

TSMC 2024

Responsible Supply Chain Report



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The Journey Toward a Sustainable Supply Chain

Message from the Executive

In recent years, the rise in natural disasters caused by extreme climate events, growing social inequality, human rights violations, and global geopolitical and economic instability have posed challenges to business continuity while also drawing heightened international attention to corporate supply chain management. TSMC is dedicated to being a responsible purchaser. In collaboration with its supply chain partners, the Company promotes ESG transformation and has published its first TSMC Responsible Supply Chain Report. This report provides a systematic disclosure of TSMC's supply chain policies and achievements, with the aim of fostering responsible practices across the supply chain. Through transparent reporting, TSMC seeks to strengthen collaborative synergies and partnerships, driving progress toward global sustainable development.

TSMC regards supply chain resilience as a key driver of corporate competitiveness. Building on its commitment to accountable operations, the Company instituted a comprehensive supply chain governance framework that includes regular supplier support and audits, proactive development of new suppliers, and encouragement for suppliers to diversify production sites while increasing local investments to mitigate the risk of supply chain disruptions. In line with the German Supply Chain Due Diligence Act (SCDDA) and the European Union's 2024 Corporate Sustainability Due Diligence Directive (CSDDD), TSMC identifies, assesses, prevents, and remediates potential human rights and environmental impacts throughout its supply chain. These efforts not only strengthen supply chain resilience but also guide partners toward sustainable transformation.

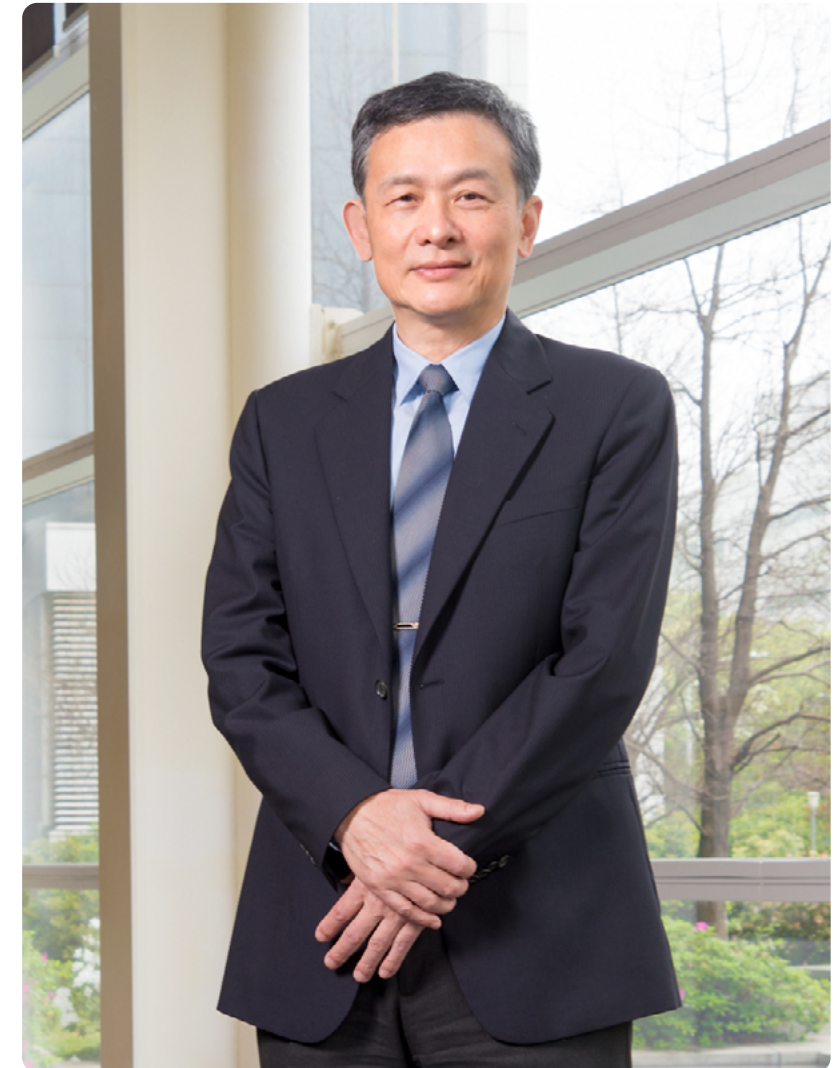
In 2024, TSMC established the semiconductor industry's first "Zero Waste Manufacturing Center", integrating suppliers' waste reuse and treatment technologies to transform waste into reusable raw materials. The Company also collaborated with Taiwan's Ministry of Environment to develop "membrane carbon capture technology," leveraging green innovation to expand

its sustainable impact. To enhance suppliers' low-carbon management capabilities, TSMC introduced the Supply Chain Carbon Reduction Subsidy Project and Phase II of the Joint Procurement of Renewable Energy, while incorporating carbon-reduction performance as a key criterion in supplier selection. TSMC also partnered with suppliers, government agencies, and academic institutions on multiple industry-government-academic initiatives, such as developing recycling technology for electronic-grade Tetramethyl Ammonium Hydroxide (TMAH), reducing biological sludge combined with biogas recovery, and recovering copper ions from wastewater. Beyond environmental efforts, TSMC emphasizes respect for human rights across its supply chain. The Company prioritizes sourcing conflict-free minerals, integrates supplier human rights performance into long-term sustainability objectives, and has implemented a Supplier Human Rights Management Tracking Platform. These initiatives aim to foster a global semiconductor supply chain that is not only low-carbon but also upholds human rights.

Building a sustainable supply chain is TSMC's long-term mission. Through the publication of this report, the Company aims to inspire innovation and strengthen collaborative partnerships with its value chain partners to address global sustainability challenges. Guided by its core principles of "operational continuity, environmental protection, and social responsibility," The Company strives to achieve mutual prosperity for all stakeholders.

Cliff Hou

Senior Vice President and Deputy Co-CEO



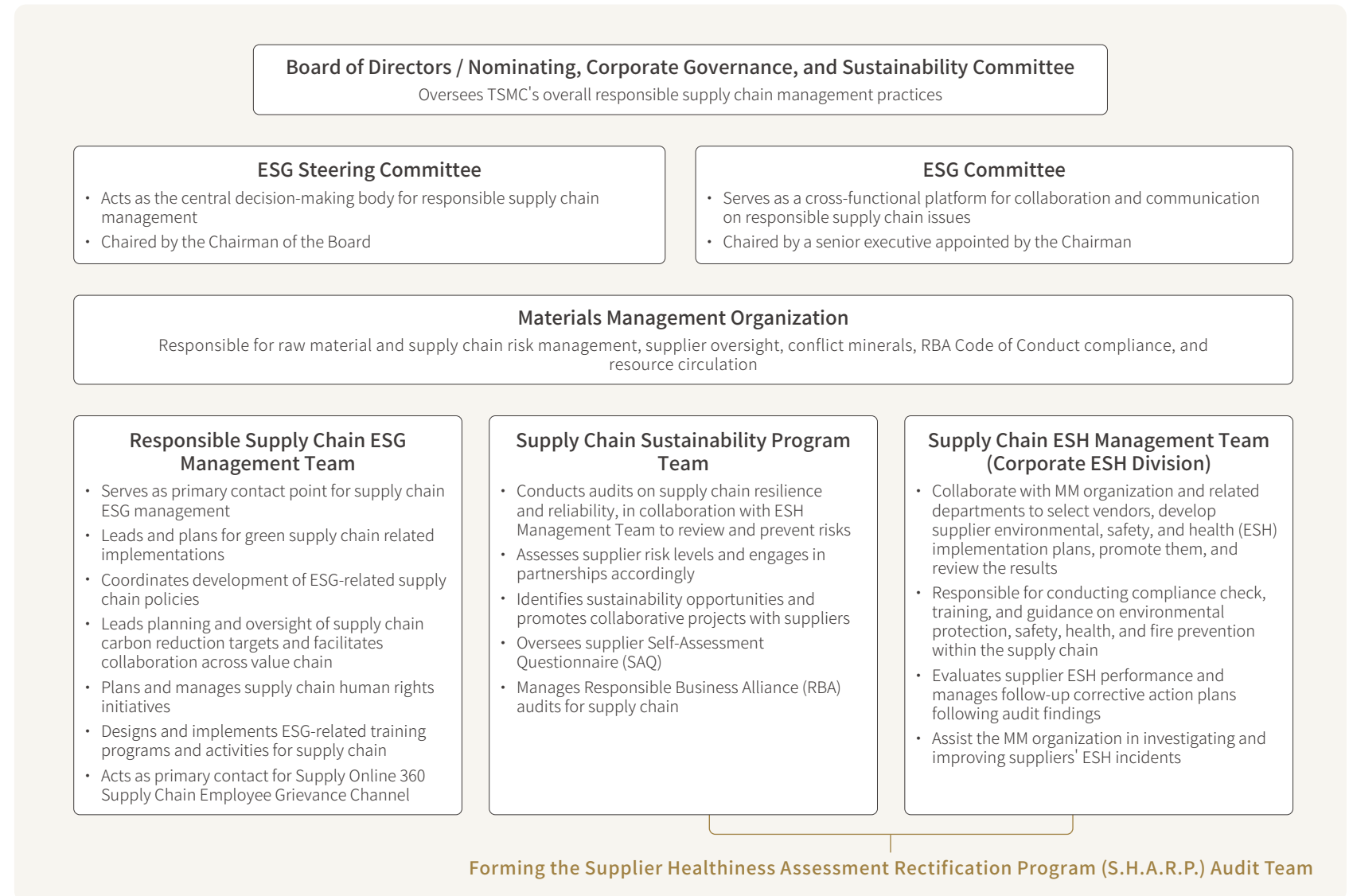
Responsible Supply Chain Management Platform

Building a responsible supply chain is one of TSMC's five core [ESG directions](#). The Nominating, Corporate Governance, and Sustainability Committee under the Board of Directors serves as the highest decision-making body, overseeing major sustainability issues and guiding future planning. To achieve sustainable supply chain development goals, the ESG Steering Committee defines management visions and strategies, while the ESG Committee is responsible for implementing resolutions and tracking performance outcomes. TSMC has also established dedicated teams, including the Responsible Supply Chain ESG Management Team, the Supply Chain Sustainability Program Team, and the Supply Chain ESH Management Team. These teams are tasked with managing supplier ESG initiatives and audit programs across TSMC's Taiwan sites and overseas subsidiaries, in alignment with [four key guiding principles](#): Management and Commitment, Identification and Assessment, Mitigation and Improvement, and Communication and Cooperation. Relevant ESG performance and risk management accomplishments from the supply chain are regularly reported to the ESG Committee. The Chairperson of the ESG Committee provides updates regularly to the Board of Directors and the Nominating, Corporate Governance, and Sustainability Committee on progress.

The Nominating, Corporate Governance, and Sustainability Committee under the Board of Directors serves as the highest decision-making body, overseeing major sustainability issues and guiding future planning.



● Responsible Supply Chain Management Platform





Supply Chain Management Goals

★ Exceeded ♦ Achieved

Implement Accountable Supply Chain Management

2030 Goals	2025 Targets	2024 Achievements
Continue to diversify production plant sites and assess new suppliers; develop 185 multi-source supply solutions (Base year: 2018)	Complete the development of 165 multi-source supply programs	♦ Completed the development of 155 multi-source supply programs ● Target: 155 programs
Annually ensure 100% of tier 1 suppliers ^{Note 1} complete the Self-Assessment Questionnaire (SAQ) ^{Note 2}	—	♦ 100% of tier 1 suppliers complete the Sustainability Management Self-Assessment Questionnaire ● Target: 100%
Ensure 100% significant suppliers ^{Note 3} receive Code of Conduct audits by RBA-certified agencies every year ^{Note 2}	—	♦ A total of 70 significant suppliers completed third-party supplier audits with an annual completion rate of 100% ● Target: 70 significant suppliers
Ensure 980 sessions of S.H.A.R.P. audits toward high risk significant suppliers at a pace of 120 sessions a year ^{Note 2}	—	★ Completed 150 sessions of S.H.A.R.P. audits toward high risk significant suppliers ● Target: 110 sessions
Ensure 100% high risk significant suppliers complete Safety and Health consultation ^{Note 2}	—	♦ Ensure 100% high risk significant suppliers complete Safety and Health consultation ^{Note 5} ● Target: 100%
Ensure a cumulative total of 300 raw materials suppliers ^{Note 4} participate in the annual emergency response drill (Base year: 2016) ^{Note 2}	—	★ 22 raw materials suppliers participated in the annual emergency response drill, bringing the cumulative total to 212 ● Target: Cumulative total 210
Ensure a cumulative total of 1,500 suppliers ^{Note 4} participate in the Environmental Safety and Health (ESH) training programs (Base year: 2016) ^{Note 2}	—	★ 725 suppliers participated in the ESH training programs, bringing the cumulative total to 1,879 ● Target: Cumulative total 1,300
Ensure a cumulative total of 145 local raw materials suppliers receive consultation on process advancement and quality improvement (Base year: 2016)	Ensure a cumulative total of 95 local suppliers receive consultation on process advancement and quality improvement	♦ Ten suppliers received consultation on process advancement and quality improvement, bringing the cumulative total to 85 ● Target: 10; cumulative total 85

Note 1: Tier 1 suppliers: Suppliers trading directly with TSMC with more than three orders per year, with order amounts exceeding NT\$5 million, excluding suppliers related to warehousing, hospitals, or those with no further transactions, to ensure the questionnaire's applicability. The number of tier 1 suppliers meeting this definition was 1,294 in 2023 and 1,429 in 2024. To enhance information transparency and the comprehensiveness of management practices, the survey results and management actions for the 1,294 tier 1 suppliers in 2023 are disclosed, along with the total number of tier 1 suppliers in 2024.

Note 2: To better highlight supplier management performance, indicators related to routine operations will be removed starting in 2025. Instead, outcomes will be presented in the main text.

Note 3: Significant Supplier: Suppliers accounting for the top 85% of the purchasing expenses or of a single-source purchase, or suppliers recognized as significant by TSMC after assessing multiple risk indicators, including the suppliers' market shares, inventory levels and characteristics, and potential environmental, social, and governance negative impact risks.

Note 4: Mainly involving suppliers in Taiwan.

Note 5: In 2023, TSMC conducted 99 supplier audits and consultations, among which one supplier scored below 70 and another scored below 60 (suppliers scoring below 60 will have their qualifications revoked). The consultation and corrective actions were completed in 2024.



★ Exceeded ♦ Achieved

Advance Toward Net Zero and Environmental Harmony

2030 Goals	2025 Targets	2024 Achievements
Reduce supplier ^{Note 6} carbon emissions by 30% from what they would be in the absence of action (Comparing result from the BAU scenario)	Reduce supplier carbon emissions by 8% comparing to BAU scenario	♦ Reduced supplier carbon emissions by 4% comparing to BAU scenario ● Target: 4%
Suppliers invited to participate in CDP in the year should achieve an average score of B and a response rate of 95%	Suppliers invited to participate in CDP in the year should achieve an average score of B- and a response rate of 100%	★ Suppliers invited to participate in CDP ^{Note 7} in the year achieved an average score of B- and a response rate of 100% ● Target: Average score of B- and a response rate 98%
Ensure 100% of high energy consumption suppliers ^{Note 8} receive ISO 14064 GHG Emission verification (Base year: 2021)	Ensure 92% of high energy consumption suppliers receive ISO 14064 GHG Emission verification	★ 90% of high energy consumption suppliers received ISO 14064 GHG Emission verification ● Target: 88%
Provide consultation on power reduction for suppliers ^{Note 4} and reduce energy consumption by a total of 1,500 GWh (Base year: 2018)	Reduce supplier energy consumption by a cumulative total of 1,150 GWh	★ Reduced supplier energy consumption by a cumulative total of 1,026 GWh ● Target: 900 GWh
Provide consultation on water reduction for suppliers ^{Note 4} and reduce water consumption by a cumulative total of 150 million metric tons (Base year: 2020)	Reduce supplier water consumption by a cumulative total of 65 million metric tons	★ Reduced supplier water consumption by a cumulative total of 54.86 million metric tons ● Target: 50 million metric tons
Reduce waste production among local major suppliers ^{Note 9} by 42% (Base year: 2014)	—	★ Reduced waste production among local major suppliers by 42% ● Target: 40%
Provide consultation on waste reduction for suppliers ^{Note 4} and achieve an average waste recycling rate of 86% ^{Note 10} NEW	Achieve an average waste recycling rate of 81% NEW	— Achieved an average waste recycling rate of 80% NEW
Require tier 1 suppliers ^{Note 1} to establish phase-out plans for regulated materials ^{Note 11} , with a 100% completion rate NEW	Require tier 1 suppliers to establish phase-out plans for regulated materials, with a 73% completion rate NEW	—

Note 6: The suppliers are raw material suppliers, including silicon wafers, bulk gases, bulk chemicals and other chemical suppliers.

Note 7: Suppliers invited to participate in CDP in 2024: A total of 135 suppliers of raw materials and equipment met the top 75% of procurement categories and expenditures.

Note 8: High energy consumption suppliers: Suppliers in Taiwan whose energy consumption at a single site >5 GWh/year.

Note 9: Mainly focusing on suppliers in Taiwan producing 80% of the waste in raw materials. Calculation formula: $A/(A+B)(\%)$, where A represents the waste reduced by the factory in that month (metric tons), and B denotes the waste produced by the factory in that month (metric tons). In response to the new goal to "guide suppliers in waste reduction actions and average waste recycling rates," this target will be merged with the new goal starting next year.

Note 10: To fully reflect suppliers' waste reduction outcomes, starting in 2025, the survey scope will expand from local suppliers with significant waste generation to all suppliers in Taiwan, with regular monitoring of their average waste recycling rate.

Note 11: Regulated materials include PFOS, Perfluorooctanesulfonic acid (PFOS), Perfluorooctanoic acid (PFOA), and N-methylpyrrolidone (NMP).



★ Exceeded ♦ Achieved

Advance
Toward
Net Zero and
Environmental
Harmony

Uphold
Human Rights
Values in the
Supply Chain

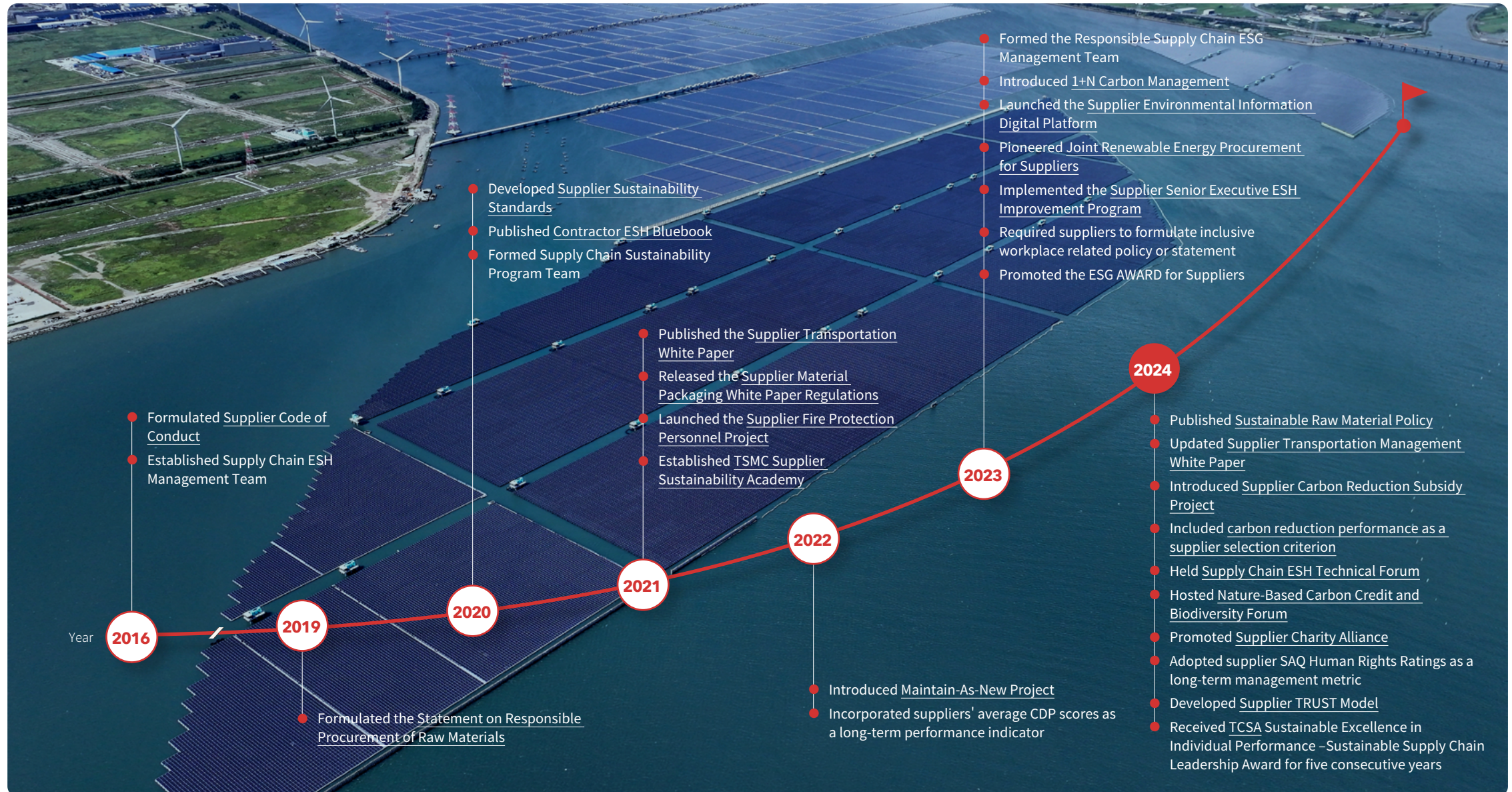
2030 Goals	2025 Targets	2024 Achievements
Increase Taiwan local sourcing: 68% for indirect raw materials	Source 65.5% of indirect raw materials locally	★ Sourced 65% of indirect raw materials locally ● Target: 64.9%
Increase overseas subsidiaries local sourcing: 52.5% for indirect raw materials ^{Note 12}	Source 35.6% of indirect raw materials locally	– Sourced 33.1% of indirect raw materials locally
Increase global local sourcing: 67.5% for indirect raw materials ^{Note 13}	—	★ Sourced 64.6 of indirect raw materials locally ● Target: 63.6%
Increase Taiwan local sourcing: 60% for spare parts	Source 45% of spare parts locally	★ Sourced 46.0% of spare parts locally ● Target: 41.0%
Achieve an average human rights rating of Grade B (score 85) on the SAQ for tier 1 suppliers ^{Note 1}	Achieve an average human rights rating of Grade C (score 78) on the SAQ for tier 1 suppliers	– Achieve an average human rights rating of Grade C (score 77) on the SAQ for tier 1 suppliers
Ensure 100% of tier 1 suppliers ^{Note 1} stipulate inclusive workplace related policy or statement ^{Note 14}	—	★ 100% of tier 1 suppliers stipulate inclusive workplace related policy or statement ● Target: 40%
Supplier due diligence on <u>responsible mineral sourcing</u> : 100% of the minerals used are sourced responsibly	Supplier due diligence on responsible mineral sourcing: 100% of the minerals used are sourced responsibly	♦ 100% responsible mineral sourcing ● Target: 100%
Audit a cumulative total of 30 suppliers (≥ 3 suppliers per year) for due diligence on responsible mineral sourcing	Complete audits on ≥ 3 suppliers for due diligence on responsible mineral sourcing	♦ Completed audits on 3 suppliers for due diligence on responsible mineral sourcing ● Target: ≥ 3 suppliers

Note 12: To improve transparency in localized procurement information, a new management indicator for the local procurement ratio of overseas subsidiaries was introduced in 2024. The data covers TSMC (China), TSMC (Nanjing), TSMC Washington, LLC, TSMC Arizona, and JASM.

Note 13: In response to the new goal for localized procurement by overseas subsidiaries, this goal will be divided into separate targets for Taiwan and overseas subsidiaries starting next year.

Note 14: This indicator achieved its 2030 Targets ahead of schedule and will therefore be removed starting from the next year. Ongoing management actions will continue to be disclosed in the main text.

Key Milestones



Implementing Accountable Supply Chain Management

Supplier Code of Conduct

In 2015, TSMC officially became a member of the Responsible Business Alliance (RBA), reaffirming its commitment to ensuring safe working conditions across the supply chain, respecting and safeguarding the rights and dignity of all supply chain workers, and maintaining environmentally responsible and ethically sound business operations. Aligned with the RBA Code of Conduct framework, TSMC developed its Supplier Code of Conduct, under which all tier 1 suppliers are required to comply. New suppliers must sign the Code prior to establishing partnerships. TSMC also actively encourages its suppliers to ensure their upstream suppliers, contractors, and service providers adopt the Code to collectively advance sustainable supply chain practices.

To further enhance responsible supply chain governance, TSMC introduced the Supplier Sustainability Standards, built upon four core management dimensions: risk assessment, control processes, communication, performance evaluation, and continuous improvement. The 2025 update of these standards will place greater emphasis on critical areas such as human rights protection and greenhouse gas reduction, extending the Company's principles of accountable management throughout its supply chain.

● Supplier Code of Conduct Categories



Labor

- Prohibition of Forced Labor
- Young Workers
- Working Hours
- Wages and Benefits
- Non-Discrimination / Non-Harassment / Humane Treatment
- Freedom of Association and Collective Bargaining
- Human Rights Policy
- Inclusive Workplace Culture
- Accessibility Culture



Health and Safety

- Occupational Health and Safety
- Emergency Preparedness
- Occupational Injury and Illness
- Industrial Hygiene
- Physically Demanding Work
- Machine Safeguarding
- Sanitation, Food, and Housing
- Health and Safety Communication



Environmental

- Environmental Permits and Reporting
- Hazardous Substances
- Solid Waste
- Air Emissions
- Water Management
- Energy Consumption and Greenhouse Gas Emissions
- Ecological Resource Protection (Biodiversity, Zero Deforestation, and Land Conservation)



Ethics

- Business Integrity and No Improper Advantage
- Disclosure of Information
- Intellectual Property
- Fair Business, Advertising and Competition
- Protection of Identity and Non-Retaliation
- Privacy Protection
- Avoid Conflicts of Interest
- Complying with Export and Import Regulations



Management Systems

- Company Commitment
- Management Accountability and Responsibility
- Legal and Customer Requirements
- Risk Assessment and Risk Management
- Improvement Objectives
- Training
- Communication
- Worker/Stakeholder Engagement and Access To Remedy
- Audits and Assessments
- Corrective Action Process
- Documentation and Records
- Supplier Responsibility

New Supplier Collaboration Evaluation

When evaluating the eligibility of new suppliers, TSMC utilizes evaluation reports provided by impartial third parties to validate their business capabilities, ethical standards, and potential operational risks, while also analyzing any potential impact on the Company. TSMC also reviews the "judicial records of individual supplier representatives" to evaluate any implications for the stability of business partnerships. To safeguard mutual interests and ensure smooth collaboration, TSMC requires suppliers to sign the Letter of Assurance on TSMC's Supplier Code of Conduct and Business Ethics Statement, affirming the legality and integrity of their business activities. Suppliers are also required to sign the Supplier Agreements and Electronic Transaction Declaration, which

clearly outline cybersecurity requirements, ensuring information security and stability of partnerships across the supply chain.

Supplier Performance Evaluation

TSMC evaluates supplier performance across five major dimensions: quality, cost, delivery, service, and sustainability. The Company conducts supplier performance review meetings twice a year and compiles an annual year-end summary of scores. These evaluation results are shared with relevant departments—including the Materials Management Organization, Corporate Analytical Laboratories, Nano-Materials Center, and Corporate ESH Division—as a reference for supplier selection. To acknowledge suppliers' outstanding contributions, TSMC offers constructive feedback and presents

annual awards to suppliers that demonstrate excellence in sustainability performance, propelling continuous improvement and progress toward sustainable goals.

Selection and Risk Assessment Mechanism

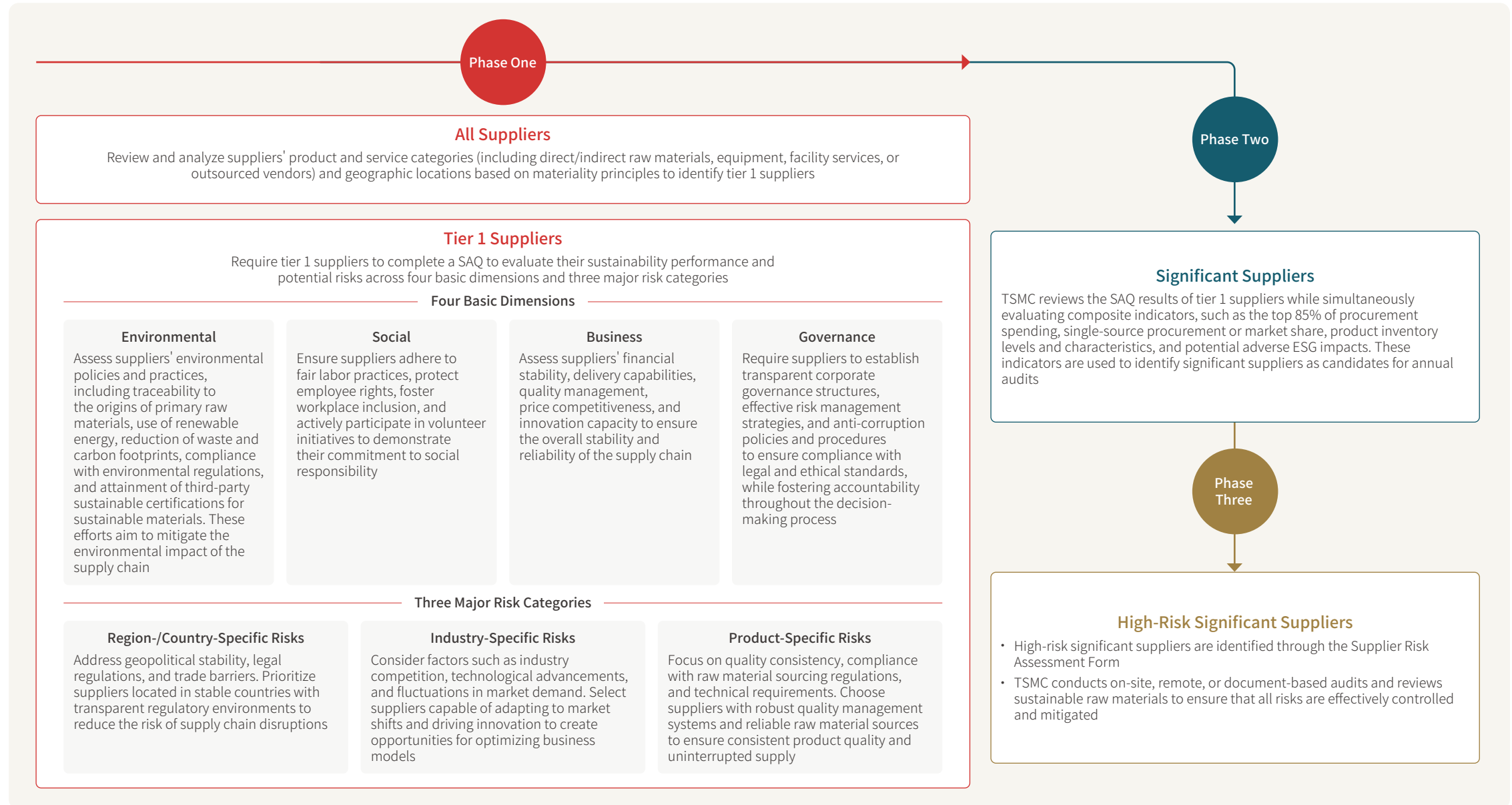
To monitor supplier status in real time and mitigate potential risks, TSMC's audit team, under the Supplier Healthiness Assessment Rectification Program (S.H.A.R.P.), implements a comprehensive three-phase risk assessment and selection process. In the first phase, the team evaluates the business relationship between TSMC and its suppliers by reviewing and analyzing suppliers' product and service categories, as well as geographic locations, to identify tier 1 suppliers. These suppliers are required to complete a SAQ, which assesses their sustainability performance and potential risks

across four dimensions—environmental, social, business, and governance—as well as three risk categories: country-specific, sector-specific, and product-specific risks. In the second phase, TSMC applies composite indicators—including suppliers accounting for the top 85% of procurement spending, single-source procurement or market share, product inventory levels and characteristics, and potential adverse ESG impacts—to further select significant suppliers as candidates for annual audits. In the third phase, the Supplier Risk Assessment Form is used to identify high-risk significant suppliers, who then undergo on-site, remote, or documentation-based audits and a review of sustainable raw materials to ensure that risks are effectively controlled and corrective actions are completed. This process strengthens supply stability and reliability, minimizes exposure to various risks, and ensures that suppliers can meet TSMC's requirements within manageable risk levels.

● Supplier Performance Evaluation Dimensions



● Three-Phase Supplier Risk Assessment and Selection



● Supplier Risk Assessment Form

Dimensions	Contents
Business	Direct transactions involving at least three annual orders and a transaction amount exceeding NT\$5 million, accounting for the top 85% of procurement spending
Environmental Protection	Management measures for waste, wastewater, stationary pollution sources, and toxic substances as defined by environmental regulations
Safety and Health	Occupational safety and health risks at supplier facilities, including employee numbers, chemical usage, hazardous machinery management, and dangerous workplaces
Fire Safety	Fire risks at supplier facilities, including factory area, high-risk production tool, and regulatory thresholds for public hazardous materials
Society	Records of major irregular incidents and violations, as well as labor and human rights risk management (e.g., prevention of discrimination, excessive working hours, and provision of maternity protection)
Governance	Ethical principles outlined in TSMC's Supplier Code of Conduct, including the prevention of corruption, bribery, infringement, conflicts of interest, and retaliation, while emphasizing fair trading, privacy protection, confidentiality, and information transparency
Industry	Industry-specific risks, including conflict minerals, supply chain resilience, and other sector-related vulnerabilities
Product	Product risks such as quality, reliability, process technology, management systems, and transportation logistics risks
Region/Country	Risk identification related to geopolitical issues, conflicts, natural disasters, and climate change
Sustainability	ISO certifications, achievements in carbon reduction and water-saving, and climate risk management

Supplier Selection Results

Based on the 2024 assessment, TSMC identified 609 significant suppliers. These included 387 tier 1 suppliers, which collectively accounted for 85% of total procurement spending, and 222 smelters outside the tier 1 category. The Company also, identified 112 high-risk significant suppliers. For all suppliers with potential risks, TSMC implemented corrective action plans and ensured full compliance through document reviews and on-site audits. Throughout this process, no supplier relationships were terminated due to actual or adverse impacts. To oversee the operational status of smelters, TSMC required the submission of due diligence documentation to ensure there were no associated risks of human rights violations or environmental harm.



TSMC collaborates with suppliers to enhance risk management capabilities.

Audit, Improvement, and Follow-up

TSMC's S.H.A.R.P. audit team categorizes audit items into six areas: Supply Chain Risk, Quality and Reliability, Environmental Safety and Health, Fire Safety System, Labor Ethics, and Management Systems. Through on-site and remote audits, the team identifies potential risks and requires suppliers to develop corrective action plans with defined timelines. TSMC provides regular guidance and monitors progress to collaboratively address issues with suppliers. While integrating the six audit categories, TSMC engages an independent third-party agency to conduct comprehensive health assessments, further strengthening supplier management and improving audit effectiveness.

The S.H.A.R.P. team conducts three types of audits: scheduled, risk-based, and project-specific. Scheduled audits are performed annually and focus on suppliers whose audit scores fell below 80 in the previous year, suppliers of commercial significance that have not been audited for over three years, and newly established facilities under audit plans. Risk-based audits utilize SAQs for risk assessment and supplier selection, with audit plans developed in accordance with the Supplier Sustainability Standards and RBA guidelines. In the event of anomalies during the year, the audit scope may be expanded to include peer suppliers. Project-specific audits target specific supplier deficiencies by implementing focused corrective actions, such as improvements in facility management, production line quality stability, and environmental and personnel safety.

Audit Results

In 2024, TSMC performed 220 audits on high-risk significant suppliers, including 150 audits conducted internally and 70 on-site audits undertaken by RBA-accredited third-party agencies. For each identified nonconformance, TSMC issued a Corrective Action Request (CAR) and utilized the Supply Online 360 platform to send regular follow-up notifications, urging suppliers to respond promptly and implement corrective measures. If the outcomes failed to meet expectations, the case was returned for re-evaluation to ensure that remedial actions complied with standards and were effectively executed.

Among TSMC-led audits, chemical raw material suppliers accounted for the largest share, with 45 audits. Additionally, over 20 audits were conducted on gas suppliers, sole or oligopoly sources, or in response to irregularities such as fires or gas leaks. Audit findings were categorized into three types: priority, major, and minor. In 2024, priority and major deficiencies were primarily associated with "supply chain risks." To address these issues, TSMC collaborated with suppliers to improve power equipment, emergency response mechanisms, and critical component management, thereby strengthening supply chain risk response capabilities. In 2024, TSMC introduced the Supplier TRUST Model – Comprehensive Risk Assessment Technology, integrating supplier management practices with historical supply chain risk assessment data to identify potential risks and implement tiered controls, thereby ensuring supply chain stability and sustainable operations.



TSMC conducts key risk management training for suppliers.

TSMC's S.H.A.R.P. audit team categorizes audit items into six areas: Supply Chain Risk, Quality and Reliability, Environmental Safety and Health, Fire Safety System, Labor Ethics, and Management Systems. Through on-site and remote audits, the team identifies potential risks, provides regular guidance and monitors progress to collaboratively address issues with suppliers.





● 2024 High-Risk Significant Supplier Audits and Areas for Improvement

Categories	Priority Findings ^{Note 1}	Major Findings ^{Note 2}	Minor Findings ^{Note 3}	Key Audit Focus Areas	Major Audit Findings	Improvement Results of TSMC Suppliers
Supply Chain Risks	13%	81%	6%	- Business Continuity Planning and Management - Upstream Supplier Oversight - Warehouse Management - Power and Water Management - Raw Material Control	- Failure to regularly inspect the plant's power supply equipment and lack of defined criteria for replacing outdated equipment - Lacking emergency response protocols or failing to conduct practical drills - Failing to implement a regular inspection mechanism for critical parts related to manufacturing, production, and quality measurement	- Establish a regular inspection mechanism and develop criteria for replacing outdated equipment based on inspection outcomes and root cause analysis - Formulate emergency response protocols, incorporating notification procedures and conducting drills - Periodically count and update inventories of critical components
Environmental Safety and Health	13%	41%	46%	- Occupational Safety Documentation and On-site Inspection - Health Management and Implementation Review - Compliance of Environmental Documents and Equipment	- Improper management of fall risks during work at heights, such as failure to implement comprehensive fall protection measures - Failure to install interlocks, appropriate covers, and guards on equipment with entanglement or nip hazards - Improper selection, use, and maintenance of personal protective equipment (PPE) by personnel	- Install safety lifelines, sturdy guardrails, and anchorage points; personnel must wear safety harnesses and remain hooked throughout the entire operation - Implement physical protective measures and conduct regular inspections to ensure their effectiveness - Establish a personal protective equipment (PPE) management program and conduct re-training on the program
Quality and Reliability	10%	79%	11%	- Production Risk Assessment - Unplanned Shutdown Response Mechanism - Quality Inspection Management - Process Quality and Production Line Parameter Management - Change Management System and Internal Audits	- Not fully documenting or tracking annual maintenance activities - Severe corrosion in the plant or the existing rust removal mechanisms have not been assessed for their effectiveness in relation to the surrounding environmental conditions - Failing to establish preventive maintenance frequencies and inspection protocols for equipment and parts based on their criticality levels	- Properly record the maintenance or servicing work hours and frequencies of equipment in the plant, and coordinate with regular meetings. Define standards for rust removal and painting, evaluating corrosion rates and conditions of different gadgets - Classify equipment and parts based on critical parameters and service life, or add new inspection items to achieve preventive maintenance objectives
Fire Safety System	4%	33%	63%	- Reporting and Fire Prevention Documentation - High-Risk Fire Protection in Manufacturing Plants - On-site Inspection of Fire Protection, Fire Prevention, and Seismic Safety - Fire System Functionality Inspection	- Explosion-proof electrical devices and proper piping configurations have not been implemented within the explosion-proof zone - Failing to apply firestopping materials in breached fire compartments or using incorrect installation methods - Not properly activating loop disconnection alerts in the fire alarm system	- Inspect electrical devices in explosion-proof areas, using appropriate explosion-proof equipment and techniques - Carry out a plant-wide inspection to identify compromised fire compartments and seal them using certified firestopping methods - Check and repair fire alarm disconnection circuits, activate the disconnection alarm switch, and inspect the DIP switches after each disconnection alert

Note 1: Priority findings may present higher risks of production halt, life, serious illegal affairs, or systematic failure. For example: lacking a response mechanism for an unexpected halt in production lines, environmental pollution, hiring child labor, or forced labor.

Note 2: Major findings refer to significant differences between implementation and proper ESH procedures, such as daily operations not adhering to ESH procedures.

Note 3: Minor findings refer to risks other than priority or major violations, such as incomplete training records or incomplete ESH procedures.

Categories	Priority Findings	Major Findings	Minor Findings	Key Audit Focus Areas	Major Audit Findings	Improvement Results of TSMC Suppliers
Labor Ethics	4%	12%	84%	- Wages and Benefits - Working Hours - Confidentiality and Protection Against Retaliation - Privacy Rights and Prohibition of Improper Benefits	- Not providing necessary facility accommodations for individuals with disabilities - Failing to establish a policy governing the acceptance or offering of gifts	- Provide facilities for individuals with disabilities and improve their work environments - Create a policy on gift acceptance and giving, specifying value limits and frequency
Management System	0%	5%	95%	- Risk Evaluation and Management - Labor Feedback, Participation, and Grievance - Supplier Responsibility - Training Systems	- Neglecting to convey the TSMC Supplier Code of Conduct to upstream vendors - Not establishing grievance channels or anonymity protection mechanisms	- Distribute the Supplier Code of Conduct to upstream raw material vendors and require them to sign and return it - Establish grievance handling procedures along with regulations for protecting anonymity in complaints



TSMC conducts audits at supplier facilities.



Transportation Audits

To strengthen transportation safety across the supply chain and ensure the stable delivery of materials and services, TSMC conducts on-site audits aligned with the guidelines outlined in the [Supplier Transportation White Book](#). These audits focus on three core areas—driver oversight, hardware management, and system administration—to identify potential risks and ensure suppliers propose corrective action plans. In 2024, TSMC undertook project-specific audits on 18 transportation providers, covering over 130,000 delivery trips and identifying 94 opportunities for improvement. Key findings included the need to enhance driver training and evaluation, improve pre-dispatch inspections of vehicle components (e.g., tire tread), and implement personnel condition checks (e.g., alcohol testing). Through comprehensive on-site audits and close collaboration with suppliers, TSMC actively works to improve transportation vehicle management, elevates professional driver competency, and refines transportation safety management systems, thereby bolstering supplier autonomy, reducing transportation risks, and creating a safe, reliable transportation environment across the supply chain.



TSMC creates a safe and reliable transportation environment.



RBA Audits Focused on Targeted Issues

TSMC enlisted an RBA-certified third-party impartial organization to perform audits in accordance with the Supplier Code of Conduct. In 2024, the Company conducted its first supplier RBA audits addressing migrant worker and female-related issues. The audits covered 24 suppliers with over 30% migrant workers and seven suppliers with more than 50% female employees, involving 4,194 migrant workers and 401 women.

TSMC conducted audits to safeguard the rights of migrant workers, focusing on key areas such as dormitory living conditions and safety, restrictions on personal freedom (e.g., passport retention and dormitory curfews), and the availability of safety signage and evacuation instructions in workers' native languages. The audits also addressed compliance with overtime regulations, requiring that overtime work align with the Labor Standards Act and that overtime pay is calculated based on full wages.. Suppliers are further required to support migrant workers in obtaining relevant safety operation [certifications](#) and must ensure equitable distribution of work assignments between local and migrant workers. In terms of workplace protections for women, suppliers are required to provide lactation rooms with appropriate privacy measures and implement maternity health protection protocols. They are also required to establish communication and grievance channels for reporting sexual harassment and create gender equality committees to serve as platforms for reviewing and strengthening harassment prevention measures. Through RBA audits, TSMC collaborates with suppliers to optimize working environments and reinforce workplace protection measures, striving to provide lawful, fair, safe, and healthy working conditions.



Project-Specific Audits

TSMC performs project-specific audits to comprehensively enhance supplier operational stability through key initiatives including the "Maintain-As-New Project," "Supplier Improvement Program," and "Electrical Safety Project." Findings from the Supplier Improvement Program and the Electrical Safety Project were compiled and shared at TSMC's Environmental, Safety, and Health (ESH) Forum. The event attracted 360 ESH professionals from 152 supplier companies, fostering inter-supplier collaboration, knowledge exchange, and the sharing of best practices.



Key Project-Specific Audits



Target Suppliers and Audit Findings



Key Supplier Improvement Outcomes

Maintain-As-New Project	Five Significant Raw Material Suppliers - Lacked maintenance and operational risk management standards - Supplied materials from a single facility or for a single industry	- Developed business continuity plans and enhanced annual facility maintenance programs - Communicated with suppliers to encourage capacity and production line expansion to mitigate supply risks - Reduced supplier production line anomalies from 513 incidents in the project's initial year (2022) to 82, achieving an 84% reduction
Supplier Improvement Program	Nine Significant Raw Material Suppliers - Provided non-compliant protective gear for on-site personnel - Failed to label wastewater discharge outlets and did not perform routine discharge quality inspections	- Implemented PPE requirements by mandating protective clothing compliant with work area regulations; guided suppliers in establishing proactive ESH metrics and fostering a safety culture - Fully reviewed wastewater discharge labeling and established routine inspection protocols - The number of priority findings has decreased by 69% (all priority findings have been fully rectified), with average ESH audit scores rising from 73.7 to 86.1
Electrical Safety Project	Six Suppliers with High Electrical Fire Risk - Installed power switches inconsistent with equipment-rated current - Did not properly protect cables and wires	- Upgraded power switch capacity in compliance with electrical codes - Installed conduits and flexible joints to prevent cable damage - Achieved a 100% improvement rate

Advancing Toward Net Zero and Environmental Harmony

Climate Strategy for the Supply Chain

TSMC is strengthening its commitment to environmental sustainability by extending its efforts into its supply chain, focusing on proactive measures to address environmental challenges. The Company conducts regular climate risk assessments for five key supplier categories: direct raw materials, indirect raw materials, equipment, fab facilities, and parts and components. These assessments analyze the likelihood and impact of physical risks such as drought, flooding, and extreme heat. TSMC also continuously monitors and tracks suppliers' carbon emissions, electricity consumption, and water usage. Collaborating with suppliers, TSMC is driving innovation in low-carbon raw materials and advancing material recycling practices as part of circular economy initiatives, aligning efforts toward achieving net zero emission goals. To further enhance climate action across the supply chain, TSMC consolidated its carbon management practices in 2024 and released the [T.S.M.C. Supply Chain Carbon Reduction Action Guide](#). This guide features four approaches: Tracking, Support, Motivation, and Creativity, designed to accelerate decarbonization transformation throughout the supply chain and foster long-term sustainability.

TSMC conducts regular climate risk assessments for five key supplier categories: direct raw materials, indirect raw materials, equipment, fab facilities, and parts and components.



TSMC extends its emphasis on and actions regarding environmental issues to its supply chain.



Tracking

Track supplier carbon emissions data and mitigation performance while continuously improving data quality and transparency.

Supplier Environmental Information Data Platform

To advance a low-carbon supply chain, TSMC prioritized the development of a Supplier Environmental Information Data Platform, targeting key suppliers contributing to significant emissions. This platform collects environmental data from suppliers' factories and products, enabling digital management and in-depth analysis. By accurately identifying emissions patterns and hotspots, the platform serves as a critical foundation for guiding carbon reduction strategies. Between 2023 and 2024, TSMC collected environmental data from 477 factories and 245 products through this platform. These insights also support TSMC's environmental footprint calculations and Environmental Profit and Loss (EP&L) analysis, ensuring optimal resource allocation for decarbonization efforts and maximizing emissions reduction efficiency.

Supplier Carbon Management Tool

To assist major emission-contributing suppliers in integrating emissions accounting and planning decarbonization pathways, TSMC developed the Supplier Carbon Management Tool in 2024, referencing international standards. This tool standardizes the methodology for calculating emissions allocated from suppliers to TSMC, incorporating automated data integration and computational functions to simplify the emissions accounting process. By employing a transparent and consistent allocation methodology, the tool enables both parties to effectively communicate the current emissions status, reduction targets, and progress. Additionally, suppliers can use the tool to automatically generate analytical charts, facilitating the planning and adjustment of future mitigation pathways.

Supply Chain CDP Climate Questionnaire

Aligning with global trends in carbon disclosure assessments, TSMC continues to invite raw material and equipment suppliers to participate in CDP surveys, aiming to reveal corporate-level progress related to climate governance. In 2024, TSMC engaged 135 suppliers, representing the top 75% of procurement categories and expenditures, to complete the questionnaire. The survey achieved a 100% response rate with an average grade of B-. The results showed that 99% of suppliers had completed a greenhouse gas (GHG) inventory or calculation, while 92% had set emissions reduction targets. Additionally, 72% of

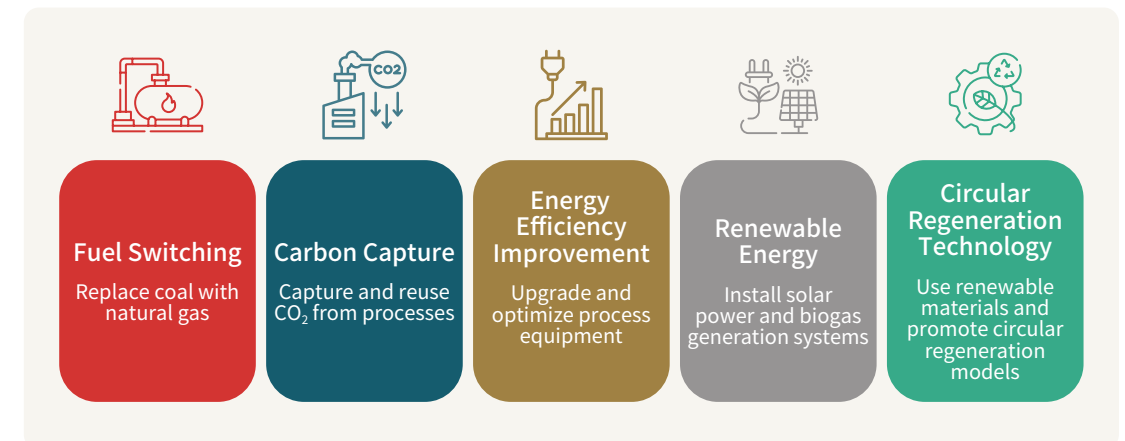
suppliers calculated and disclosed Scope 3 emissions data for "purchased goods and services." Further progress was noted in supplier commitments to sustainability initiatives: 37 suppliers obtained approval for science-based targets (SBTs), an increase of 17 from the previous year, and 17 suppliers joined the RE100 initiative. Collectively, these two groups accounted for 54% of TSMC's total procurement spend.

Carbon Reduction Progress Tracking Meetings and Assessment Project

To monitor the decarbonization progress of major emission-contributing suppliers, TSMC conducts regular meetings where suppliers are required to report on their carbon inventory data, carbon footprint verification status, and the implementation progress of proposed reduction measures. All relevant information is consolidated into a "Carbon Reduction Checklist." If a supplier falls behind schedule, senior management from both sides convenes to address challenges and explore solutions. TSMC proactively provides guidance and outlines available support to ensure suppliers have the necessary capacity to implement their decarbonization plans effectively.

In 2024, TSMC launched the Supplier Carbon Reduction Assessment Project, partnering with a third-party consultancy to conduct specialized on-site audits at the facilities of 27 major emission contributors. These audits, guided by the Carbon Reduction Checklist, evaluated the implementation status of reduction measures, verified the accuracy of emission reduction calculations, and assessed the quality of data related to emissions inventories and accounting. By combining progress tracking meetings with on-site assessments, TSMC aims to achieve a cumulative reduction of 2 million metric tons of carbon emissions by 2030, with 230,000 metric tons already achieved in 2024.

● Classification of Carbon Reduction Programs for Major Emission Contributors





Support

Provide suppliers with carbon management resources and tailored guidance to build decarbonization capacity.

On-Site Visits and Guidance to Identify Reduction Opportunities

TSMC conducts on-site visits and provides tailored guidance to suppliers, collaborating directly with frontline teams to identify emission reduction opportunities. The Company shares expertise on supply chain management, renewable energy procurement trends, and the latest global energy developments, empowering suppliers to adopt practical decarbonization strategies and proactively plan for carbon reduction and green energy initiatives. During these visits, TSMC strengthened support provided by engaging external professional consultants to provide specific improvement recommendations while sharing innovative energy-saving technologies. In 2024, TSMC successfully completed 36 on-site guidance sessions and carbon reduction meetings.

Carbon Management Capacity-Building Series

TSMC is committed to growing alongside its suppliers by organizing both in-person and online workshops and courses focused on carbon management. One notable example is the "CDP Supplier Training Program," which offers multilingual basic and advanced sessions designed to analyze key question sets. These sessions help domestic and overseas suppliers understand CDP guidelines and master response strategies. As a result, all suppliers invited to participate in the CDP questionnaire achieved a 100% response rate. Additionally, TSMC actively supports high electricity-consuming suppliers in obtaining ISO 14064-1 GHG inventory certifications, increasing the certification rate to 90%—a 6% increase compared to the previous year—and further empowering suppliers to strengthen their independent carbon management capabilities.

Leverage Government Resources to Advance Supply Chain Carbon Management

Building on its pioneering role in 2023 as a lead enterprise in Taiwan's Industrial Development Administration's "1+N Carbon Management Project," TSMC successfully integrated industry, government, and academic resources to drive supply chain decarbonization. Continuing its efforts in 2024, TSMC once again secured NT\$5 million in government subsidies to support its suppliers in advancing sustainable practices. Priority was given to significant emission contributors, with 14 suppliers receiving support for carbon inventories and energy efficiency assessments, and five suppliers completing carbon footprint inventories and reports. TSMC also introduced the Supplier Net Zero Emission Roadmap Development

Guidance, using carbon inventory results to identify emission hotspots, uncover reduction opportunities, and assist suppliers in formulating short-, medium-, and long-term strategies aligned with their 2050 net-zero roadmaps. In 2024, the 1+N carbon management program facilitated the submission of 48 carbon reduction initiatives by suppliers, which are projected to cut emissions by 7,000 metric tons annually. Moreover, TSMC hosted 12 carbon reduction training sessions, doubling participation compared to the inaugural year and encouraging suppliers to initiate 1+N programs within their own supply chains.

In addition, for suppliers not classified as major emission contributors, TSMC participated in the government's Smart Machinery Industry Upgrade and International Linkage Program. Through targeted training sessions, consultation meetings, and on-site visits, TSMC provided support to two small and medium-sized enterprises in transitioning to low-carbon operations, assisting them in completing their carbon inventory reports.

● 1+N Carbon Management Project

1

TSMC

+

N

Supply Chain Partners

Expert Guidance

- Factory carbon inventory
- Energy efficiency audit
- Product carbon footprint assessment
- Carbon reduction pathway planning

Carbon Reduction Capacity Building

- International regulations and indicators
- ISO 14064
- ISO 14067
- Circular economy and low-carbon raw materials
- Carbon taxes and carbon fees

1+N Carbon Management Project Kick-Off Meeting in 2024

2024 Achievements

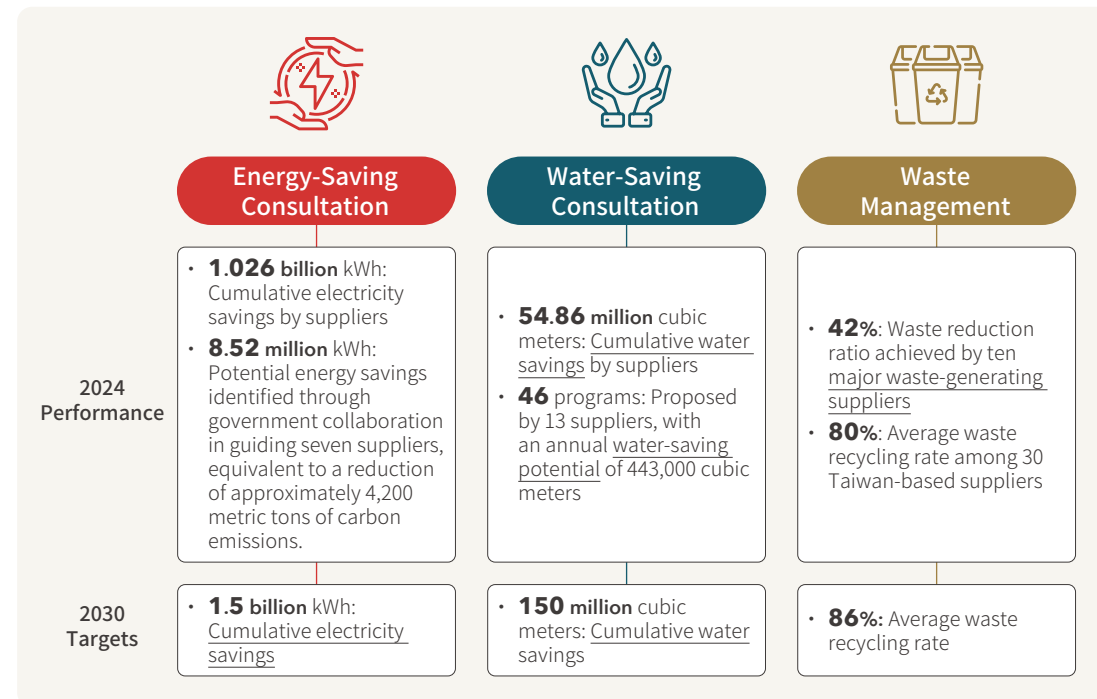
14 factories received guidance

261 participants received carbon reduction guidance

Energy and Resource Management Guidance

Extending the principles of green manufacturing, TSMC actively supports suppliers in electricity and water conservation, as well as waste management. For high electricity-consuming suppliers, the Company conducts online courses, in-person experience-sharing workshops, and one-on-one engagements to encourage the implementation of energy-saving initiatives at their facilities. For the first time, TSMC invited suppliers to participate in the Industrial Development Administration's Industrial Water Efficiency Enhancement Program. Using a "larger suppliers support smaller ones" strategy, the Company leveraged its internal experts and external consultants to identify water-saving opportunities based on suppliers' water withdrawal volumes and willingness to participate. Regarding waste management, TSMC expanded its oversight in 2024, increasing the number of major waste-generating suppliers under supervision from 10 to 30. The Company also updated its performance metric from the waste reduction ratio to average waste recycling rate (%), fostering supplier adoption of resource regeneration practices.

● TSMC's Counseling Effectiveness in 2024



TSMC actively supports suppliers in electricity and water conservation, as well as waste management.



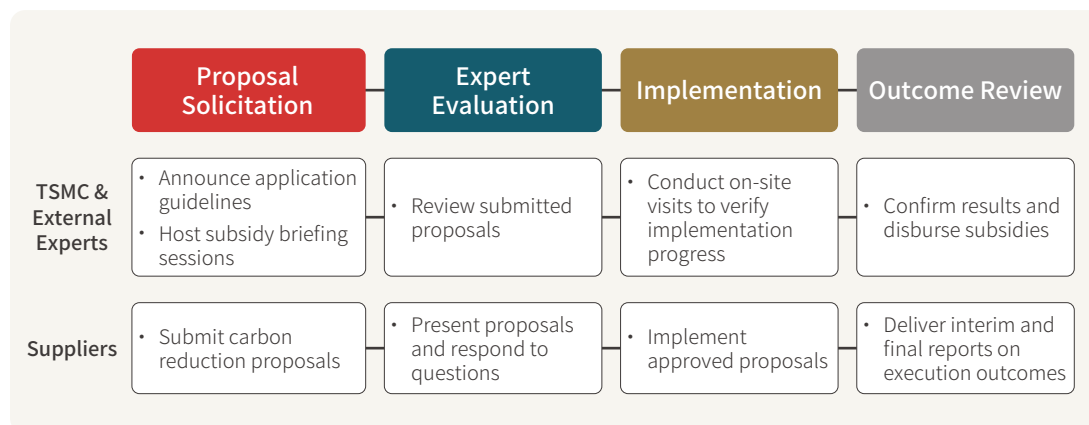
Motivation

Increase suppliers' motivation for carbon reduction and expand overall impact.

Supply Chain Carbon Reduction Subsidy Project

To accelerate emissions reductions among suppliers, TSMC launched the Supply Chain Carbon Reduction Subsidy Project in 2024, allocating NT\$84 million to encourage suppliers to propose carbon reduction initiatives and take concrete actions targeting Scope 1 and Scope 2 emissions within their operational boundaries. The project incorporated external experts in the review process, assessing supplier proposals through presentations and Q&A sessions to evaluate their carbon reduction calculations, feasibility, and cost-effectiveness. Suppliers selected through this process were authorized to implement their proposals and, following on-site verification by TSMC and an independent auditing body, received the allocated subsidies. In 2024, 26 suppliers were granted funding, which is expected to drive NT\$5.5 billion in decarbonization investments and achieve an estimated 450,000 metric tons of annual carbon reductions. This initiative underscores TSMC's financial commitment to enabling effective decarbonization across its supply chain.

● TSMC Supply Chain Carbon Reduction Subsidy Project Process



Incorporate Carbon Reduction Performance into Supplier Selection

Beyond providing financial incentives, TSMC is accelerating supply chain decarbonization through its business processes. In 2024, the Company announced that starting in 2025, carbon reduction performance will officially be included as criterion in supplier selection, emphasizing suppliers' progress in emissions reduction, renewable energy adoption, and decarbonization commitments. Additionally, suppliers identified as major emission contributors will be required to sign the TSMC Greenhouse Gas Reduction, Emissions Elimination & Neutrality (GREEN) Agreement for Suppliers, pledging to meet 2030 carbon reduction targets. These suppliers must also complete third-party verification of product carbon footprints for raw materials representing 90% of emissions by 2026. Suppliers who fail to meet these requirements may impact future business partnership with TSMC, underscoring the Company's commitment to driving decarbonization across its supply chain.

Starting in 2025, TSMC will introduce a supplier decarbonization performance evaluation framework to systematically track key indicators, including carbon reduction project completion rates, renewable energy usage, carbon footprint verification status, and emission reduction targets. The results will play a pivotal role in shaping supplier partnerships, with preference given to higher-performing suppliers when addressing new procurement requirements. TSMC will also anonymously share industry-wide progress and performance benchmarks, showcasing the achievements and best practices of top-performing suppliers. This initiative aims to encourage positive competition among suppliers and drive collective advancement in the semiconductor industry's journey toward sustainability.



TSMC subsidizes suppliers for the installation of new solar modules.



Creativity

Collaborate with suppliers to develop innovative, cost-effective carbon reduction plans.

TSMC works closely with its suppliers to develop innovative applications and business models that promote green operations and low-carbon raw materials. In 2024, the Company launched a second round of joint renewable energy procurement with suppliers, a fab-wide nitrogen efficiency enhancement initiative, the recycling and reuse of electronic-grade chemicals, and the circular utilization of electronic-grade metal materials. These collaborative efforts aim to explore novel commercial models and scale up successful practices across the semiconductor industry, amplifying the impact of decarbonization efforts and driving sustainable progress.

	Joint Renewable Energy Procurement	Fab-Wide Nitrogen Efficiency Enhancement Project	Recycling of Electronic-Grade Chemicals	Circularity of Electronic-Grade Metal Materials
Purposes	Lower the entry barrier for suppliers to access green electricity, increasing renewable energy adoption	Reduce raw material consumption and carbon emissions	Recycle liquid chemical waste into reusable electronic-grade products, minimizing new material consumption and emissions	Minimize raw material extraction, improve metal resource utilization, and cut carbon emissions
Practices	In 2023, TSMC launched its first joint green electricity procurement with suppliers, offering suppliers comprehensive services from power assessment to electricity transfer, with long-term contracts ensuring stable pricing; the second round of joint procurement was launched in 2024	Introduced high-efficiency gas pumps and replaced nitrogen with clean dry air (CDA), which has a lower carbon footprint, while optimizing tool parameter settings to accurately control nitrogen usage	Enhanced process controls to prevent contamination, assisted suppliers in improving cleanroom conditions and optimizing resin column rinsing performance, and successfully developed recycling technology for electronic-grade developer tetramethyl ammonium hydroxide (TMAH), enabling the circular reuse of waste liquids in manufacturing processes	Collaborated with suppliers to refine testing, cutting, acid cleaning and packaging, melting inspection, thermo-mechanical treatment, and final processing steps. Leveraging specialized surface chemical treatment and smelting inspection techniques, successfully removed residual impurities and contaminants from used targets, facilitating the regeneration of electronic-grade copper-manganese (CuMn) alloy targets that align with semiconductor process specifications
2024 Achievements	Invited 12 suppliers to participate, collectively procuring 280 million kWh of green electricity	Reduced 390,000 metric tons of nitrogen usage, equivalent to a carbon reduction of 59,000 metric tons	Once fully implemented, the initiative is expected to replace 24,000 metric tons of new liquid purchases annually, resulting in annual carbon reductions of 2,496 metric tons	Upon full deployment across all 12-inch wafer fabs worldwide, the initiative is expected to reduce over 700 metric tons of carbon emissions annually

Biodiversity Conservation

In alignment with the United Nations Convention on Biological Diversity (CBD) and the Sustainable Development Goals, TSMC issued its [Biodiversity Statement](#) in 2023, pledging to collaborate with stakeholders to safeguard biodiversity. The Company also prioritized "working with the supply chain to minimize environmental impact" as a core strategy, requiring supply chain partners to comply with biodiversity conservation laws and to avoid operations that could disrupt critical species habitats.

To better understand the relationship between suppliers' operational sites and their surrounding environments, TSMC follows the assessment framework recommended by the Taskforce on Nature-related Financial Disclosures (TNFD). This framework is based on four key steps—Locate, Evaluate, Assess, Prepare (LEAP)—to establish a comprehensive biodiversity conservation evaluation process. Through this process, TSMC identifies ecologically sensitive supplier sites and examines their dependencies and impacts on nature ecosystems. For suppliers operating in ecological hotspots, the Company ensures compliance by verifying the legal establishment of their sites, the approval of environmental impact assessments, and the proper

implementation of mitigation measures. Biodiversity compliance requirements have also been integrated into the Supplier Code of Conduct to reduce supply chain pressures on natural environments. For more details on the nature-related LEAP assessments, please refer to the [TSMC Climate and Nature Report](#).

TSMC also strives to enhance supplier awareness of carbon credit development and biodiversity conservation. In November 2024, the Company held its first Nature Carbon Credits and Biodiversity Forum, bringing together experts from industry, government, academia, and research institutes to discuss international trends, strategic planning, and implementation experiences. The forum featured renewable energy suppliers with overseas operational experience, who shared insights on biodiversity trends and practical approaches with domestic industry players. These discussions highlighted how biodiversity considerations can be integrated into various project phases, including site selection, engineering development, transportation and installation, and operations and maintenance, providing valuable references for enhancing environmental management practices.



TSMC actively enhances suppliers' awareness of carbon credit and biodiversity.

Sustainable Raw Materials Procurement

In 2024, TSMC issued its Sustainable Raw Material Policy, demonstrating its commitment to mitigating potential environmental and social impacts throughout all stages of raw material extraction, production, transportation, and usage. The policy emphasizes the importance of avoiding overexploitation of raw material sources and preventing operations in critical biodiversity areas. It also addresses key supply chain issues, including human rights, health and safety, and ethical standards. TSMC encourages suppliers to adopt third-party certified sustainable raw materials, develop recycling and reuse technologies, enhance the quality of recycled materials, and implement circular economy principles to ensure the sustainable use of raw materials.

Adopting a product life cycle approach, TSMC advanced its management measures for "certified sustainable raw materials, recycled raw materials, and metal raw materials," with a focus on increasing suppliers' management-level awareness and understanding of sustainable raw materials. In 2024, TSMC hosted the event "Shaping Sustainable Business Models: Material-Driven Design," featuring case studies and discussions on sustainable business models. The event aimed to strengthen the supply chain's ability to integrate circular economy concepts into operations, with 146 management representatives from supplier organizations participating.

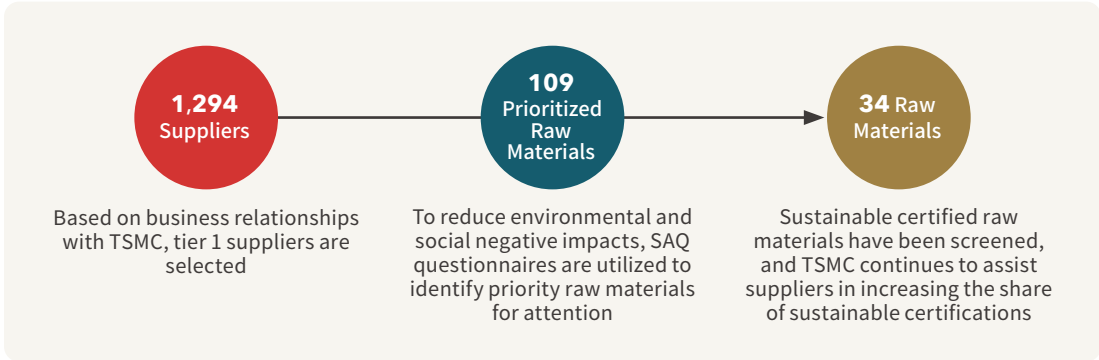
Certified Sustainable Raw Materials

TSMC records every step of the wafer manufacturing process to ensure traceability of



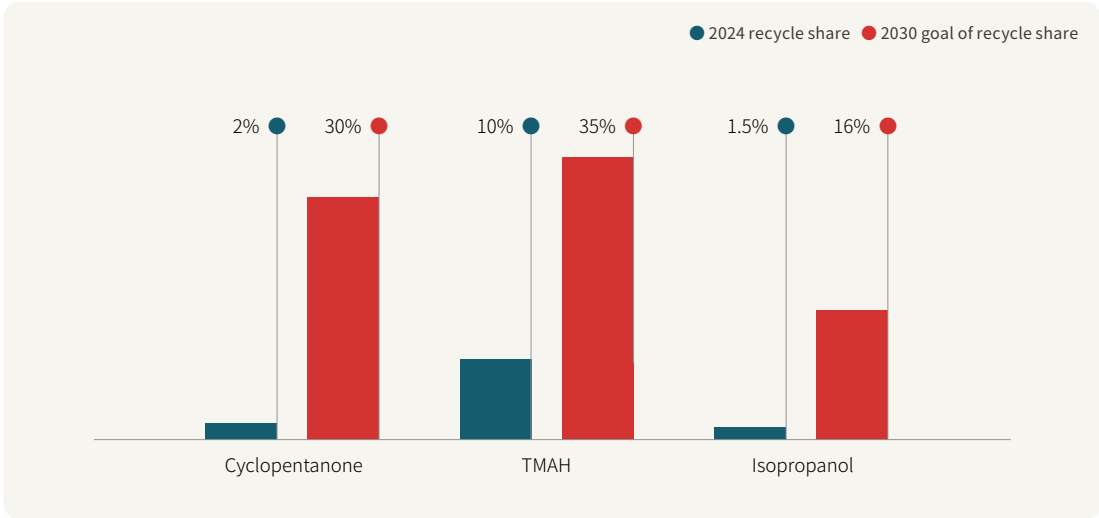
TSMC collaborates with suppliers to successfully develop TMAH recycling technology.

raw material origin and tool. Throughout product traceability information provided by suppliers, TSMC tracks origin of raw materials and identifies and categorizes potential risks associated with raw materials due to abnormality, natural disasters, or geopolitical issues. To further increase the share of sustainable raw materials, TSMC established the Sustainable Raw Materials Team and the S.H.A.R.P. audit team. With self-assessment questionnaires (SAQs), TSMC evaluates the potential negative impacts on human rights, the environment, and society associated with raw materials produced by tier 1 suppliers. After screening, 109 prioritized raw materials have been identified and selected, and audits and guidance have been strengthened for related suppliers. In addition, to promote the use of recycled and third-party certified sustainable raw materials among suppliers, TSMC actively assists suppliers in obtaining certifications such as the "Copper Mark" and "UL 2809," thereby increasing the proportion of sustainable raw materials in its supply chain. As of 2024, according to the survey, suppliers have obtained sustainable certifications for a total of 34 raw materials, including the "Copper Mark" and "UL 2809 Recycled Content Validation."



Recycled Raw Materials

TSMC has successfully established a green, circular recycling system through its "Electronic Grade Chemicals Recycling Program." In 2023, the Company achieved its first milestone of recycling cyclopentanone waste liquid into electronic-grade cyclopentanone, which was introduced in some plants in 2024. During the same year, TSMC developed a recycling technology for Tetramethyl Ammonium Hydroxide (TMAH) waste liquid. The Company plans to recycle isopropanol (IPA) waste liquid and convert it into electronic-grade isopropanol by 2025. This initiative is expected to reduce new liquid procurement by 2,400 metric tons annually and cut carbon emissions by 486 metric tons, further advancing the value of resource regeneration. To continuously increase the share of recycled raw materials, TSMC has set 2030 targets for recycled content ratios, aiming to raise recycling rates for cyclopentanone, TMAH, and isopropanol to 30%, 35%, and 16%, respectively.



Metal Raw Materials

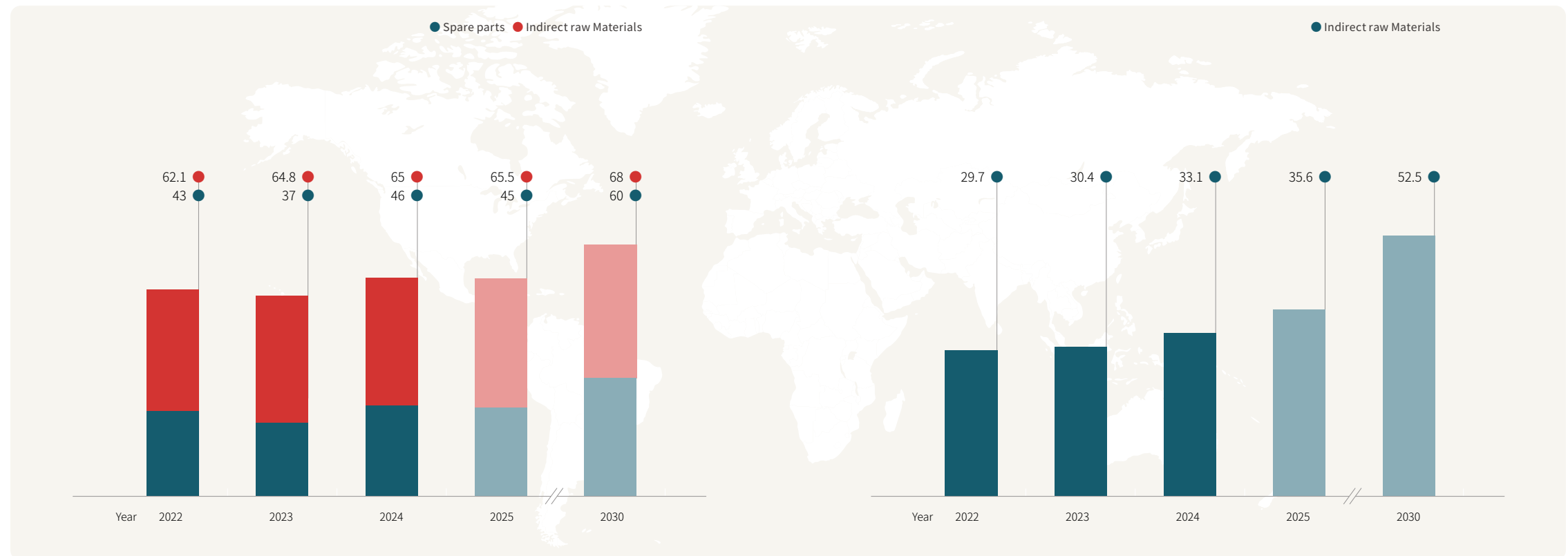
In 2024, TSMC conducted an assessment of products containing metals and mineral commonly used in semiconductor processes, including aluminum, cobalt, copper, iron, nickel, titanium, and lithium. Among these materials, 1.3% of copper and 0.4% of titanium come from recycled sources. Collaborating with suppliers, the Company develops various metal recycling techniques, such as alloy target purification and regeneration, to promote the sustainable use of metal raw materials. For more details, please refer to the chapter on "Creativity."

Metal Raw Materials	Aluminum	Cobalt	Copper	Iron	Nickel	Titanium	Lithium
Annual Usage (metric tons)	68.0	10.2	585.2	159.7	1.9	118.1	0
Recycled Percentage (%)	0	0	1.3	0	0	0.4	0

Local Procurement

TSMC prioritizes local procurement across its global operational sites by setting concrete targets to strengthen the localization of material supply. Overseas subsidiaries—including TSMC (China), TSMC (Nanjing), TSMC Washington, LLC, TSMC Arizona, and JASM—each maintain independent procurement departments. These departments manage procurement for six major categories: equipment, parts and components, raw materials, facility services, IT automation, and goods. They also work closely with local suppliers to help improve technical capabilities, enhance quality, reduce costs, and minimize carbon emissions.

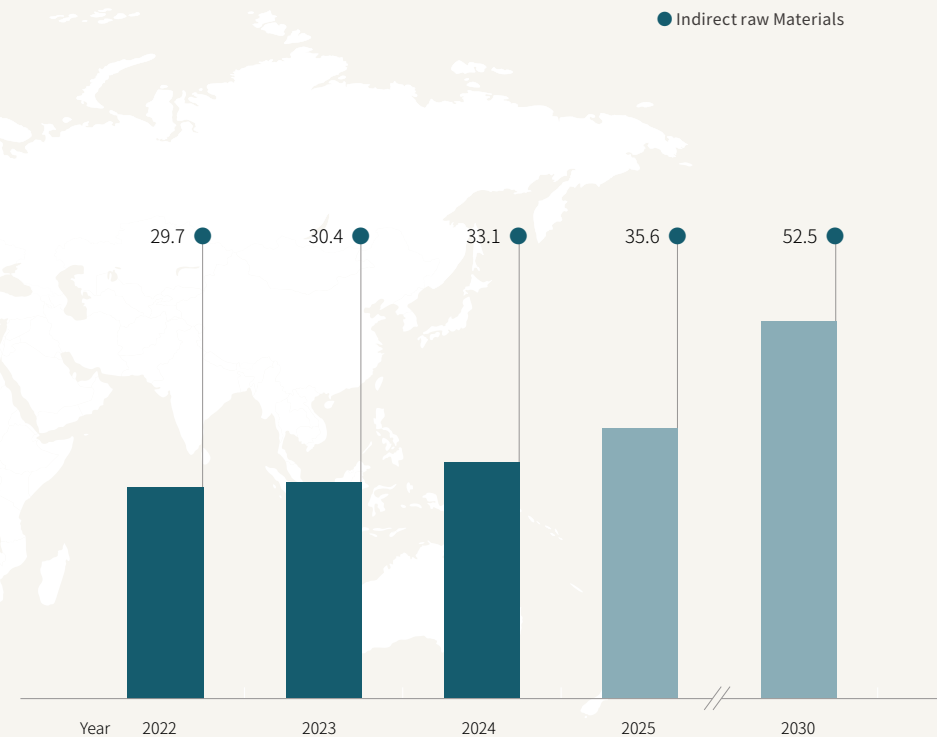
● Percentage of Taiwan Local Sourcing



Global Fab Supply Chain Management Actions

- Set Procurement Targets: Continue promoting or maintaining the local procurement percentage to achieve long-term goals.
- Improve Technical Quality: Actively improve the technology and quality of suppliers for critical equipment, spare parts, and raw materials to improve local procurement volume.
- Facilitate Factory Establishment: Invite suppliers from different countries to establish production, R&D, and training facilities at TSMC's production sites.

● Percentage of Overseas Subsidiaries Local Sourcing



Uphold Human Rights Values in the Supply Chain

Human Rights Assessment and Management in the Supply Chain

Guided by its [Human Rights Policy](#), TSMC takes proactive measures in assessing and managing human rights risks across its supply chain. In addition to complying with the labor and human rights guidelines outlined in its Supplier Code of Conduct, the Company adheres to the United Nations Development Programme's (UNDP) business and human rights risk framework. This approach focuses on six key human rights categories: Labor Rights, Environmental Rights, Voice and Participation, Gender Equality, Services and Products Liability, and Governance and Security. To systematically evaluate suppliers' human rights practices, TSMC introduced 76 human rights-related questions into its tier 1 supplier SAQ. In 2024, TSMC launched a tiered human rights management system. Based on each supplier's level of human rights performance, the Company provided tailored [training programs](#) and introduced its new [Supplier Human Rights Management Tracking Platform](#). The platform offers many resources such as case studies, educational materials, and online consultation, to support suppliers in implementing their corrective action plans.

TSMC also integrated supplier human rights performance into its long-term management metrics to further embed human rights values more deeply throughout the supply chain. For further details on supply chain human rights management, please refer to the [TSMC Human Rights Report](#).

Establish a Trusted Grievance Channel

TSMC places great importance on its supplier partner relationships and is committed to safeguarding the rights of their employees. All supplier personnel can anonymously report grievances through the "Supply Chain Employee Grievance Channel" available on the homepage of Supply Online 360. Every case is handled with strict confidentiality and care to ensure effective resolution of issues.

In 2024, the grievance channel received seven reports. Among them, three involved wage disbursement disputes and unclear definitions of overtime hours for on-site operations, while four were related to business disputes, unequal treatment, and labor insurance concerns. Upon receiving these reports, TSMC promptly investigated the issues, assigned relevant departments to address them, and, when necessary, communicated with the complainants to provide feedback. Suppliers were required to implement corrective actions in accordance with the Supplier Code of Conduct to ensure the protection of employee rights across the supply chain. For more information on the grievance handling process, please refer to the [TSMC Human Rights Report](#).



TSMC deepens the value of human rights within its supply chain.

Responsible Mineral Sourcing

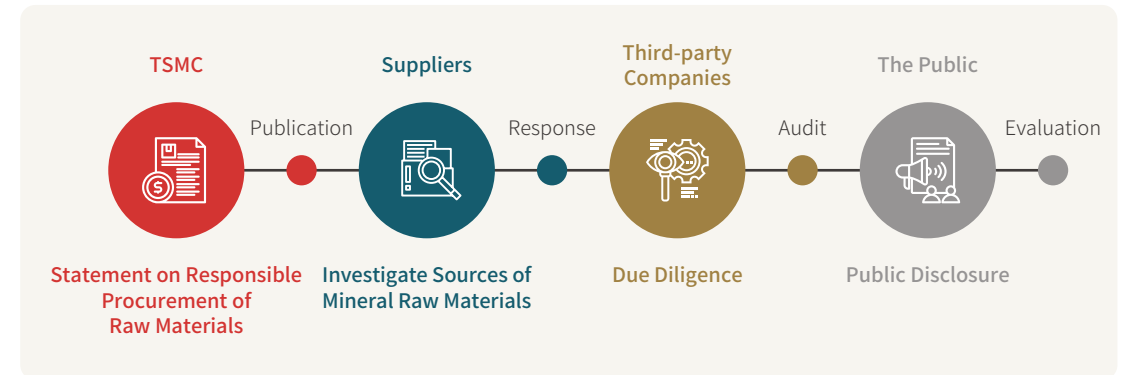
TSMC complies with Rule 13p-1 of the U.S. Securities Exchange Act of 1934, issued by the U.S. Securities and Exchange Commission, which requires the disclosure of conflict mineral sources. The Company is dedicated to procuring raw materials from verified conflict-free sources, ensuring the protection of human rights, health, and the environment in mineral-producing regions. Furthermore, TSMC implemented a solid due diligence framework in line with the Organization for Economic Cooperation and Development's (OECD) Model Supply Chain Policy for a Responsible Global Supply Chain of Minerals from Conflict-Affected and High-Risk Areas.

In collaboration with third-party verification bodies, TSMC reviews suppliers' conflict mineral management policies and implementation procedures to ensure full compliance. As a committed supporter of the RBA and the Global e-Sustainability Initiative (GeSI), the Company adheres to the principles of the Responsible Minerals Initiative (RMI). TSMC requires suppliers to procure conflict-free materials, striving to enhance transparency across the mineral supply chain while exploring funding opportunities to drive broader advancement in responsible sourcing practices.

Responsible Sourcing and Management Processes

TSMC regularly monitors the use of minerals in its supply chain. Suppliers whose products contain tin, tantalum, tungsten, or gold are required to comply with the sourcing procedures outlined in the [TSMC Conflict Minerals Report](#), sign a statement of responsible mineral sourcing, and identify and assess risks associated with sourcing from conflict-affected and high-risk areas. Since 2021, TSMC has conducted annual audits of at least three suppliers whose products include these minerals to ensure they have established conflict minerals management policies and performed upstream due diligence. For the latest disclosure documents, please visit [TSMC's official website](#) or the United States Securities and Exchange Commission (SEC) [website](#).

In addition, TSMC has broadened its oversight to include cobalt and [mica](#). Since 2017, the Company has required cobalt material suppliers to disclose the smelters in their supply chain and has shared cobalt sourcing information with customers to help mitigate risks such as child labor and unsafe working conditions. TSMC also encourages smelters to undergo third-party audits to ensure ethical practices. In 2023, cobalt was officially added to the Supplier Code of Conduct, requiring suppliers to adhere to the same standards as those outlined in TSMC's conflict minerals reporting. As for mica, TSMC completed a comprehensive mica usage survey in 2022 to ensure compliance with responsible sourcing practices throughout the entire supply chain.

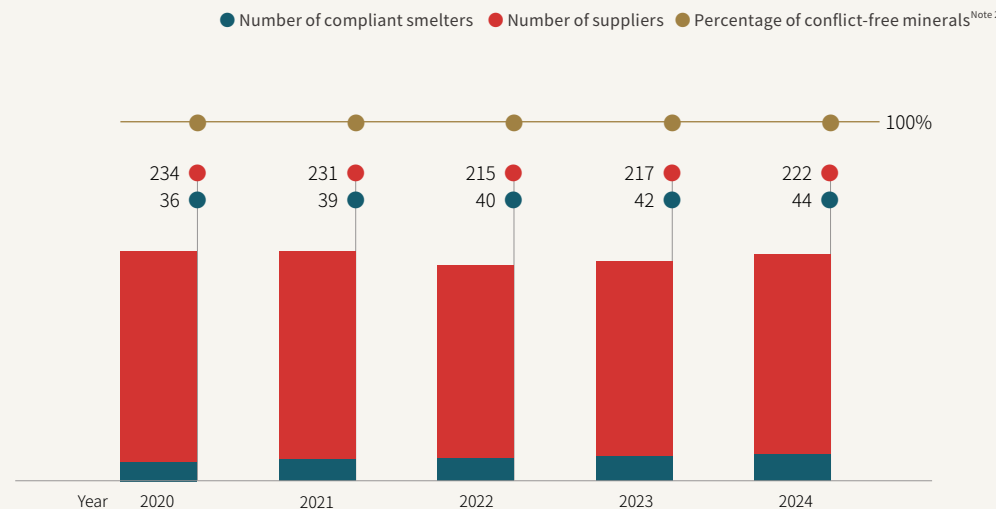


TSMC is committed to enhancing the transparency of its mineral supply chain.

Responsible Mineral Sourcing Processes

In accordance with the RBA management principles, TSMC developed risk management plans for suppliers with elevated human rights risks—such as smelters and refiners—to address and mitigate mineral sourcing risks associated with conflict-affected and high-risk areas. In the first quarter of each year, TSMC conducts conflict minerals assessments and works with suppliers and contractors to gather relevant information, including details on smelters and refiners. TSMC conducts due diligence on smelters and refiners claiming to be conflict-free by reviewing the Conflict Minerals Reporting Template (CMRT) and the Extended Minerals Reporting Template (EMRT) submitted by suppliers. This ensures that these entities have been certified as "conflict-free" through the Responsible Minerals Assurance Process (RMAP). If suppliers are deemed non-compliant, they are required to implement corrective actions within 60 days, which may include discontinuing procurement from the identified smelter or refiner or assisting in achieving compliance. Failure to implement corrective measures will result in TSMC terminating its business relationship with said supplier.

● Conflict Minerals Due Diligence^{Note 1}



Note 1: Figures pertain to tier 1 Suppliers of TSMC fabs in Taiwan, TSMC Washington, LLC, TSMC (China), TSMC (Nanjing), and VisEra.

Note 2: "Legally compliant" indicates that smelters and refiners in TSMC's supply chain sourcing tantalum, tin, tungsten, and gold have undergone comprehensive audits, been thoroughly vetted, and certified under the Responsible Minerals Assurance Process (RMAP).

Responsible Minerals Usage Status and Labeling

The semiconductor industry relies heavily on metals such as tin, tantalum, tungsten, and gold. To ensure that raw materials are sourced from responsible regions, TSMC is committed to ethical mineral procurement practices. The Company guarantees that 100% of the minerals it uses are conflict-free, ensuring the prevention of human rights violations during mining activities. TSMC also requires suppliers to sign the "TSMC Declaration of Conflict-Free Minerals" when introducing new materials, thereby promoting the responsible sourcing of tin, tantalum, tungsten, and gold. For further details, please refer to the [TSMC Conflict Minerals Report](#).

● TSMC Declaration of Conflict-Free Minerals

- ☐ Do not supply minerals originating from conflict-affected regions
- ☐ Only supply minerals from smelters or refiners certified under the Responsible Minerals Assurance Process
- ☐ Supply minerals from recycled or scrap materials
- ☐ Each statement must be based on a Reasonable Country of Origin Inquiry (RCOI) conducted by the supplier or contractor, accompanied by a complete report and signed declaration. Suppliers or contractors must promptly notify TSMC of any material changes.

As a steadfast supporter of the RBA and the GeSI, TSMC adheres to the RBA's Responsible Minerals Initiative. The company requires its suppliers to procure non-conflict raw materials, strives to enhance the transparency of the mineral supply chain, and explores funding opportunities to drive broader improvements.



Build a Sustainable and Resilient Supply Chain

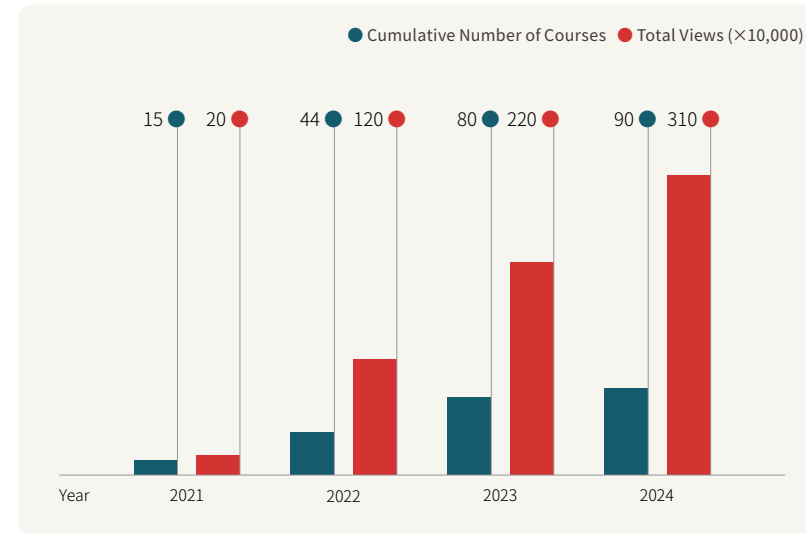
Empower Suppliers for Sustainable Development

Supplier Sustainability Academy

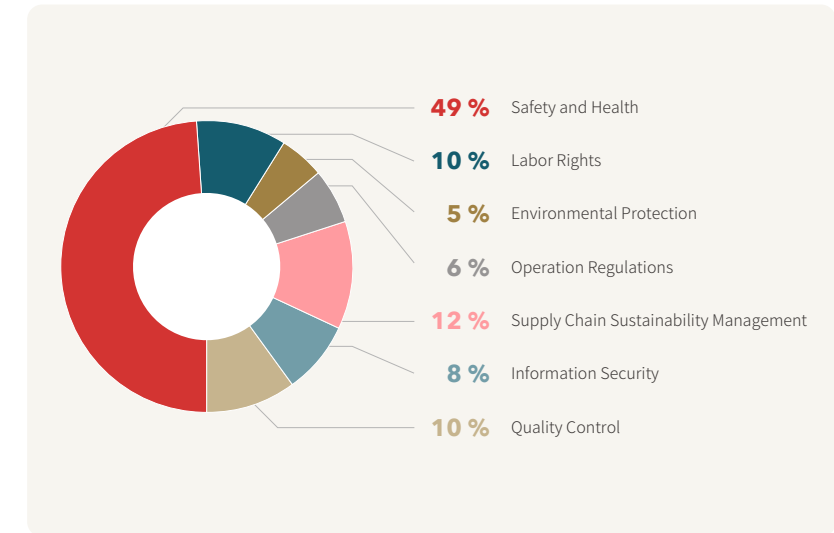
TSMC encourages suppliers to continuously advance their sustainability efforts. In 2021, TSMC launched the only open-access educational platform in the Taiwan semiconductor ecosystem—TSMC Supplier Sustainability Academy—through Supply Online 360. The platform offers seven major programs: Safety and Health, Labor Rights, Environmental Protection, Operation Regulations, Supply Chain Sustainability Management, Information Security, and Quality Control. These free learning resources, available to both suppliers and the general public, combine engaging animated content with interactive features and built-in assessments to maximize learning effectiveness. As of 2024, the Academy introduced 90 courses, accumulating 3.1 million visits.

To assist suppliers in adopting sustainable practices and aligning with international standards, TSMC developed five thematic courses based on the Supplier Code of Conduct, which follows the framework of the RBA. These courses have been considered mandatory for tier 1 suppliers since the Academy's inception. In 2024, TSMC introduced ten new courses covering topics such as human rights, GHG inventory, EHS and fire safety, and patent strategy. Notably, the Product Carbon Footprint course was designated as a required program to strengthen suppliers' carbon reduction capabilities.

TSMC Supplier Sustainability Academy Course Statistics



TSMC Supplier Sustainability Academy Course Distribution



TSMC Supplier Sustainability Academy

We are a firm believer of empowerment through education. The academy is our open education platform for our suppliers, our next-tier suppliers, and the global community.

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TSMC Supplier Sustainability Academy empowers suppliers for sustainable development.



Thematic Courses and Training Programs

Advance a Low-Carbon Supply Chain

A key mission in TSMC's supply chain management is ensuring that suppliers have fundamental carbon management. The Company offers a range of both foundational and advanced carbon management courses. Foundational courses include topics such as GHG inventory, product carbon footprint calculation, and insights into international net zero and sustainability regulatory trends. Advanced courses cover

areas like sustainable raw material certification and upstream supply chain carbon management. These initiatives aim to establish a consistent carbon management language and knowledge base between TSMC and its suppliers, thereby enhancing communication efficiency in support of achieving better outcomes.

● Supply Chain Carbon Management Courses

Courses	Course Contents	Target Participants
Carbon Disclosure Project (CDP) Supplier Courses	- Analyze CDP questionnaire structure and key response points - Introduce new question sets and scoring rules - Share exemplary cases for critical question sets - Improve supplier CDP response rates and scores	Suppliers invited to participate in the CDP questionnaire 263 participants
Product Carbon Footprint and Value-Based Responses	- Analyze carbon footprint inventory standards and calculations - Share Taiwan's carbon fee policy and response strategies - Share renewable energy practices and low-carbon material certification - Explain Taiwan's latest carbon fee regulatory requirements	TSMC's tier 1 suppliers and their upstream suppliers 112 participants
"Collaborative Carbon Reduction" Supply Chain Learning Course	- Explain organizational GHG inventory and digital carbon reduction tools - Share carbon estimation tools and practical exercises - Drive upstream suppliers to jointly learn carbon management methods	TSMC's tier 1 suppliers and their upstream suppliers 37 participants
Supplier Carbon Inventory Planning Briefing	- Share TSMC's supply chain carbon reduction management strategies and targets - Explain TSMC's carbon management tools and international carbon emission calculation methodologies - Plan suppliers' internal carbon reduction and net zero pathways	Major emission contributors 118 participants
International Carbon Reduction Requirements and Energy Trends	- Share corporate ESG implementation processes through sustainability framework analysis - Share circular economy practices, international energy trends, and forward-looking technologies - Explain latest sustainability trends and regulations	Major emission contributors (Primary) and tier 1 suppliers 69 participants
Factory Carbon Inventory and Reduction Practices	- Explain GHG inventory and digitalization processes - Share carbon reduction strategy planning, energy management systems, international initiatives, and standards - Understand energy management system implementation methods and identify energy-saving opportunities	Major emission contributors (Primary) and tier 1 suppliers 80 participants





Courses	Course Contents	Target Participants
ISO 14064-1 GHG Inventory Internal Verifier Course	• Share international climate change response trends • Analyze ISO 14064-1 organizational GHG inventory standards • Conduct case studies and internal verification testing • Develop supplier GHG inventory capabilities	High electricity-consuming suppliers and major emission contributors without ISO 14064-1 organizational GHG verification certification 40 participants
Upstream Raw Material Carbon Management	• Explain Scope 3 emission calculations, data quality, and major emission source identification methods • Share TSMC's supply chain carbon management processes and experiences • Explain upstream supply chain carbon reduction proposal collection forms • Drive suppliers to promote upstream carbon emission management	Major emission contributors with upstream raw material carbon emission hotspots 23 participants
1+N Carbon Management and Reduction Training	• Analyze international regulations and standards related to carbon reduction • Share circular economy and low-carbon raw materials • Explain carbon tariffs and carbon fees	Suppliers participating in the 1+N Carbon Management Project 261 participants
Smart Machinery Industry Upgrade and International Linkage Program	• Analyze the theory and practice of carbon inventory • Share insights on smart and low-carbon diagnostics • Plan carbon reduction pathways	Suppliers participating in the Smart Machinery Industry Upgrade and International Linkage Program 60 participants



TSMC extends the spirit of green manufacturing to supply chain management.

Strengthen ESH Management Across the Supply Chain

To assist suppliers in effectively managing environment, safety and health (ESH) and fire safety risks, TSMC developed a diverse range of courses and group discussions. These programs address fundamental topics such as "common ESH and fire safety deficiencies among suppliers, hazardous materials management, and updates on domestic and international regulations." The curriculum further delves into advanced technical subjects, including the "selection of explosion-proof electrical equipment and the storage and management of water-reactive substances." The target audience includes suppliers' ESH personnel and senior management, aiming to encourage suppliers to enhance their internal capabilities and strengthen ESH and fire safety management practices.

The session was highly insightful, offering valuable perspective and innovative ideas for implementation and management. I look forward to further discussions on sustainability and ESH topics.

Equipment Supplier



TSMC enhances suppliers' capabilities in environmental protection, occupational safety and health, and fire management.

● ESH and Loss Prevention Capability Guidance Programs

Courses	Course Contents	Purposes	Target Participants
Sustainable Supply Chain ESH Forum	- Share supply chain net zero emission directions, carbon inventory results, and future carbon reduction tasks - Analyze supplier ESH audit results and future approaches - Discuss fire incidents and learn disaster response measures - Share supplier ESH and carbon reduction management practices	Strengthen supply chain operational resilience by promoting net zero initiatives, ESH improvements, and fire prevention knowledge sharing	Suppliers of gases, chemicals, wafers, spare parts, components, and cleaning services 360 participants
Supply Chain ESH Technical Forum	Focus on three main aspects: "safety and health, fire safety and emergency response, and facility and carbon management," covering topics such as thermal hazard prevention, lithium battery safety, and carbon capture technology	Facilitate the exchange of ESH management practices to raise suppliers' awareness from diverse perspectives	Suppliers of gases, chemicals, wafers, parts and components, and parts cleaning services 199 participants
Fire Response Workshop	- Share fire case studies and disaster response concepts - Conduct group discussions, tabletop exercises, and outcome presentations	Assist suppliers in developing customized emergency response mechanisms that address their specific requirements	Suppliers engaged in chemical and gas production or with high fire risk 62 participants
On-Site Supplier Hazardous Materials Management Assessment and Guidance	Engage third-party fire protection engineers to provide on-site compliance assessment guidance for suppliers	Help suppliers achieve hazardous materials management compliance and reduce fire risks	Suppliers manufacturing or using hazardous materials 35 participants
Annual Supplier Emergency Response Drill Observation	Conduct fire drills for solvent tank truck filling leaks and emergency medical response drills for personnel injuries	Enhance suppliers' emergency response and disaster relief capabilities by sharing TSMC's response strategies and rescue methodologies	22 participants
Supplier Senior Executive ESH Improvement Program	Conduct audit investigations and analysis and communicate with suppliers' senior management	Support suppliers in establishing <u>proactive safety performance systems</u> , provide targeted guidance, and conduct on-site assessment to evaluate their effectiveness	Raw material suppliers 97 participants
Interactive Supplier ESH and Fire Safety Training	Perform deficiency analysis to identify major critical or common audit findings and provide improvement recommendations	Develop interactive online learning materials to provide suppliers real-time and engaging learning experiences	All suppliers 1,583 participants

Promote Human Rights Governance in the Supply Chain

To enhance human rights performance across its supply chain, TSMC has implemented a tiered guidance and monitoring system, to improve human rights practices throughout its supply chain. Suppliers are categorized into five human rights performance levels, from A to E, based on their responses to the SAQ. Suppliers receiving low ratings are prioritized for tailored improvement support. In 2024, TSMC launched a series of human rights training programs aimed at enhancing these suppliers' practices. As part of the Supplier Sustainability Academy, the Materials Management and Human Resources departments jointly developed an interactive online course on workplace inclusion, which shares TSMC's expertise in human rights management. Moreover, in response to supplier needs and global trends in business and human rights, TSMC periodically holds online and in-person workshops. In 2024, the Company offered two online courses—Supply Chain Human Rights Policy and Management Plan and Guidelines on Respecting Human Rights for Taiwanese Enterprises and Supply Chains—as well as two in-person workshops: Supplier Workplace Inclusion Workshop and Supplier Human Rights Enhancement Workshop.

Furthermore, the Company reinforced its commitment to fostering an inclusive workplace across the supply chain. By 2024, 100% of tier 1 suppliers had established an inclusive workplace related policy or statement ahead of schedule. Additionally, five suppliers obtained Women-Owned Business certification, leveraging third-party verification to further promote inclusivity within the supply chain.

● Human Rights Capacity-Building Training Programs

Courses	Course Contents	Target Participants
Supply Chain Human Rights Policy and Management Plan	• Explain corporate human rights issues and scope. • Share TSMC's supply chain human rights management approach and human rights/inclusive workplace concepts	Suppliers rated A-E in human rights performance 401 participants
Guidelines on Respecting Human Rights for Taiwanese Enterprises and Supply Chains	• Present the latest international human rights trends and regulatory frameworks • Analyze "Guidelines on Respecting Human Rights for Taiwanese Enterprises and Supply Chains" - content and implementation processes • Demonstrate practical corporate human rights governance through case studies	Suppliers rated A-E in human rights performance 404 participants
Supplier Workplace Inclusion Workshop	• Define corporate inclusive workplace topics and scope • Share the journey and outcomes of leading companies' inclusive workplace initiatives • Introduce TSMC's employee resource groups	Suppliers rated A-E in human rights performance 191 participants
Supplier Human Rights Enhancement Workshop	• Clarify corporate human rights scope. • Explain human rights-related questions in the supplier SAQ. • Share best practice examples of human rights governance	Suppliers rated D-E in human rights performance 161 participants



TSMC strengthens human rights management capabilities within its supply chain.

TSMC reinforced its commitment to fostering an inclusive workplace across the supply chain. By 2024, 100% of Tier 1 suppliers had established an inclusive workplace policy or statement ahead of schedule.





Supplier Awards

To honor outstanding partners, TSMC created a variety of supplier awards. In 2024, 31 suppliers were recognized for their exceptional performance. In support of the Company's 2050 net zero emissions goal, a "Best Carbon Reduction Partner Award" was introduced to encourage suppliers to set ambitious carbon reduction targets, actively adopt renewable energy, and drive their upstream supply chains for collective carbon reduction efforts. In 2024, FUJIFILM Electronic Materials Taiwan Co., Ltd. and Siltronic AG, Taiwan Branch (Germany) received the Best Carbon Reduction Partner Award, inspiring all suppliers to collaborate with TSMC in advancing sustainable development.

TSMC encourages suppliers to set ambitious carbon reduction targets, actively adopts renewable energy, and drives their upstream supply chains for collective carbon reduction efforts.



● 2024 Supplier Awards

Supplier Awards	Award Recipients
Best Carbon Reduction Partner Award	2
ESG Promotion Award	2
Excellent Technology Collaboration Award	1
Excellent Technology Collaboration and Production Support in Advanced Packaging Award	2
Excellent Production Support Award	7
Excellent Production Support in Advanced Packaging Award	4
Excellent Performance in New Fab Construction Award	4
Excellent Technology Collaboration and Production Support Award	3
Excellent Contribution in Green Manufacturing and Excellent Technology Collaboration and Production Support Award	1
Excellent Contribution in Green Manufacturing Award	1
Excellent Performance in Fab Automation Award	1
Distinguished Mask Writer Collaboration Award	1
Excellent Contribution in Green Manufacturing and Excellent Production Support Award	1
Novel Technology Collaboration Award	1

● Best Carbon Reduction Partner Award Highlights

FUJIFILM Electronic Materials Taiwan Co., Ltd.

- Actively developed carbon reduction proposals to achieve TSMC's 2030 carbon reduction targets and installed solar power systems across its facilities
- Participated in the 1+N carbon management program
- Completed GHG emissions verification for all facilities
- Committed to Science Based Targets (SBT), with a goal to reduce Scope 1, 2, and 3 emissions by 50% by 2030 over the base year, while consistently achieving leadership-level performance in CDP assessments for multiple consecutive years

Siltronic AG, Taiwan Branch (Germany)

- Strategically advanced the adoption of renewable energy usage, with a commitment to achieve RE100 and net zero emissions for Scope 1 and 2 by 2045
- Conducted a comprehensive inventory of Scope 3 and supply chain carbon emissions
- Required its critical suppliers to align with SBT, RE100, and net zero emission goals

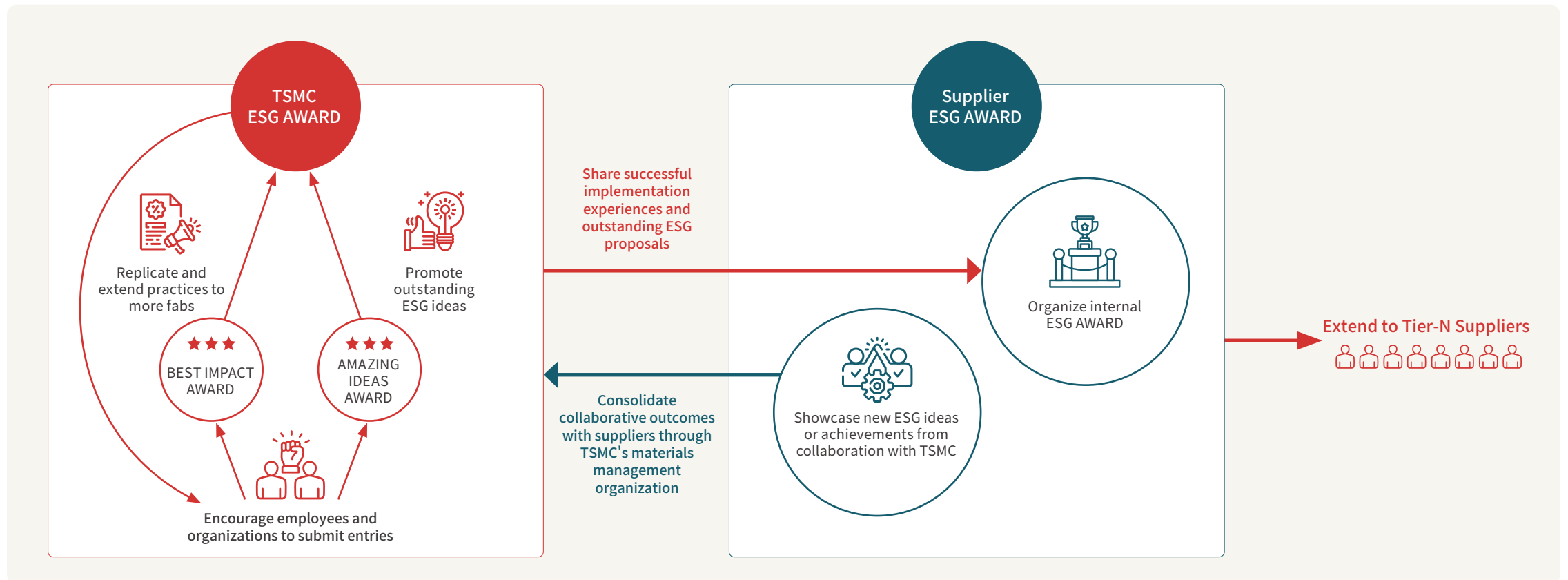
Supplier ESG AWARD

In 2024, TSMC held the Company's fifth annual ESG AWARD program, bringing together innovative ideas from employees both domestically and internationally, while recognizing organizations for their meaningful contributions to sustainability. The Company regards collaborative achievements with suppliers as a crucial element of innovation and sustainability. Through its Materials Management organization, TSMC worked closely with suppliers to compile ESG-related ideas and results generated through joint efforts. In 2023 and 2024, this initiative engaged 52 and 81 suppliers respectively, resulting

in 74 and 193 proposals, demonstrating TSMC's continued dedication to spreading the spirit of the ESG AWARD throughout its supply chain and inspiring new opportunities for joint innovation.

To further promote ESG values, TSMC shared its implementation experiences with suppliers, successfully encouraging 27—including seven Tier 2 suppliers—to host their own internal ESG AWARD events. This initiative was intended to create a broad ripple effect throughout the supply base, amplifying the impact of sustainable practices.

● Supplier ESG AWARD Promotion



Create Shared Value with Communities

TSMC focuses on driving supply chain development while collaborating with suppliers to engage in social welfare initiatives, bringing together disparate forces to foster positive change. In 2024, the Company, in partnership with its partners, established the "Supplier Charity Alliance" to participate in charitable activities. TSMC also launched the "[Circular Box Alliance's Box Replacement Program](#)" to enhance resource circulation through a collaborative ESG-driven model. In addition, the Company invited suppliers to assist in matching vocational and high school graduates with technical job opportunities, strengthening the connection between industry and academia.

TSMC focuses on driving supply chain development while collaborating with suppliers to engage in social welfare initiatives, bringing together disparate forces to foster positive change.



TSMC and supplier volunteers foster community well-being through shared prosperity initiatives.

Engage Suppliers in Charitable Initiatives

To uplift society, TSMC aims to leverage its industry and community influence to improve collective well-being. In 2024, the Company partnered with five suppliers to support the TSMC Charity Foundation's Aging Community Care Model, integrating resources from enterprises, hospitals/academic institutions, and social welfare organizations to provide care for elderly individuals and children in remote areas. Together, they organized three intergenerational charity events—Intergenerational Learning for All Ages, Lifelong Caring through Intergenerational AI Learning, and Shared Intergenerational Well-being, Shared Stories. These events featured activities such as fitness stretching, health education, tea arts, local cuisine cooking, essential oil massage, pot painting, and plant cultivation, all designed to foster diverse models of community care.



TSMC achieves a positive cycle of mutual benefit between environmental protection and public welfare.

Mobilize Suppliers for the Box Replacement Program

TSMC brought together social enterprises, suppliers, and social welfare organizations to jointly promote the Circular Box Alliance's Box Replacement Program. This initiative repurposes recycled in-factory plastic waste into eco-friendly reusable boxes, replacing single-use cardboard cartons. In addition, social welfare groups were enlisted to provide box-cleaning services, creating a positive cycle that integrates environmental sustainability with social good. In 2024, ten consumables suppliers joined the effort, collectively using 46,367 reusable boxes, reducing carbon emissions by 17.6 metric tons. TSMC also hosted the "TSMC Together for ESG" experience-sharing event to highlight achievements in packaging material recycling.



The Job Fair guides career planning to encourage young people to plan their future early according to their interests and aptitudes.

Join Hands with Suppliers to Create Career Opportunities

TSMC supports vocational education and youth employment development. In 2024, the Company partnered with several suppliers to participate in the Job Fair for Vocational High School Students, co-organized by the TSMC Charity Foundation and the Pingtung County Government. This initiative assisted job-seekers by matching industry and vocational school graduates with technical expertise, while offering on-site interviews and career guidance. By encouraging early career planning and the exploration of diverse career paths, the program created many employment opportunities, cultivated talent development, in an effort to improve participants' economic well-being.



Appendix

Independent Third Party Assurance Statement



INDEPENDENT ASSURANCE REPORT ON APPLYING AGREED-UPON PROCEDURES

Statement No.: C767929-2024-AG-TWN-DNV

Date of Issue: 25 July, 2025

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DNV Business Assurance Co., Ltd. (hereafter "DNV" or "we/our") has been commissioned by the management of Taiwan Semiconductor Manufacturing Company Ltd. (hereafter "TSMC" or "the Company") to perform an independent assessment on the Company's 2024 Responsible Supply Chain Report based on the agreed-upon procedures as follow.

Scope of Assessment

Subject to our assessment was the 2024 Responsible Supply Chain Report prepared by TSMC in July 2025 (hereafter "the Report"). The Report has been developed on the basis of the Company's Sustainability Report for the year ended December 31, 2024, which had undergone another independent assurance process. With the affinity between the two reports established to ensure materiality and consistency, the current engagement tested the transcription from the Company's Sustainability Report for the information disclosed without reevaluating such information.

For information beyond the Company's 2024 Sustainability Report, we reviewed supporting evidence and documentation to verify its reliability. Our assessment adhered to the principles agreed with the Company, including accuracy, completeness, consistency, credibility, relevance and transparency, which form the basis of the agreed-upon procedures. The current assurance engagement prioritizes the above established principles over specific performance data, validated based on sampling.

Responsibilities and Independence

The management of TSMC has the sole responsibility for the preparation and presentation of the information in the Report, including the design, implementation, and maintenance of necessary internal control mechanisms related to ensuring the Report is free from material misstatement. The current engagement is also performed based on the assumption that the data and information provided by the Company to us as part of our review have been complete, accurate, sufficient and provided in good faith.

DNV is independent of TSMC and was not involved in the preparation of any statements or data included in the Report, except for this Assurance Report. We have no particular contractual or other affiliations that could lead to conflicts of interest against the current engagement under the established policies and procedures to ensure adherence to the independence principle.

In performing the current engagement, our responsibility and independent opinion are to the management of TSMC. Provided the consent that TSMC may refer to this Assurance Report under the agreed terms and conditions, DNV expressly disclaims liability or co-responsibility for any decision a person or an entity with potential access to this Assurance Report may make based on our opinion.



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Procedures

A multi-disciplinary team of sustainability and assurance specialists performed work at the Company's corporate level and covering relevant functions to obtain the supporting evidence necessary. We undertook the following agreed-upon procedures and activities to assess the Company's reporting as per the above-mentioned criteria:

- Conducting interviews with the senior management responsible for the oversight of supply chain sustainability issues to understand the considerations underpinning the reporting objective and the applicability of the guiding principles and the agreed-upon procedures.
- Interviewing personnel from the relevant corporate functions involved in the selected sustainability issues and data collection to evaluate the systems and processes for data preparation.
- Reviewing the supporting evidence and documentation, including the site- or project-level data collection and consolidation, with the sampling principle applied.
- An independent assessment of the Report against the guiding principles of accuracy, completeness, consistency, credibility, relevance, and transparency.
- The current engagement was conducted based only on the Chinese version of the Report.

Inherent Limitations

This Assurance Report is based upon the application of the sampling principle and professional judgment on certain facts and assumptions, with resulting subjective interpretations. Professional judgments expressed herein are based upon the data made available to us at the moment of our engagement performed under the agreed scope of work as well as time and resource constraints.

Conclusion

It is DNV's opinion that based on the Company's reporting against the principles and agreed-upon procedures mentioned above, nothing has come to our attention that causes us to believe that relevant disclosures in the Report are unreliable. We can conclude that the Company's reporting against the principles, procedures and data gathered, analysed, and consolidated is reasonable and balanced as presented in the Report.

For and on behalf of DNV Business Assurance Co., Ltd. Taiwan

Lead Verifier
Yu Chung Chen



Place and date:
Taipei, 25 July, 2025

Reviewer / District Manager
David Hsieh





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