received by employees</b>		<b>Hour(s)</b>	<b>9.29</b>	<b>39.32</b>	<b>37.94</b>
By gender	Female	Hour(s)	9.29	39.32	37.94
	Male	Hour(s)	9.29	39.32	37.94
<b>Proportion of employees receiving regular performance and career development evaluations <sup>②</sup></b>		<b>%</b>	<b>100</b>	<b>100</b>	<b>100</b>
By gender	Female	%	100	100	100
	Male	%	100	100	100

① [Calculation method] Employee training coverage rate = Number of employees who participated in training / Total number of employees × 100.

② [Calculation method] Proportion of employees receiving regular performance and career development evaluations = Number of employees receiving regular performance and career development evaluations / Total number of employees × 100.

## Product and Service Quality, and Customer Relationship Data Sheet

Indicators	Units	2022	2023	2024
Number of product quality training sessions conducted for all employees	Case(s)	—	—	410
Number of product quality training sessions conducted for all suppliers	Case(s)	—	—	428
Number of products sold or shipped that must be recalled for safety and health reasons	Case(s)	0	0	0
Number of valid customer complaints	Case(s)	1	5	3
Number of customer satisfaction surveys conducted	Case(s)	2	2	2
Customer satisfaction	%	93.18	97.47	96.45

## R&D Innovation and Intellectual Property Protection Data Sheet <sup>①</sup>

Indicators	Units	2022	2023	2024
Number of patent applications filed within the reporting period	Case(s)	115	52	169
Number of patents authorized within the reporting period	Case(s)	70	84	121
Cumulative number of patent applications	Case(s)	594	666	868
Cumulative number of patents authorized	Case(s)	262	348	468

<sup>①</sup> Intellectual property work is under the unified management of TP-Link. Therefore, the Intellectual Property and R&D Innovation Performance Tables of Guangming Branch are all group-level data.

## Information Security and Privacy Protection Data Sheet <sup>①</sup>

Indicators	Units	2022	2023	2024
Number of incidents penalized due to violations of information security laws and regulations	Case(s)	0	0	0
Number of personal information security training sessions conducted for employees	Case(s)	55	23	219
Number of employees covered by personal information security training	Person(s)	282	839	5372
Number of specialized training and assessment sessions conducted in the field of personal information security	Case(s)	1	1	1
Number of participants in specialized personal information security training and assessments	Person(s)	41	41	35
Number of individuals who passed the training and assessments in the specialized field of personal information security	Person(s)	41	41	35
Information security training coverage rate	%	—	—	100
Number of confirmed information security incidents	Case(s)	0	0	0

<sup>①</sup> Information security work is under the unified management of TP-Link. Therefore, the content of Guangming Branch's Data Security and Customer Privacy Protection Performance Table is overall reflected by group data. Among them, the "number of employees covered by personal information security training" in 2024 is the separate data of Guangming Branch.

## Supplier Management Data Sheet

Indicators		Units	2022	2023	2024
<b>Total number of suppliers</b>		<b>Company(ies)</b>	<b>434</b>	<b>463</b>	<b>585</b>
By location	Mainland China	Company(ies)	—	—	527
	Hong Kong, Macao, Taiwan, and other countries and regions	Company(ies)	—	—	58
Screening and evaluation status	Percentage of suppliers screened using social responsibility standards	%	100	100	100
	Percentage of suppliers screened using environmental standards	%	100	100	100
Status of questionnaire and commitment signed	Number of suppliers that have signed the Supplier Code of Conduct	Company(ies)	350	394	502
	Percentage of suppliers that have signed the Supplier Code of Conduct	%	80.64	85.10	85.81
	Percentage of signed social responsibility framework agreements	%	100	100	100
	Number of suppliers that have completed the social responsibility questionnaire	Company(ies)	350	394	502
	Percentage of suppliers that have completed the social responsibility questionnaire	%	80.64	85.10	85.81
	Number of signed Anti-Corruption Commitment	Company(ies)	396	426	542
	Percentage of signed Anti-Corruption Commitment <sup>①</sup>	%	91.35	91.91	91.28
Training status	Number of signed clauses including environmental, labor and human rights requirements	Company(ies)	46	61	158
	Percentage of suppliers that have received business ethics training	%	100	100	100
	Number of suppliers that have received social responsibility training	Company(ies)	44	86	163
	Percentage of suppliers that have received social responsibility training <sup>②</sup>	%	10.14	18.57	27.86
<b>Total number of new suppliers</b>		<b>Company(ies)</b>	<b>46</b>	<b>61</b>	<b>59</b>
Screening and evaluation status	Percentage of new suppliers screened using social responsibility standards	%	100	100	100
	Number of new suppliers that have undergone corporate social responsibility on-site audit	Company(ies)	2	3	59
	Percentage of new suppliers screened using environmental standards	%	100	100	100

Indicators		Units	2022	2023	2024
Status of questionnaire and commitment signed for new suppliers	Number of new suppliers that have signed the Supplier Code of Conduct	Company(ies)	20	29	59
	Percentage of new suppliers that have signed the Supplier Code of Conduct	%	43.48	47.54	100
	Number of signed clauses containing environmental, labor and human rights requirements	Company(ies)	11	54	54
	Percentage of signed clauses containing environmental, labor and human rights requirements	%	23.91	88.52	91.93
	Number of signed the Social Responsibility Framework Agreement	Company(ies)	20	29	59
	Percentage of signed the Social Responsibility Framework Agreement	%	43.48	47.54	100
	Number of new suppliers that have completed the social responsibility questionnaire	Company(ies)	20	29	59
	Percentage of new suppliers that have completed the social responsibility questionnaire	%	43.48	47.54	100
<b>Total number of procurement staff</b>	<b>Person(s)</b>	<b>65</b>	<b>71</b>	<b>94</b>	
Number of procurement staff who have received sustainable procurement training	Person(s)	62	71	94	
Percentage of procurement staff who have received sustainable procurement training	%	95.38	100	100	
Localization rate of raw material procurement <sup>③</sup>	%	65.96	65.40	98.46	
<b>Number of key or core suppliers</b>	<b>Company(ies)</b>	<b>60</b>	<b>58</b>	<b>62</b>	
Key suppliers that have completed the social responsibility questionnaire	Company(ies)	60	58	62	
Key suppliers that have undergone corporate social responsibility (on-site audit)	Company(ies)	25	31	43	
Key suppliers that have signed the Supplier Code of Conduct	Company(ies)	60	58	62	
Key suppliers that have signed the Social Responsibility Framework Agreement	Company(ies)	60	58	62	

① The signing status of anti-corruption commitment and clauses including environmental, labor and human rights requirements in 2022 and 2023, as well as the localization ratio of raw material procurement, are derived from group data through estimation or continuation.

② In 2024, the supplier audit and evaluation form was updated, and the new supplier social responsibility audit was fully implemented, resulting in an increase in data for 2024.

③ [Calculation method] Localization rate of raw material procurement = Number of Chinese suppliers for raw material procurement / Total number of suppliers × 100.

## Environmental Management Data Sheet

Indicators		Units	2022	2023	2024
Number of employees who participated in environmental protection training		Person(s)	—	—	5,372
Number of environmental protection trainings		Time(s)	—	—	133
Training hours on environmental protection		Hour(s)	—	—	157.00
Number of employees covered by environmental protection training		Participants(s)	—	—	9,941
Percentage of operational sites for which an environmental risk assessment has been conducted <sup>①</sup>		%	100	100	100
Number of punishments caused by violating the environmental protection laws		Case(s)	0	0	0
<b>Amount of environmental protection investment <sup>②</sup></b>		<b>USD'000</b>	<b>220.90</b>	<b>235.18</b>	<b>20.80</b>
By category	Equipment upgrade	USD'000	193.70	209.10	14.00
	Waste disposal	USD'000	7.26	6.17	5.60
	Environmental training	USD'000	0.17	0.14	0.10
	Others	USD'000	19.78	19.77	1.10

① [Calculation method] Percentage of operational sites for which an environmental risk assessment has been conducted = Number of operational sites for which an environmental risk assessment has been conducted / Number of operational sites × 100.

② Environmental protection facilities were added in 2022 and 2023, while no large-scale environmental protection equipment was added in 2024, therefore the data decreased in 2024.

## Climate Change and Energy Management Data Sheet <sup>①</sup>

Indicators		Units	2022	2023	2024
<b>Total greenhouse gas emissions (Scope 1 + Scope 2 + Scope 3)</b>		<b>tCO<sub>2</sub>e</b>	<b>2,429,660.41</b>	<b>4,426,501.74</b>	<b>3,914,188.88</b>
Scope 1 greenhouse gas emissions		tCO <sub>2</sub> e	736.08	8,691.63	1,379.96
Scope 2 greenhouse gas emissions		tCO <sub>2</sub> e	18,504.98	19,753.18	18,915.85
Scope 3 greenhouse gas emissions <sup>②</sup>		tCO <sub>2</sub> e	2,410,419.35	4,398,056.93	3,893,893.07
By activities	Scope 3 (upstream) greenhouse gas emissions	tCO <sub>2</sub> e	—	3,141,723.60	3,573,289.11
	Scope 3 (downstream) greenhouse gas emissions	tCO <sub>2</sub> e	—	1,256,333.33	320,603.97
By category of activities	Category 1 Purchased goods and services	tCO <sub>2</sub> e	—	1,227,509.05	275,686.61
	Category 2 Capital goods	tCO <sub>2</sub> e	—	270.82	707.68
	Category 3 Fuel- and energy-related activities (not included in Scope 1 or Scope 2)	tCO <sub>2</sub> e	—	6,091.97	6,209.06
	Category 4 Upstream transportation and distribution	tCO <sub>2</sub> e	—	21,990.99	37,844.24
	Category 5 Waste generated in operations	tCO <sub>2</sub> e	—	368.44	93.93
	Category 6 Business travel	tCO <sub>2</sub> e	—	73.68	32.86
	Category 7 Employee commuting	tCO <sub>2</sub> e	—	28.38	29.58
	Category 8 Upstream leased assets	tCO <sub>2</sub> e	—	—	0
	Category 9 Downstream transportation and distribution	tCO <sub>2</sub> e	—	970.60	7,118.20
	Category 10 Processing of sold products	tCO <sub>2</sub> e	—	—	0
	Category 11 Use of sold products	tCO <sub>2</sub> e	—	3,139,885.83	3,565,823.66
	Category 12 End-of-life treatment of sold products	tCO <sub>2</sub> e	—	867.17	347.24
	Category 13 Downstream leased assets	tCO <sub>2</sub> e	—	—	0
	Category 14 Franchises	tCO <sub>2</sub> e	—	—	0

Indicators		Units	2022	2023	2024
By category of activities	Category 15 Investments	tCO <sub>2</sub> e	—	—	0
Natural gas consumption		m <sup>3</sup>	—	71,549.00	90,579.00
Diesel fuel consumption		kg	160,227.91	101,146.56	106,906.79
Gasoline consumption		kg	26.53	—	0
Fire extinguishers consumption		kg	—	—	392.00
Refrigerant or snow seed consumption		kg	—	—	0
Electricity consumption		kWh	32,447,800.00	34,636,475.84	35,251,301.00

① The calculation of greenhouse gas emissions is based on ISO 14064-1:2018 and the Greenhouse Gas Protocol. Greenhouse gas emission factors refer to the UK Government's Greenhouse Gas Conversion Factors for Company Reporting (2023), the IPCC Guidelines for National Greenhouse Gas Inventories (2006), the General Principles for Calculating Comprehensive Energy Consumption (GB/T 2589-2020), etc.

② During the carbon verification in 2023, a new database and new coefficients were uniformly used for accounting, so there are differences in Scope 3 data compared with the 2023 Sustainable Development Report of Guangming Branch.

## Resource Utilization and Circular Economy Data Sheet

Indicators		Units	2022	2023	2024
<b>Total consumption of packaging materials for manufactured goods</b>		<b>tons</b>	<b>14,075.95</b>	<b>20,095.27</b>	<b>20,186.04</b>
By type	Paper	tons	13,560.78	19,470.27	17,624.81
	Plastic	tons	515.17	625.00	2,561.23
<b>Total recycling of packaging materials for manufactured goods <sup>①</sup></b>		<b>tons</b>	<b>—</b>	<b>—</b>	<b>—</b>
By type	Paper	tons	—	—	—
	Plastic	tons	—	—	—
Water withdrawal		m <sup>3</sup>	380,117.00	394,025.85	401,770.00
Wastewater discharge		m <sup>3</sup>	342,105.30	314,334.77	317,192.40
Water consumption		m <sup>3</sup>	38,012.00	79,691.09	84,577.60
Circulating water intake		m <sup>3</sup>	0	0	49,334.00

① The company does not recycle finished product packaging materials by itself. Instead, We entrust them to third-party professional institutions for recycling or disposal, and have not yet collected or sorted out the recycling data from these third-party institutions.

## Pollutant Control Data Sheet

Indicators		Units	2022	2023	2024
<b>Waste Gases Emissions</b>					
<b>Total pollutants emissions in exhaust gas <sup>①</sup></b>		<b>kg</b>	<b>21,457.61</b>	<b>32,067.57</b>	<b>17,827.00</b>
By type	PM	kg	2.79	19.81	0
	NOx	kg	3.41	11.45	15.05
	SOx	kg	0.60	3.34	2.15
	NMHC	kg	8,140.00	13,990.00	7,786.70
	VOCs	kg	13,290.00	16,330.00	10,001.33
	Smoke and dust	kg	0	0	0
	Benzene	kg	0	0	—
	CF <sub>3</sub> CHFCF <sub>3</sub>	kg	—	1,693.00	—
	Tin and its compounds	kg	20.81	19.97	21.81
<b>Wastewater</b>					
Domestic sewage discharge		m <sup>3</sup>	342,105.30	314,334.77	317,192.40
<b>Waste</b>					
<b>Total weight of non-hazardous waste generated</b>		tons	<b>2,221.99</b>	<b>2,879.66</b>	<b>4,175.87</b>
<b>Total weight of non-hazardous waste disposal</b>		tons	<b>2,245.14</b>	<b>2,869.51</b>	<b>4,175.87</b>
By disposal method	Incineration	tons	—	—	—
	Landfill	tons	—	—	—
	Recycling	tons	—	—	—
	Composting	tons	—	—	—

Indicators		Units	2022	2023	2024
Non-hazardous waste disposal rate <sup>②</sup>		%	101.04	99.65	100
<b>Total weight of hazardous waste generated</b>		<b>tons</b>	<b>49.38</b>	<b>128.04</b>	<b>176.50</b>
By type	Stencil wipes, waste rags, waste gloves	tons	8.02	18.05	22.80
	Waste liquid	tons	0.96	1.32	2.10
	Waste empty containers and bottles	tons	2.68	5.32	9.87
	Waste activated carbon	tons	1.90	10.53	13.90
	Waste mineral oil	tons	0	0.18	0.76
	Waste light tubes	tons	0.87	0.29	0.17
	Scrap PCBs and board edges	tons	34.95	92.35	126.90
	PCB dust	tons	0	0	0
	Others	tons	0	0	0
<b>Total weight of hazardous waste disposal</b>		<b>tons</b>	<b>44.18</b>	<b>124.23</b>	<b>157.91</b>
By type	Stencil wipes, waste rags, waste gloves	tons	7.99	18.09	21.10
	Waste liquid	tons	0.87	1.41	2.10
	Waste empty containers and bottles	tons	2.54	5.46	9.15
	Waste activated carbon	tons	1.85	10.58	13.90
	Waste mineral oil	tons	0	0.18	0.76
	Waste light tubes	tons	0.87	0	0.43
	Scrap PCBs and board edges	tons	30.06	88.52	110.46
	PCB dust	tons	0	0	0

Indicators		Units	2022	2023	2024
By type	Others	tons	—	0	0
Hazardous waste disposal rate		%	89.48	97.02	89.47

① Total actual emissions of waste gas pollutants cannot be simply summed up directly due to differences in the concentrations of various pollutants. To avoid ambiguity, a simplified approach is adopted here for direct summation. This summed value is for reference only and does not represent the actual emissions.

② Some hazardous waste can be temporarily stored for one year in compliance with relevant laws, regulations and standards. Meanwhile, part of the hazardous waste generated in the previous year will be disposed of in the current year. Therefore, the total disposal volume of hazardous waste may be higher than its total generation volume, and the disposal rate of hazardous waste may exceed 100%.

# Appendix 1

## GRI Content Index

Statement of use	Lianzhou International Co., Ltd. Guangming Branch reported information cited in this GRI content index from January 1, 2024 to December 31, 2024, according to GRI standards.				
GRI 1 used	GRI 1: Foundation 2021				
Applicable GRI Sector Standard(s)	No applicable GRI Sector Standards				
GRI STANDARD	DISCLOSURE	LOCATION	OMISSION		
			REQUIREMENT(S) OMITTED	REQUIREMENT(S) OMITTED	REQUIREMENT(S) OMITTED
GRI 2: General Disclosures 2021	2-1 Organizational details	About TP-Link			
	2-2 Entities included in the organization's sustainability reporting	About the Report			
	2-3 Reporting period, frequency and contact point	About the Report			
	2-4 Restatements of information	ESG Data Sheet			
	2-5 External assurance	Verification Statement			
	2-6 Activities, value chain and other business relationships	Company Profile Business Scope			
	2-7 Employees	Employees			
	2-8 Workers who are not employees	ESG Data Sheet			
	2-9 Governance structure and composition	Sustainability Management			
	2-10 Nomination and selection of the highest governance body				
	2-11 Chair of the highest governance body				
	2-12 Role of the highest governance body in overseeing the management of impacts				
	2-13 Delegation of responsibility for managing impacts				
	2-14 Role of the highest governance body in sustainability reporting				

GRI STANDARD	DISCLOSURE	LOCATION	OMISSION		
			REQUIREMENT(S) OMITTED	REQUIREMENT(S) OMITTED	REQUIREMENT(S) OMITTED
GRI 2: General Disclosures 2021	2-15 Conflicts of interest	Business Ethics			
	2-16 Communication of critical concerns				
	2-17 Collective knowledge of the highest governance body	Sustainability Management			
	2-18 Evaluation of the performance of the highest governance body				
	2-19 Remuneration policies	Employees			
	2-20 Process to determine remuneration				
	2-21 Annual total compensation ratio	ESG Data Sheet			
	2-22 Statement on sustainable development strategy	Message from the CEO			
	2-23 Policy commitments	Sustainability Governance Supply Chain Management Employees			
	2-24 Embedding policy commitments				
	2-25 Processes to remediate negative impacts				
	2-26 Mechanisms for seeking advice and raising concerns	Sustainability Management			
	2-27 Compliance with laws and regulations	Compliance Supervision Supplier training and communication Employee communication Violation management			
	2-28 Membership associations				
	2-29 Approach to stakeholder engagement	Identification and Communication with Stakeholders			
2-30 Collective bargaining agreements	Employee communication				
<b>Material topics</b>					
GRI 3: Material Topics 2021	3-1 Process to determine material topics	Dual Materiality Analysis			
	3-2 List of material topics				

GRI STANDARD	DISCLOSURE	LOCATION	OMISSION		
			REQUIREMENT(S) OMITTED	REQUIREMENT(S) OMITTED	REQUIREMENT(S) OMITTED
<b>Economic performance</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	Dual Materiality Analysis Green Development Employees			
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	ESG Data Sheet			
	201-2 Financial implications and other risks and opportunities due to climate change	Green Development			
	201-3 Defined benefit plan obligations and other retirement plans	Employees			
	201-4 Financial assistance received from government	Omitted	201-4a 201-4b 201-4c	Confidentiality constraints	In adherence to the Company's confidentiality policies, it will not be disclosing the pertinent information externally.
<b>Indirect economic impacts</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	Dual materiality analysis Supply Chain Management			
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported	Supply Chain Management			
	203-2 Significant indirect economic impacts				
<b>Procurement practices</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	Dual Materiality Analysis Supply Chain Management			
GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	ESG Data Sheet			
<b>Anti-corruption</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	Dual Materiality Analysis Business Ethics			

GRI STANDARD	DISCLOSURE	LOCATION	OMISSION		
			REQUIREMENT(S) OMITTED	REQUIREMENT(S) OMITTED	REQUIREMENT(S) OMITTED
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	Business Ethics			
	205-2 Communication and training about anti-corruption policies and procedures				
	205-3 Confirmed incidents of corruption and actions taken				
<b>Anti-competitive behavior</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	Dual materiality analysis Business Ethics			
GRI 206: Anti-competitive Behavior 2016	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Business Ethics			
<b>Materials</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	Dual Materiality Analysis Green Development			
GRI 301: Materials 2016	301-1 Materials used by weight or volume	Green Development			
	301-2 Recycled input materials used				
	301-3 Reclaimed products and their packaging materials				
<b>Energy</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	Dual Materiality Analysis Green Development			
GRI 302: Energy 2016	302-1 Energy consumption within the organization	ESG Data Sheet			
	302-2 Energy consumption outside of the organization				
	302-3 Energy intensity	Omitted	302-3a 302-3b 302-3c 302-3d	Confidentiality constraints	In adherence to the Company's confidentiality policies, it will not be disclosing the pertinent information externally.

GRI STANDARD	DISCLOSURE	LOCATION	OMISSION		
			REQUIREMENT(S) OMITTED	REQUIREMENT(S) OMITTED	REQUIREMENT(S) OMITTED
GRI 302: Energy 2016	302-4 Reduction of energy consumption	Green Development			
	302-5 Reductions in energy requirements of products and services	Omitted	302-5a 302-5b 302-5c	Information unavailable / incomplete	Given the diverse array of product types offered by the Company, which exhibit considerable differences in power requirements and usage environments, it is impractical to monitor and quantify the actual energy consumption at the point of use. Consequently, it is not possible to quantify the reduction in energy demand for our products. Throughout the reporting period, the Company has consistently intensified its initiatives focused on the design, research, and production of environmentally friendly products, with the aim of decreasing energy utilization.
<b>Water and effluents</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	Dual Materiality Analysis Resources Management			
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	Water resources management			
	303-2 Management of water discharge-related impacts				
	303-3 Water withdrawal	ESG Data Sheet			
	303-4 Water discharge				
	303-5 Water consumption				

GRI STANDARD	DISCLOSURE	LOCATION	OMISSION		
			REQUIREMENT(S) OMITTED	REQUIREMENT(S) OMITTED	REQUIREMENT(S) OMITTED
<b>Emissions</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	Dual Materiality Analysis Climate Change Response			
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	Climate Change Response ESG Data Sheet			
	305-2 Energy indirect (Scope 2) GHG emissions				
	305-3 Other indirect (Scope 3) GHG emissions				
	305-4 GHG emissions intensity				
	305-5 Reduction of GHG emissions				
	305-6 Emissions of ozone-depleting substances (ODS)				
	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions				
<b>Waste</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	Dual Materiality Analysis Environmental Management			
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	Environmental Management ESG Data Sheet			
	306-2 Management of significant waste-related impacts				
	306-3 Waste generated				
	306-4 Waste diverted from disposal				
	306-5 Waste directed to disposal				
<b>Supplier environmental assessment</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	Dual Materiality Analysis Supply Chain Management			
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	Supply Chain Management			

GRI STANDARD	DISCLOSURE	LOCATION	OMISSION		
			REQUIREMENT(S) OMITTED	REQUIREMENT(S) OMITTED	REQUIREMENT(S) OMITTED
GRI 308: Supplier Environmental Assessment 2016	308-2 Negative environmental impacts in the supply chain and actions taken	Supply Chain Management			
<b>Employment</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	Dual Materiality Analysis Employees			
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	ESG Data Sheet			
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	Employees			
	401-3 Parental leave	ESG Data Sheet			
<b>Labor / management relations</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	Dual Materiality Analysis Employees			
GRI 402: Labor / management Relations 2016	402-1 Minimum notice periods regarding operational changes	Employees			
<b>Occupational health and safety</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	Dual Materiality Analysis Health and Safety			
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	Health and Safety			
	403-2 Hazard identification, risk assessment, and incident investigation				
	403-3 Occupational health services				
	403-4 Worker participation, consultation, and communication on occupational health and safety				
	403-5 Worker training on occupational health and safety				

GRI STANDARD	DISCLOSURE	LOCATION	OMISSION		
			REQUIREMENT(S) OMITTED	REQUIREMENT(S) OMITTED	REQUIREMENT(S) OMITTED
GRI 403: Occupational Health and Safety 2018	403-6 Promotion of worker health	Health and Safety			
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships				
	403-8 Workers covered by an occupational health and safety management system				
	403-9 Work-related injuries	ESG Data Sheet			
	403-10 Work-related ill health	Health and Safety			
<b>Training and education</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	Dual Materiality Analysis Empowerment, Assessment and Development			
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	ESG Data Sheet			
	404-2 Programs for upgrading employee skills and transition assistance programs	Empowerment, Assessment and Development			
	404-3 Percentage of employees receiving regular performance and career development reviews	ESG Data Sheet			
<b>Diversity and equal opportunity</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	Dual Materiality Analysis Employees			
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	Employees ESG Data Sheet			
	405-2 Ratio of basic salary and remuneration of women to men	Omitted	405-2a 405-2b	Confidentiality constraints	In adherence to the Company's confidentiality policies, it will not be disclosing the pertinent information externally.

GRI STANDARD	DISCLOSURE	LOCATION	OMISSION		
			REQUIREMENT(S) OMITTED	REQUIREMENT(S) OMITTED	REQUIREMENT(S) OMITTED
<b>Non-discrimination</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	Dual Materiality Analysis Employees			
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	Employees			
<b>Freedom of association and collective bargaining</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	Dual Materiality Analysis Employees Supply Chain Management			
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	Employees Supply Chain Management			
<b>Child labor</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	Dual Materiality Analysis Employees Supply Chain Management			
GRI 408: Child Labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor	Employees Supply Chain Management			
<b>Forced or compulsory labor</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	Dual Materiality Analysis Employees Supply Chain Management			
GRI 409: Forced or Compulsory Labor 2016	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	Employees Supply Chain Management			

GRI STANDARD	DISCLOSURE	LOCATION	OMISSION		
			REQUIREMENT(S) OMITTED	REQUIREMENT(S) OMITTED	REQUIREMENT(S) OMITTED
<b>Local communities</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	Dual Materiality Analysis Identification and Communication with Stakeholders			
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	Identification and Communication with Stakeholders			
	413-2 Operations with significant actual and potential negative impacts on local communities				
<b>Supplier social assessment</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	Dual Materiality Analysis Supply Chain Management			
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	Supply Chain Management ESG Data Sheet			
	414-2 Negative social impacts in the supply chain and actions taken				
<b>Customer health and safety</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	Dual Materiality Analysis Products and Services			
GRI 416: Customer Health and Safety 2016	416-1 Assessment of the health and safety impacts of product and service categories	Products and Services			
	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services				
<b>Marketing and labeling</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	Dual Materiality Analysis Products and Services			
GRI 417: Marketing and Labeling 2016	417-1 Requirements for product and service information and labeling	Products and Services			

GRI STANDARD	DISCLOSURE	LOCATION	OMISSION		
			REQUIREMENT(S) OMITTED	REQUIREMENT(S) OMITTED	REQUIREMENT(S) OMITTED
GRI 417: Marketing and Labeling 2016	417-2 Incidents of non-compliance concerning product and service information and labeling	Products and Services			
	417-3 Incidents of non-compliance concerning marketing communications				
<b>Customer privacy</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	Dual Materiality Analysis Information Security Protection of Customer Rights and Interests			
GRI 418: Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	Information Security Protection of Customer Rights and Interests			

# Appendix 2

## SASB Standards Index- Electronic Manufacturing Services & Original Design Manufacturing

TOPIC	CODE	METRIC	LOCATION
Water Management	TC-ES-140a.1	(1) Total water withdrawn (m3); (2) Total water consumed (m3); (3) percentage of total water withdrawn in regions with High or Extremely High Baseline Water Stress (%); (4) percentage of total water consumed in regions with High or Extremely High Baseline Water Stress (%)	Resources Management ESG Data Sheet
Waste Management	TC-ES-150a.1	(1) Amount of hazardous waste from manufacturing (t); (2) Percentage of recycled hazardous waste (%)	Environmental Management ESG Data Sheet
Labor Practices	TC-ES-310a.1	(1) Number of work stoppages (No.); (2) Total days idle (days)	ESG Data Sheet
Workforce Conditions, Health & Safety	TC-ES-320a.1	(1a) Total recordable incident rate (TRIR) for direct employees; (1b) Total recordable incident rate (TRIR) for contract employees; (2a) Near miss frequency rate (NMFR) for direct employees; (2b) Near miss frequency rate (NMFR) for contract employees.	ESG Data Sheet
	TC-ES-320a.2	(1a) Percentage of entity's facilities audited in the RBA Validated Audit Process (VAP) or equivalent, by all facilities; (1b) Percentage of entity's facilities audited in the RBA Validated Audit Process (VAP) or equivalent, by high-risk facilities; (2a) Percentage of Tier 1 supplier facilities audited in the RBA Validated Audit Process (VAP) or equivalent, by all facilities; (2b) Percentage of Tier 1 supplier facilities audited in the RBA Validated Audit Process (VAP) or equivalent, by high-risk facilities.	Supply Chain Management ESG Data Sheet
	TC-ES-320a.3	(1i) Non-conformance rate with the RBA Validated Audit Process (VAP) or equivalent disaggregated by the entity's facilities; (1ii) Non-conformance rate with the RBA Validated Audit Process (VAP) or equivalent disaggregated by the entity's Tier 1 supplier facilities; (2ai) Associated corrective action rate for priority nonconformances, disaggregated by the entity's facilities; (2aii) Associated corrective action rate for priority nonconformances, disaggregated by the entity's Tier 1 supplier facilities; (2bi) Associated corrective action rate for other nonconformances, disaggregated by the entity's facilities; (2bii) Associated corrective action rate for other nonconformances, disaggregated by the entity's Tier 1 supplier facilities.	ESG Data Sheet
Product Lifecycle Management	TC-ES-410a.1	Weight of end-of-life products and e-waste recovered (t); percentage recycled of end-of-life products and e-waste (%)	ESG Data Sheet
Materials Sourcing	TC-ES-440a.1	Description of the management of risks associated with the use of critical materials.	Conflict Minerals Management ESG Data Sheet

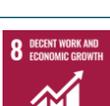
# Appendix 3

## ISSB Standards Index

ISSB Standards	Disclosures	Corresponding chapters and sections	Page numbers
Governance	<p>a) Describe the board's oversight of climate-related risks and opportunities.</p> <p>b) Describe the role of the management in assessing and managing climate-related risks and opportunities.</p>	Climate Change Response - Governance	P38
Strategy	<p>a) Describe the climate-related risks and opportunities identified by the organization in the short, medium, and long term.</p> <p>b) Describe the impact of climate-related risks and opportunities on organizational operations, strategies, and financial planning.</p> <p>c) Describe the resilience of organizational strategies considering different climate-related conditions, including scenarios with a temperature of 2°C or lower.</p>	<p>Climate Change Response – Strategy</p> <p>Analysis of climate change risk impacts and response strategies</p> <p>Analysis of the impact of climate change opportunities and response strategies</p>	P38,P39,P41
Risk Management	<p>a) Describe the process by which organizations identify and assess climate-related risks.</p> <p>b) Describe the process by which organizations manage climate-related risks.</p> <p>c) Describe how the process of identifying, assessing, and managing climate-related risks is integrated into overall risk management of the organization.</p>	Climate Change Response - Risk management	P43
Indicators and targets	<p>a) Disclose the indicators used by the organization to assess climate-related risks and opportunities based on its strategy and risk management processes.</p> <p>b) Disclose greenhouse gas (GHG) emissions and related risks from direct emissions (Scope 1), indirect emissions (Scope 2), and other indirect emissions (Scope 3) (if applicable).</p> <p>c) Describe the objectives that the organization uses to manage climate-related risks and opportunities, and the comparison between performance and objectives.</p>	Climate Change Response - Target indicators	P43

# Appendix 4

## Sustainability Goals Index

SDGs	Response	Corresponding chapters and sections	Page numbers
	Employees	<ul style="list-style-type: none"> <li>All employees are covered by the social insurance system and enjoy comprehensive social security benefits.</li> </ul>	P26
	Rights and Equality Health and Safety Employee care	<ul style="list-style-type: none"> <li>Provide all employees with full statutory rights protection.</li> <li>Regularly conduct assessments of occupational hazards, safety emergency drills, occupational disease examinations, and annual inspections of special equipment.</li> <li>Allocate funds for psychological care activities, organize various cultural and sports activities to enhance employee happiness.</li> </ul>	P28, P32, P36
	Empowerment, Assessment and Development	<ul style="list-style-type: none"> <li>Design personalized training courses to continuously enhance employees' knowledge and skills.</li> <li>Design a "professional + management" dual-channel career development mechanism to create diversified career development opportunities and paths for employees.</li> </ul>	P30
	Rights and Equality	<ul style="list-style-type: none"> <li>Enforce a zero-tolerance policy against discrimination and harassment in all forms.</li> <li>Foster an inclusive and equal, open and diverse workplace atmosphere.</li> </ul>	P28
	Water resources management	<ul style="list-style-type: none"> <li>Actively improve the efficiency of water resource utilization through measures such as water conservation promotion, and investigation and control of network leakage.</li> </ul>	P44
	Resources Management	<ul style="list-style-type: none"> <li>Adhere to the ISO 50001 standard and promote the construction of an energy management system to achieve the goal of reducing energy consumption and improving energy utilization efficiency.</li> <li>Implement a series of energy-saving projects and initiate planning for renewable and clean energy.</li> <li>Actively conduct proactive energy-saving awareness campaigns and training initiatives to boost employee awareness and engagement in energy-saving efforts.</li> </ul>	P44
	About TP-Link Employees	<ul style="list-style-type: none"> <li>Continuously provide high-quality, highly reliable, and high-performance product experiences to global users.</li> <li>Adhere to independent research and development, independent manufacturing, and independent marketing, creating a global industrial layout and collaborating with over 40 overseas strategic partners.</li> <li>Regularly conduct propaganda and training on human rights management systems and related topics.</li> </ul>	P5, P26

SDGs	Response	Corresponding chapters and sections	Page numbers
	Products and Services	<ul style="list-style-type: none"> <li>Vigorously develop fields such as chip design, artificial intelligence, cloud computing, network security, and industrial Internet.</li> </ul>	P6
	Rights and Equality	<ul style="list-style-type: none"> <li>Ensure equality and fair compensation for equivalent work.</li> <li>Pay special attention to protecting the legitimate rights and interests of female employees during special periods such as menstruation, pregnancy, and lactation.</li> <li>Provide lactation rooms and additional family care support measures.</li> </ul>	P28
	Supply Chain Management Green Development	<ul style="list-style-type: none"> <li>Promote sustainable procurement with the policy of "green procurement, responsible procurement" to build a sustainable supply chain system.</li> <li>Adhere to the green environmental protection concept and carry out product green innovation.</li> <li>Introduce the concept of product lifecycle management into the design and development stage to ensure that products meet the requirements of green products.</li> <li>Constantly refine process parameters and monitor equipment conditions during production, and promote the adoption of energy-saving technology upgrades and initiatives.</li> </ul>	P17, P37
	Supply Chain Management Products and Services	<ul style="list-style-type: none"> <li>Endeavor to enhance the management level of conflict minerals and actively respond to conflict mineral-related regulations and customer requirements.</li> <li>Build a quality system covering all business areas and operational processes, including manufacturing and services.</li> <li>Integrate the protection of customers' various legitimate rights and interests into corporate governance, cultural construction, and business development efforts.</li> </ul>	P17, P23
	Climate Change Response	<ul style="list-style-type: none"> <li>Incorporate climate change-related issues into sustainability concerns and management frameworks.</li> <li>Actively analyze climate change risks and formulate scientific response strategies.</li> </ul>	P38
	Sustainability Management Business Ethics Supply Chain Management	<ul style="list-style-type: none"> <li>Establish a top leadership composed of executive directors and supervisors to comprehensively identify risks, formulate comprehensive strategies, and effectively implement strategies and business plans.</li> <li>Conduct an annual business ethics risk assessment to promptly identify and respond to risk factors that may affect business ethics.</li> <li>Implement the internal control system established by the parent company, Lianzhou International.</li> <li>Implement a strategy of unified management of the supply chain, with the Sustainability Management Committee of the group planning and coordinating the procurement department to carry out sustainable management of the supply chain.</li> </ul>	P8, P13, P17
	Message from the CEO Participation in Initiatives Products and Services	<ul style="list-style-type: none"> <li>Prioritize information security and privacy protection for stakeholders, ensuring compliance with information security requirements throughout the daily product development and company operations processes.</li> <li>Actively participate in RBA, RMI, SBTi, and UNGC initiatives.</li> <li>Include 11 indicators such as "zero product safety complaints" in the annual quality target system.</li> <li>Build a comprehensive customer service system through standardized processes, methods, and means.</li> </ul>	P4, P6, P23

# Appendix 5

## Verification Statement





### ASSURANCE STATEMENT

CN25/00002459

**SGS-CSTC Lianzhou International Co., Ltd. Guangming Branch'S REPORT ON SUSTAINABILITY ACTIVITIES IN THE Lianzhou International Co., Ltd. Guangming Branch Sustainability Report FOR 2024**

**NATURE AND SCOPE OF THE ASSURANCE VERIFICATION**  
 SGS-CSTC STANDARDS TECHNICAL SERVICES CO., LTD. (hereinafter referred to as SGS) was commissioned by Lianzhou International Co., Ltd. Guangming Branch (hereinafter referred to as Guangming Branch) to conduct an independent assurance of the Chinese version of Lianzhou International Co., Ltd. Guangming Branch Sustainability Report FOR 2024 (hereinafter referred to as the Report).

**INTENDED USERS OF THIS ASSURANCE STATEMENT**  
 This Assurance Statement is intended to be provided to all stakeholders of the Guangming Branch.

**RESPONSIBILITIES**  
 The information in the Report and its presentation are the responsibility of the governing body and the management of Guangming Branch. SGS has not been involved in the preparation of any of the material included in the Report.

Our responsibility is to express an opinion on the text, data, graphs and statements within the scope of assurance, with the intention of informing all stakeholders of the Guangming Branch.

SGS hereby states that it shall not be held responsible or liable for any direct, indirect losses arising from or in connection with the use of information provided in this report.

**ASSURANCE STANDARDS, TYPE AND LEVEL OF ASSURANCE**  
 The SGS ESG & Sustainability Report Assurance (SRA) protocols used to conduct assurance are based upon internationally recognised assurance standards including the AA1000 series of standards and ISAE3000.

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

Assurance Standard	Level of Assurance
AA1000AS v3 Type 2	Moderate

**SCOPE OF ASSURANCE AND REPORTING CRITERIA**  
 The assurance includes assessing the accuracy and reliability of sustainability performance in the report. The content of the report was prepared using the following criteria:

- Refers to the requirements of *GRI Standards 2021*.
- The Sustainability Accounting Standard for Electronic Manufacturing Services and Original Design Manufacturing by the Sustainability Accounting Standards Board (SASB).
- IFRS S1: General Requirements for Disclosure of Sustainability-related Financial Information and IFRS S2: Climate-related Disclosures issued by International Sustainability Standards Board (ISSB).

**ASSURANCE METHODOLOGY**  
 The assurance comprised a combination of pre-assurance research, interviews with relevant employees onsite at No.198, Kellian Road, Yutang Community, Yutang Street, Guangming District, Shenzhen City, Guangdong Province, P.R.China, with necessary documentation and record review and validation where relevant.

**ASSURANCE LIMITATIONS**  
 Data drawn directly from independently audited financial accounts has not been checked back to source as part of this assurance process.



The greenhouse gas emission related data in the Report has been directly adopted from the independent third party verification data and has not been double verified in this audit.

**STATEMENT OF INDEPENDENCE AND COMPETENCE**  
 The SGS Group of companies is the world leader in inspection, testing and certification, operating in multiple countries and providing services. SGS affirm our independence from Guangming Branch, being free from bias and conflicts of interest with the organisation, its subsidiaries and stakeholders.

The assurance team was assembled based on their knowledge, experience and qualifications for this assignment.

**FINDINGS AND CONCLUSIONS**  
**ASSURANCE/VERIFICATION OPINION**  
 On the basis of the methodology described and the assurance engagement performed, the information and data contained in the Report is accurate and reliable, which provides a fair and pertinent statement of the sustainability activities of the Guangming Branch in 2024.

**CONCLUSIONS, FINDINGS AND RECOMMENDATIONS**  
 The assurance team concludes that the Report:

- Has referred to the requirements of *GRI Standards 2021*.
- In accordance with the Sustainability Accounting Standard for Electronic Manufacturing Services and Original Design Manufacturing by the Sustainability Accounting Standards Board (SASB).
- In accordance with IFRS S1: General Requirements for Disclosure of Sustainability-related Financial Information and IFRS S2: Climate-related Disclosures issued by International Sustainability Standards Board (ISSB).

**FINDINGS AND RECOMMENDATIONS**  
 All observations pertaining to commendable practices, sustainable development activities, and managerial recommendations identified throughout the assurance process have been thoroughly documented in the *Internal Management Report on Sustainability Reporting Assurance*. This report has been officially presented to the relevant management divisions of Guangming Branch to serve as a reference for their ongoing efforts towards continuous improvement.

Signed:



For and on behalf of SGS-CSTC

David Xin  
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Apr. 17<sup>th</sup>, 2025  
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