TSMC 2024

Human Rights Report

Contents

Letter from the ESG Committee Chairperson

In this era, marked by global sustainability transformation and a diverse range of associated challenges, the United Nations' Universal Declaration of Human Rights serves as the cornerstone for international human rights protection. The UN Secretary-General's "Call to Action for Human Rights" emphasizes the principle of "Rights at the Core of Sustainable Development," stressing that safeguarding human rights is essential in achieving corporate sustainability. As a responsible corporate citizen, TSMC aligns with these global expectations by establishing a Human Rights Policy, conducting comprehensive due diligence, and committing to protecting all the right of stakeholders.

As TSMC's global presence expands, our workforce reflects a broader diversity of backgrounds. To gain a deeper understanding of the perceptions and needs of domestic and international employees regarding human rights issues, the 2024 "Workplace Human Rights Climate Survey" incorporated region-specific human rights impact items. The survey results showed that employees expressed strong concern in key human rights areas including "Privacy and Personal Information Protection, Mental Health, Wages and Working Hours, Harassment, Voice and Participation, and Occupational Health and Safety." Based on these findings, the Company's business management units and the Human Rights Working Group plan to deploy enhanced measures and conduct quarterly progress tracking to continuously improve the effectiveness of human rights due diligence efforts.

To create a workplace culture grounded in respect for human rights, TSMC prioritizes the well-being of its employees while safeguarding the rights of customers, suppliers' and contractors' employees, and communities. For customers, the Company addresses two key human rights issues—Managing Hazardous Substances in Products, and Customer Proprietary Information and Personal Information Protection through a robust human rights management system designed to build and sustain customer trust. Regarding supply chain management, starting in 2024, TSMC has integrated human rights performance into its 2030 long-term sustainability goals. This initiative facilitates the implementation of due diligence across the supply chain and aims to prevent and mitigate potential human rights impacts. Regarding community environmental rights, TSMC is committed to achieving net-zero emissions by 2050 while consistently maintaining the highest Platinum-level performance at all fabs as defined by the internationally recognized Alliance for Water Stewardship (AWS) standards. Additionally, through its "Eco Plus! Ecological Harmony Program" TSMC is actively working to enhance biodiversity restoration and reduce environmental impacts throughout the operational life cycle.

TSMC demonstrates its commitment to upholding human rights and fostering a workplace built on dignity and respect through concrete action in all aspects of human rights management. By publishing the "Human Rights Report," the Company transparently shares its strategies and outcomes in addressing salient human rights issues. TSMC aims to collaborate closely with all stakeholders to create a workplace where human rights are fully protected and respected.

Lora Ho
Senior Vice President and ESG Committee Chairperson

About This Report

Purpose of Publication

Accountable Management

Upholding the commitment stated in the Human Rights Policy, TSMC identifies salient human rights issues through due diligence processes and takes corrective actions to prevent any human rights violations

Building Trust

TSMC responds to the expectations and needs of stakeholders affected by human rights issues by providing mitigation measures, remedy measures, grievance handling, and educational outreach

Frameworks and Standards

Responsible Business Alliance Code of Conduct (RBA Code of Conduct)

Due Diligence Guidance for Responsible Business Conduct issued by the Organization for Economic Cooperation and Development (OECD)

United Nations Guiding Principles on Business and Human Rights (UNGPs)

Scope of Disclosure

The TSMC Human Rights Policy applies to the management team and all employees (those employed by TSMC and receiving wages or compensation), affiliated enterprises, associates, suppliers, contractors, partners (including customers and communities), and other stakeholders

The reporting boundary aligns with the consolidated financial statements, including all TSMC fabs in Taiwan, TSMC headquarters, all wafer fabs, and advanced backend fabs, as well as TSMC (China), TSMC (Nanjing), TSMC Washington, LLC, VisEra, and other subsidiaries. Any variations in the disclosure scope among the mentioned entities will be noted in the corresponding paragraphs

Publication of Report

In 2025, TSMC published its second Human Rights Report, disclosing practices and progress regarding its relevant human rights issues

Reading Guides

Please refer to the following instructions as a guide for reading this report:

- Click the underlined gray text to access external links or the corresponding sections of this report
- Click the underlined red text to read the hidden messages
- Click ✉ to send feedback to the TSMC ESG Mailbox
- Click ☰ to return to the contents page
- Click ↩ to return to the previous page

TSMC's ESG-Related Reports and Their Relevance to Human Rights

Sustainability Report

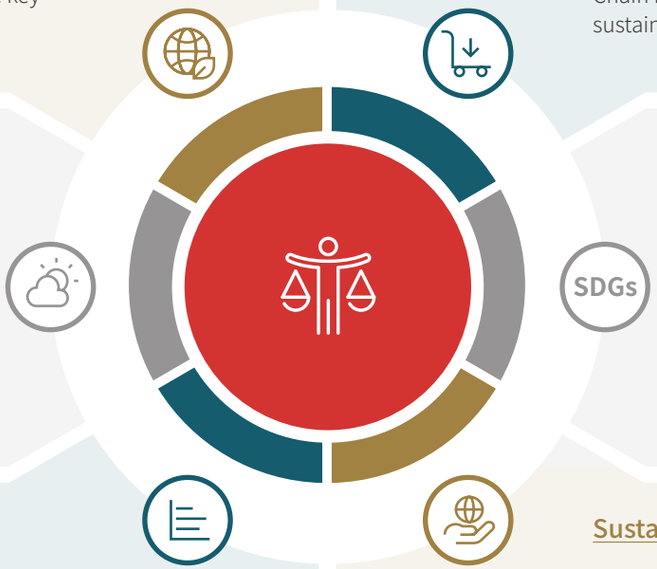
With "Business and Human Rights" being one of TSMC's 14 material issues, the Company utilizes its Sustainability Report as a management tool to formulate strategies, set targets, set action plans, and monitor performance for these key issues

Responsible Supply Chain Report

TSMC considers respect for and protection of human rights as a core commitment in responsible procurement. In 2025, the Company released its inaugural Responsible Supply Chain Report to demonstrate achievements in sustainable supply chain management

Climate and Nature Report

Environmental Rights constitute one of TSMC's six human rights dimensions. Through forward-looking climate and nature strategies, the Company mitigates its operational and value chain impacts on communities and the environment, generating positive ecological outcomes



UN SDGs Action Report

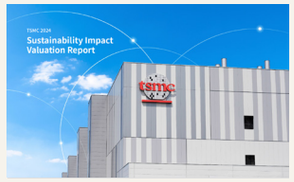
Embracing the spirit of "Driving Positive Change," TSMC pursues 62 long-term goals and 22 sustainability initiatives aligned with the United Nations Sustainable Development Goals (SDGs)

Materiality Analysis Report

TSMC issues the Materiality Analysis Report biennially covering the three dimensions of Stakeholder Concerns, Impact on Organizations, and Impact on ESG Development. In 2024, the Company applied the DEMATEL (Decision Making Trial and Evaluation Laboratory) method to identify "Business and Human Rights" as one of its critical material issues

Sustainability Impact Valuation Report

TSMC employs monetary impact valuation methods to measure human rights risks and social costs arising across the procurement stage, TSMC operation, and customer use stage in its value chain



About TSMC

TSMC fulfills its commitment to the Human Rights Policy by creating a workplace environment that respects human rights for its 84,512 employees worldwide. Centered on a "people-oriented" operational philosophy, the Company collaborates closely with supply chain partners to uphold workers' rights and eliminate all forms of human rights violations. As a responsible global corporate citizen, TSMC builds up its core business strengths with abundant momentum for innovation to continuously drive technological breakthroughs. In 2024, through the joint efforts of employees, suppliers, contractors, and customers, the Company led the industry in risk production of the 2nm process, the latest generation of technology. TSMC also actively safeguards the environmental rights of communities around its 31 global fabs, prioritizing water stewardship, chemical management, climate change, and biodiversity protection. Guided by a principle of proactive impact prevention, the Company pursues a vision of harmonious coexistence and shared prosperity with local communities.

Employees
84,512
global employees

Supply Chain
1,294
tier 1 suppliers

Customers
522
customers

Communities
31
fabs

Human Rights Management Framework

TSMC has established a comprehensive due diligence management process in accordance with the RBA, the OECD's Due Diligence Guidance for Responsible Business Conduct, and the UNGPs adopted by the UN Human Rights Council. Beyond committing to abiding by various international human rights standards and regulations, the Company has formulated its Human Rights Policy, complies with local laws in all operating locations, and prevents and eliminates modern slavery practices, including forced labor and human trafficking, in its operations and supply chain. To address all relevant human rights issues, TSMC implements a three-pronged approach: establish policy and governance, investigation and take action, and enhance engagement and disclosure, aiming to systematically prevent and minimize adverse human rights impacts and to foster a culture that is equitable, inclusive, and respectful of all individuals.

Human Rights Due Diligence

Policies & Governance

Policies / Statements
Formulate the Human Rights Policy and integrate the spirit of human rights protection into relevant policies, statements or processes

Governance
The Board of Directors serves as the highest level of governance for human rights issues at TSMC

Salient Issues
Develop a human rights risk matrix to identify salient human rights issues relevant to the value chain and communities based on the severity and likelihood

Investigations & Actions

Risk Assessments
- Government audits / inspections
- Third-party audits
- Customer audits
- Questionnaire surveys
- External evaluations
- Internal and external grievance channels
- Management systems

Mitigation Measures
- Adaptation measures: modification of aspects of operations, product, and services
- Facility Upgrading: investments in hardware, software, equipment, or technologies that control risks
- Policy/Document Development: establishment of policies, statements, and related regulations
- Training: enhancing the capabilities of affected stakeholders, workers, or management levels through training
- Red-flag system: development of management indicators for early identification of risk

Remedies
- Restoration: restoring affected stakeholders to their prior state
- Compensation: providing appropriate financial or non-financial compensation
- Discipline: imposing economic or non-economic penalties, including dismissal
- Correction: taking corrective measures post-incident to prevent recurrence of infringement

Enhancing Engagement & Disclosure

Tracking
Each organization responsible for human rights issues regularly tracks investigations, management indicators, the efficacy of mitigation and remedy measures, and responses to grievance

Communication
Conduct surveys and engage with affected stakeholders to understand the adverse impacts of various human rights issues and assist in reducing impact

Grievance Channels
Provide appropriate grievance channels for different affected stakeholders

Human Rights Management Policy Framework

By referencing business and human rights risks identified by the United Nations Development Programme (UNDP), TSMC fulfills its human rights commitments by managing affected stakeholders' human rights issues across six key dimensions: Labor Rights, Environmental Rights, Voice and Participation, Gender Equality, Services and Products Liability, and Governance and Security.

Policy Titles	Human Rights Dimensions		Contents
Human Rights Policy	• Labor Rights • Environmental Rights • Voice & Participation	• Gender Equality • Services & Products Liability • Governance & Security	TSMC establishes and issues the Human Rights Policy, applicable to stakeholders including all the management team and all employees (those employed by TSMC and receiving wages or compensation), affiliated enterprises, associates, suppliers, contractors, partners (including customers and communities), and commits to eliminating any form of human rights violations
Supplier Code of Conduct	• Labor Rights • Environmental Rights • Voice & Participation	• Gender Equality • Services & Products Liability • Governance & Security	To ensure safe working conditions and respect for employees throughout the supply chain while upholding environmental responsibility and ethical business practices, TSMC bases its Supplier Code of Conduct on the RBA Code of Conduct as well as internationally recognized standards. The Company also encourages tier 1 suppliers to require their upstream suppliers, contractors, and service providers to adopt the same principles
Supplier Sustainability Standards	• Labor Rights • Environmental Rights • Voice & Participation	• Gender Equality • Services & Products Liability • Governance & Security	To assist suppliers in meeting Supplier Code of Conduct requirements, TSMC has set Supplier Sustainability Standards to guide suppliers in establishing safe workplaces, protecting labor health, and minimizing environmental impacts
Sustainable Raw Material Policy	• Labor Rights	• Environmental Rights	Grounded in a lifecycle perspective for raw materials consumption, TSMC is dedicated to alleviating environmental and social impacts during extraction, production, transportation, and usage stages, building a resilient sustainable raw material value chain
Safety and Health Policy	• Labor Rights • Environmental Rights	• Governance & Security	TSMC actively promotes an accountable safety culture, supports the physical and mental well-being of employees, and collaborates with stakeholders to bolster workplace safety and health management, aspiring to become a world-class benchmark in occupational safety and health

Environmental Policy	• Environmental Rights	TSMC consistently drives green manufacturing by integrating environmental concepts into its core operations, optimizing resource efficiency, and collaborating with business partners as well as experts from industry, government, academia, and civil society to tackle climate change challenges
Climate Change Statement	• Environmental Rights	TSMC advances water and energy conservation as well as environmental protection projects to lower GHG emissions from production processes and electricity consumption, reduce water usage and waste generation, while requiring suppliers to implement similar controls to collectively pursue green initiatives
Biodiversity Statement	• Environmental Rights	Endorsing the United Nations Convention on Biological Diversity and the SDGs, TSMC dedicates its efforts to protecting aquatic and terrestrial ecosystems, promoting nature-based carbon-negative technologies, engaging in reforestation with stakeholders, and advancing ecological conservation to achieve net-zero deforestation, no net loss in nature and biodiversity, and net positive impact
Water Statement	• Environmental Rights	Given its value chain's dependency and impact on water resources, TSMC manages water use efficiently across all stages of the product life cycle, enhances pollution prevention, and minimizes water-related impacts to ensure sustainable water availability, safeguard ecological balance and biodiversity, and boost climate resilience and adaptation capacity
Global Inclusive Workplace Statement	• Labor Rights • Gender Equality	TSMC solves some of the world's most complex technological challenges to accelerate innovations around the world, and encourages contributions from all employees, at every level, in any role, regardless of their background or identity. Fostering a global inclusive workplace reflects the Company's core values and business philosophy and is essential for its future success.
Privacy Policy	• Voice & Participation	The Privacy Policy covers personal data of TSMC's customers, suppliers, and business partners. The Company commits to not actively collect or process sensitive personal data. If processing is legally required, TSMC strictly complies with relevant laws and confines data use to the policy's specified purposes
Information Security Statement	• Services & Products Liability • Governance & Security	To enhance information security and protect proprietary information, TSMC appoints a Chief Information Security Officer and establishes dedicated security teams, allocates professional personnel and resources, and devises management procedures and regulations to mitigate risks of data breaches

Governance

Board of Directors / Nominating, Corporate Governance and Sustainability Committee

Serve as the highest governance body overseeing and committing to human rights issues

ESG Steering Committee

Supervise the progress of human rights management efforts

ESG Committee

Formulate and monitor the implementation of management actions

Human Rights Working Group

Advance human rights initiatives

Business Development	ESG	Legal
Corporate ESH	Finance	Materials Management
Information Technology	Global Sales	Operations
Corporate Planning Organization	Global Security Management	Quality & Reliability
	Human Resources	R&D

Board of Directors

Serves as TSMC's highest governing body, responsible for overseeing and guiding human rights management

ESG Steering Committee

Oversees the interdepartmental communications of the Human Rights Working Group and refine human rights management plans

ESG Committee

Coordinates communication and collaboration across departments, leads the Human Rights Working Group in formulating management actions, and monitors the effectiveness of due diligence

Human Rights Working Group

Comprises representatives from diverse organizations, including Business Development, Corporate ESH Division, Corporate Information Technology, Corporate Planning Organization, ESG, Finance, Global Sales, Global Security Management, Human Resources, Legal, Materials Management, Operations, Quality & Reliability, and Research & Development to collectively advance human rights management initiatives

Reporting Mechanism

The Chairperson of the ESG Committee reports quarterly to the Board of Directors and the Nominating, Corporate Governance and Sustainability Committee on human rights management actions and outcomes

TSMC establishes Human Rights Working Group to integrate human rights management into daily operations.

Salient Human Rights Issues

TSMC adheres to the OECD Due Diligence Guidance for Responsible Business Conduct and references the six human rights dimensions, 18 issues, and 99 indicators proposed by the United Nations Development Programme (UNDP). In addition to incorporating regional human rights risk data from the MVO Nederland CSR Risk Check, the Company also considers the European Union's Corporate Sustainability Due Diligence Directive (CSDDD) provisions on environmental rights. Through a human rights risk matrix analyzing severity and likelihood of occurrence, TSMC identifies its salient human rights issues and affected stakeholders, including employees, employees of suppliers and contractors, customers, and communities. In 2024, the Company administered a Workplace Human Rights Climate Survey to gain deeper insight into the experiences and expectations of employees across domestic and overseas locations. Based on the results, the Human Rights Working Group and relevant business units made due diligence enhancements, embedding human rights into daily operations and reaffirming TSMC's commitment to human rights protection.

Salient Human Rights Issues Investigation Process

Conduct Benchmarking
Refer to the UNDP

Develop Human Rights Risk Matrix
Assess impact severity

Identify Salient Human Rights Issues
Determine outcomes of human rights impacts

6
Human Rights Dimensions

99
Indicators

2
Matrix Axes

3
Risk Factors

13
Salient Human Rights Issues

5
Affected Stakeholder Groups

Workplace Human Rights Climate Survey

Survey Human Rights Perception

Refine Management Measures

All Employees at Global Operating Sites Surveyed

64,625
Questionnaires Collected

3
Ongoing Due Diligence Processes

Salient Human Rights Issues and Value Chain Impacts

Dimensions	Human Rights Issues	TSMC's Salient Human Rights Issues	Affected Stakeholders				
			TSMC Employees	Suppliers' Employees	Contractors' Employees	Customers	Communities
Labor Rights	Wages and working hours, health and safety, terms of employment, job discrimination, forced labor and bonded labor, young workers, child labor, equal remuneration, freedom of association, and right to collective bargaining	Wages and Working Hours	✓	✓	✓		
		Health and Safety	✓	✓	✓		
		Terms of Employment	✓	✓	✓		
		Workplace Discrimination	✓	✓	✓		
Environmental Rights	Pollution, toxic or hazardous chemicals, and land use and property rights	Pollution and Chemicals					✓
	Carbon reduction and climate transition	Climate and Energy New		✓			✓
	Impacts on ecosystems	Biodiversity New		✓			✓
Voice & Participation	Inclusivity and participation, community impact, and privacy	Privacy	✓	✓	✓		
Gender Equality	Sexual harassment and gender discrimination	Sexual Harassment	✓	✓	✓		
		Gender Discrimination	✓	✓	✓		
Services & Products Liability	Product testing, advertising, marketing and intellectual property rights, and illegal/harmful or discriminatory products and services	Managing Hazardous Substances in Products	✓	✓	✓	✓	
		Customer Proprietary Information and Personal Information Protection				✓	
Governance & Security	Abuse of governmental power, and security	Security	✓	✓	✓		

Human Rights Risk Surveys

	Affected Stakeholders	Salient Human Rights Issues		Risk Surveys	
TSMC	• All employees • Female employees • Individuals with disabilities or mobility impairments • Employees of associate companies	• Wages and Working Hours • Health and Safety • Terms of Employment • Workplace Discrimination	• Privacy • Sexual Harassment • Gender Discrimination • Managing Hazardous Substances in Products • Security	• Employee Voice Channels • HR Analytics Platform • Comparative analysis of internal health examination results and external health data • Regulatory compliance review • Compliance check of safety and health implementation	• Occupational injury / disease reporting system • RBA SAQ and VAP results for Taiwan fabs and subsidiaries • Workplace Human Rights Climate Survey • Due diligence of associate companies
Suppliers/ Contractors	• Employees of suppliers/ contractors • Migrant workers • Female employees • Child laborers • Cooperative education students	• Wages and Working Hours • Health and Safety • Discrimination and Harassment • Pollution and Chemicals	• Climate and Energy • Biodiversity • Tier 2 Supply Chain Human Rights Management	• Third-party audits • Self-Assessment Questionnaire (SAQ) • Audits of Supplier Healthiness Assessment Rectification Program Team • Statistics on disabling injuries among contractors at TSMC worksites	• Set carbon reduction targets • Track emissions reduction performance, renewable energy usage, and progress in plant-level carbon inventory and footprint verification • Biodiversity dependency and impact assessment using the LEAP methodology
Customers	• All customers	• Managing Hazardous Substances in Products	• Customer Proprietary Information and Personal Information Protection	• Convene the Hazardous Substance Management Review Meeting quarterly to establish control plans • The PIP and Risk Committee reviews and determines information security and protection policies on a quarterly basis	• The Personal Data Protection Committee monitors the implementation of the Privacy and Personal Data Protection Guidelines • The Personal Data Protection Working Task Force discusses issues and needs raised by employees
Communities	• Major operational sites	• Pollution and Chemicals	• Climate and Energy • Biodiversity	• WRI Water Risk Atlas • Internal Control Procedures for Low Water Supply Crisis Management • Water contingency measures • Sampling and analysis by third-party certified laboratories • Technical Regulation of Health Risk Assessment by Taiwan's Ministry of Environment • Reports on air pollution inspection results and emission • Regulations on Workplace Environmental Monitoring	• New Tool and New Chemical Evaluation Process and Change Management System • Materiality assessment of climate risks and opportunities • Third-party verification of GHG inventory • Annual reporting of climate risks and opportunities to the ESG Committee • Assessment of nature-related impacts using the LEAP methodology • Application of LCA to analyze biodiversity impacts

Stakeholder: Employees

Employees are the driving force behind TSMC's pursuit of excellence and continuous innovation. Guided by the Human Rights Policy as its highest principles, the Company is fully committed to safeguarding the rights and well-being of its workforce. It strives to foster a work environment characterized by mutual respect, equity, inclusion, safety, and health, empowering employees to realize their full potential and create shared value with the Company.

Policy & Organization

In terms of human rights issues relevant to employees, TSMC prioritizes nine key areas: Wages and Working Hours, Health and Safety, Terms of Employment, Workplace Discrimination, Privacy, Sexual Harassment, Gender Discrimination, Managing Hazardous Substances in Products, and Security. In alignment with the Due Diligence Guidance for Responsible Business Conduct, the Company assigns relevant departments—including the Human Resources Organization, Corporate ESH Division, Corporate & Compliance Legal Division, Global Security Management Organization, and Customer Service — to incorporate these issues into management systems through corresponding policies to ensure effective implementation of human rights protection and respect. In 2024, TSMC established the Anti-Harassment Policy to provide employees with a workplace free from harassment, discrimination, and threats. This policy applies to all employees, both within and outside the Company, and aims to build a workplace culture and environment based on respect, inclusion, and dignity. In addition, the Company enforces the Sexual Harassment Prevention Procedure to eliminate gender-based discrimination and harassment. It also launched a series of zero-harassment workplace training programs and awareness campaigns to strengthen employees' competencies in maintaining a safe work environment, respecting gender equality, fostering constructive communication, and preventing inappropriate conduct.

Salient Issues

- Wages and Working Hours
- Health and Safety
- Terms of Employment
- Workplace Discrimination
- Privacy
- Sexual Harassment
- Gender Discrimination
- Managing Hazardous Substances in Products
- Security

Policies

- Safety and Health Policy
- Global Inclusive Workplace Statement
- Privacy Policy
- Information Security Statement
- Anti-Harassment Policy New
- Sexual Harassment Prevention Procedure
- Compensation and Benefit Policy
- Recruiting, Hiring and Staffing Policy

Organizations

- Human Resources Organization
- Corporate ESH Division
- Corporate & Compliance Legal Division
- Global Security Management Organization
- Customer Service Division

Investigation & Action

TSMC identifies human rights risk factors related to employees through a range of internal and external mechanisms, including Employee Voice Channels, the HR Analytics Platform, comparative analysis of internal health examination results and external health data, compliance reviews on labor and privacy-related regulations, safety and hygiene audits, and the occupational injury and illness application system. These risk factors encompass working hours and overtime compensation, the five major occupational hazard factors, physical and mental well-being, harassment and discrimination, employment of persons with disabilities, and protection of employee personal data. Through its responsible organizations, the Company plans and implements mitigation measures to prevent and lessen potential human rights impacts, and monitors human rights management effectiveness via tracking mechanisms and management indicators.

Salient Human Rights Issues	Risk Assessment Factors	Meetings / Platforms	Systems / Processes
Wages and Working Hours	• Working hours and overtime compensation	• Ombudsman System	• Employee Voice Channels • HR Analytics Platform
Health and Safety	• Physical and mental well-being	• Occupational Safety and Health Committee	• Comparative analysis of internal health examination results and external health data
Terms of Employment, Workplace Discrimination, Sexual Harassment, Gender Discrimination	• Harassment and discrimination • Insufficient employment of persons with disabilities as required by law	• Sexual Harassment Investigation Committee • Ombudsman System • Irregular Business Conduct Reporting System	• Employee Voice Channels • Regulatory compliance review
Privacy	• Protection of employee personal data	• Ombudsman System • Personal Data Protection Committee	• Employee Voice Channels
Managing hazardous substances in products, and security	• Five occupational disease risk factors: ergonomic, chemical, physical, biological, and social/psychological	• Occupational Safety and Health Committee • Occupational Injury and Disease Investigation Committee	• Compliance check of safety and health implementation • Occupational injury / disease reporting system

Management Indicators

	2020	2021	2022	2023	2024
Verified cases of complaints related to working hours	6	5	4	3	6
Employees with reported high stress levels (%) Note 1	-	-	8.1	6.4	6.3
Women in management (%)	12.5	13.0	13.3	14.1	14.6
Women in newly-hired fresh graduates technical professionals (%)	21.1	21.3	23.7	28.4	28.7
Verified cases of sexual harassment	2	11	14	23	28
Verified cases of discrimination	0	0	0	0	0
Employees with disabilities hired (%)	1.1	1.1	1.0	1.0	1.0
Verified cases of irregular business conduct	6	4	4	5	1
Verified cases of employee personal data breaches	0	1	3	2	1
Disabling injury frequency rate (FR) Note 2	0.42	0.38	0.27	0.35	0.26
Disabling injury severity rate (SR) Note 2	4	7	3	4	3
Cases of occupational diseases caused by exposure to chemicals Note 2	0	0	0	0	0

Note 1: This management indicator was introduced in 2021; therefore, there are no results available for 2020–2021.
Note 2: The data covers TSMC's Taiwan fabs, TSMC (China), TSMC (Nanjing), and VisEra.

RBA SAQ and VAP Results for Taiwan Fabs and Subsidiaries

As a full member of the RBA, TSMC uses the RBA Self-Assessment Questionnaire (SAQ) to identify the practices, risks, and management systems of four key aspects of labor, health and safety, environment, and ethics in business operations. The Company also commissioned a third party to carry out the RBA Validated Assessment Program (VAP) for three fabs, which all received full marks on the VAP. The complete audit report is disclosed to customers and related stakeholders on RBA-Online.

SAQ and VAP Results

Fabs		SAQ Scores Note 1	VAP Scores Note 2				
		2024	2020	2021	2022	2023	2024
Taiwan Fabs	Headquarters	96.2	-	-	-	-	-
	Fab 2	92.8	-	-	-	200	-
	Fab 3	82.3	-	-	-	-	-
	Fab 5	92.8	-	200	-	200	-
	Fab 6	82.6	-	-	-	-	-
	Fab 8	94.7	-	-	-	200	-
	Fab 12A	89.4	-	200	-	-	200
	Fab 12B	91.0	200	-	200	-	-
	Fab 14A	89.5	-	-	200	-	-
	Fab 14B	90.9	-	200	-	-	200
	Fab 15A	90.9	-	200	-	200	-
	Fab 15B	92.3	-	200	200	-	200
	Fab 18A	90.9	-	200	-	200	-
	Fab 18B	81.0	-	-	-	-	-
	Advanced Backend Fab 1	82.7	-	-	-	-	-
	Advanced Backend Fab 2	83.7	-	-	-	-	-
	Advanced Backend Fab 3	93.7	-	200	-	200	-
	Advanced Backend Fab 5	90.9	-	-	-	200	-
	Advanced Backend Fab 6	82.3	-	-	-	-	-
Subsidiaries	VisEra	96.5	-	-	-	-	-
	TSMC (China)	79.5	-	-	-	-	-
	TSMC (Nanjing)	75.9	-	-	-	-	-
	TSMC Washington, LLC	81.1	-	-	-	-	-

Note 1: According to RBA explanatory notes, 2024 SAQ not only include corporate self-assessment responses but also incorporate country and industry-specific risk scores for overall evaluation. Self-Assessment Questionnaire (SAQ): Categorized as Low Risk (≥ 80), Medium Risk (≥ 60 & <80), and High Risk (<60)

Note 2: Validated Assessment Program (VAP): The perfect score is 200 points.

Note 3: 100% of TSMC's operating sites have conducted human rights risk assessments utilizing the RBA SAQ, with 0 fabs classified as high risk. The Company is committed to further enhancing its risk management and strengthening operational resilience.

Workplace Human Rights Survey

In 2023, TSMC conducted its first sample-based Workplace Human Rights Climate Survey, targeting its Operations and Research and Development organizations. Through the survey, employee responses and feedback were translated into concrete improvement actions. In 2024, the survey scope was expanded to include all global operating sites. The questionnaire was developed based on the UNDP's Human Rights Risks in Business Operations indicators and incorporated regional human rights impact factors from the MVO Nederland CSR Risk Check to enhance content validity. All survey items were reviewed and approved by the Human Rights Working Group to ensure face validity. Based on the results, TSMC's respective business management units first reviewed the adequacy of existing policies and management mechanisms in addressing potential human rights impacts, after which the Human Rights Working Group analyzed the findings for each organization. For categories highly valued by employees—including "Privacy and Personal Information Protection, Mental Health, Wages and Working Hours, Harassment, Voice and Participation, and Occupational Health and Safety"—the relevant business management units and the Human Rights Working Group each set improvement actions. Progress is reported to the ESG Committee each quarter as part of a comprehensive due diligence and follow-up mechanism.

2024 Workplace Human Rights Survey Process

Design Questionnaires

Reference Sources for Questionnaire Items

- UNDP Human Rights Risks in Business Operations indicators and MVO Nederland CSR Risk Check

Review Questionnaires

- The Human Rights Working Group confirms questionnaire items

Identify Potential Impacts

Survey Subjects

- Employees at all global operating sites

Analyze Questionnaires

- Identify the human rights categories of major concern to employees

Report Survey Results

Management Guidance and Oversight

- The ESG Committee Chairperson reports analysis results to the CEO and senior executives

Analyze Questionnaires

- The ESG Department holds meetings with business management units and the Human Rights Working Group

Formulate Enhancement Actions

Action Plans

- Business management units and the Human Rights Working Group develop enhancement measures

Track Progress

- The ESG Committee monitors progress on a quarterly basis

Workplace Human Rights Climate Survey: Questionnaire Content and Statistical Results

Questionnaire Structure	Survey Categories	Questionnaires Collected
40 questions in 11 categories	• Health and Safety • Terms of Employment • Wages and Work Hours • Harassment • Discrimination • Mental Health • Privacy and Personal Information Protection • Environmental Rights • Land Use and Property Rights • Forced Labor and Bonded Labor • Voice and Participation	64,625 Valid Questionnaires 82% Response Rate

Workplace Human Rights Survey Improvement Actions

Human Rights Categories	Action Plans	Implementation Measures	
Privacy and Personal Information Protection	Raise awareness of privacy and personal data protection	Process Establishment	Conduct audits of related personal data systems, standardize data access procedures, and establish a classification system
		Access Management	Establish and maintain a management mechanism for personnel with special access rights to ensure compliance with personal data protection regulations
		Trainings	Design training programs for general employees and personnel with special access rights to cultivate proper awareness
		Communication Plan	Prepare a personal data and privacy protection communication plan led by designated personnel to explain and promote the content to all organizations
Mental Health	Establish a positive communication environment	Friendly Communication	Deliver training on positive communication skills and empathy building, as well as constructive feedback guidelines to strengthen two-way communication and diversity of feedback channels, creating an open communication environment
		Trainings	For example, offer workplace inclusion courses for frontline supervisors, psychological safety and fault-tolerant culture training sessions, and "Five Behaviors" workshops
	Inspire employees' innovative thinking	Innovation and Fault Tolerance	Encourage employees to maintain creativity and courage to explore, cultivating a culture of team growth
		Incentive Mechanism	Establish project-based incentive programs to motivate employees to propose impactful or breakthrough ideas
	Improve job transfer management	Transfer Communication	Fully discuss job transfer details, employee expectations, and potential challenges to ensure the employee is fully informed and agrees to the transfer
		Assignment Support	Provide diverse resources such as life and psychological support to help employees adapt to cross-regional assignments
Wages and Working Hours	Strengthen working hours management and early warning systems	Process Optimization	Promote digital transformation and improve personnel efficiency through automated workflows
		Real-Time Warning	Use factory stay-time dashboards to help employees and supervisors track and improve working hours
Harassment	Establish a zero-harassment and friendly workplace	Dedicated Teams	Each organization's Zero-harassment Working Group regularly reviews related risks and develops improvement plans accordingly
		Thematic Courses	Offer annual training on sexual harassment prevention and anti-harassment to cultivate respectful workplace interactions
Voice and Participation	Enhance usage of employee voice channels	Strengthened Promotion	Promote usage process and benefits of employee voice channels, ensuring reported issues are properly addressed
Occupational Health and Safety	Improve intrinsic safety and optimize operational procedures	Smart Management	Set up centralized chemical supply systems to reduce human handling and avoid direct contact with chemicals
		Environmental Management	Adopt raw materials with specifications exceeding regulatory standards to maintain factory environmental quality
		Enhanced Protection	Adopt more ergonomic, comfortable, and better protective gear to ensure employees' safety during operations
		Tool Upgrades	Optimize plater, solder reflow, and factory exhaust systems to reduce chemical outgassing into the environment and minimize exposure risks for employees

Human Rights Survey of Associates

In alignment with the OECD Due Diligence Guidance for Responsible Business Conduct, TSMC expanded the scope of its human rights due diligence to include its associates, assessing their exposure to human rights risks and the effectiveness of their management practices, thereby reinforcing human rights protection in business relationships. In addition to reviewing compliance records, sustainability reports, and publicly available information, the Company distributed human rights risk questionnaires to four associates, achieving a 100% response rate. Based on the findings and with reference to the EU Corporate Sustainability Due Diligence Directive's definition of high-impact human rights incidents, the Company confirmed that 0% of the associates held major human rights risks. All associates adhere to the Responsible Business Alliance (RBA) framework in human rights management, which include establishing human rights policies, conducting due diligence across the value chain, and providing grievance channels. In cases involving environmental protection, wage regulations, occupational safety, and sexual harassment, 100% of the associates have adopted appropriate remedy actions to address adverse impacts. Going forward, TSMC will continue to engage with associates on human rights management issues to strengthen due diligence across the value chain and foster a workplace that upholds human rights.

Human Rights Management Framework of Associates

	Policies & Governance		Investigations & Actions				Enhancing Engagement & Disclosure	
	Public Human Rights Policy / Commitment	Dedicated Human Rights Unit	Human Rights Due Diligence	Due Diligence Across the Value Chain	Mitigation and Remedy Measures	Human Rights Training	Disclosure of Human Rights Management Progress	Grievance Channel Available
Associate A	✓	✓	✓	✓	✓	✓	✓	✓
Associate B	✓	✓	✓	✓	✓	✓	✓	✓
Associate C	✓	✓	✓	✓	✓	✓	✓	✓
Associate D	✓	✓	✓	✓	✓	✓	✗	✓

Human Rights Risk Survey of Associates

Human Rights Incidents	Descriptions	Remedy Measures
Wages and Work Hours	2 associates were found in violation of labor regulations regarding extended working hours and full wage payment	Corrective: Provide online working hour reports to supervisors to ensure proper time management Corrective: Conduct training and promotion on working hour management Corrective: Improve wage payment processes and reinforce audit and monitoring mechanisms
Health and Safety	3 associates reported non-serious occupational injury incidents	Corrective: Implement risk identification for occupational hazards in the workplace Corrective: Conduct regular occupational safety and health inspections Corrective: Deliver training and promotion on health and safety
Harassment and Discrimination	1 associate reported a case of sexual harassment	Corrective: Establish a sexual harassment prevention policy and set up a dedicated complaint mailbox Disciplinary: Impose disciplinary and corrective actions on the respondent Compensatory: Provide counseling support to the complainant
Environmental Protection	1 associate violated environmental regulations and was penalized	Corrective: Improve audit procedures and environmental data management

Mitigation Measures

Working Hours Management and Health Support

To help employees maintain a balance between work and personal life, TSMC strictly complies with local labor laws regarding wages and working hours. Through the HR Analytics Platform, the Company proactively monitors and prevents excessive working hours. When the system detects anomalies—such as employees remaining on site for more than 12 hours, working over 60 hours per week (except in emergencies or special circumstances), or potentially working for more than 7 days—it automatically flags these individuals as high-risk and alerts department and section managers to offer timely care and support. Where overtime is verified, appropriate compensation is provided. Meanwhile, employees can access their entry and exit records and manage staggered work schedules via the Employee Experience Platform, enabling flexible and autonomous adjustment of their working hours.

In addition, TSMC sets individually adjusted working hour limits for employees identified as medium- or high-risk based on their annual health examination results. On-site healthcare professionals provide these individuals with proactive care, medical evaluations, and health instruction. To address both physical and mental well-being, the Company has established a comprehensive health management framework centered on health check-ups, health risk management, occupational disease prevention, and healthcare and support and health promotion. In 2024, the Company appointed six additional on-site psychologists and organized mental health lectures targeting various employee groups and stress relief workshops for managers. Furthermore, through the Employee Assistance Program, each employee is entitled to five hours of free counseling per year, aiming to build a work environment that promotes physical and mental well-being while being supportive and safe.

Foster an Inclusive Workplace

TSMC strives to create an inclusive and supportive work environment that mitigates potential issues related to harassment and discrimination. Beginning with the recruitment process, the Company established a Candidate Interview Internal Control Procedure, which clearly uphold a non-discrimination principle. The Company also provides hiring managers with training courses on recruitment and candidate selection, along with interview guidelines and key reminders. In 2024, TSMC continued advancing the Inclusive Leadership Workshop, designed for management at all levels. The program introduces the concept of inclusion, raises awareness of unconscious bias, and incorporates real-world case discussions to develop action plans, to cultivate inclusive team leadership.

To strengthen workplace conduct standards, the Company launched the "Workplace Harassment TSMC Caring" in-person course in 2024. The course familiarizes managers in the Operations organization with workplace violence, bullying, and relevant legal requirements, while equipping them with appropriate management and communication skills. A total of 181 sessions were held during the year, with 5,268 managers completing the training, achieving a completion rate of 98%. The Company also trained 207 core trainer and incorporated the Five Principles into the mandatory curriculum for newly appointed managers. Eight sessions were conducted, with 196 participants completing the program. To broaden the scope of learning, the Company also introduced interactive online courses titled "Fostering a Positive Workplace Environment" tailored for both managers and general employees. These courses use real-world case studies to examine common forms of harassment or discrimination in the workplace and teach appropriate interaction techniques, enabling all staff to understand how to prevent misconduct.

TSMC actively fosters employees' fundamental understanding of business and human rights and strengthens their understanding of the Human Rights Policy. In 2024, the Company offered two online courses: "Introduction to Human Rights" and "TSMC Human Rights Policy - Build a Workplace Free of Sexual Harassment" with 69,801 and 69,051 participants completing the training, respectively. The Company expects employees to integrate respect for human rights into their daily decisions and actions, thereby fulfilling its human rights commitments.

Regarding individuals with disabilities, TSMC collaborated with school resource centers and government employment service centers to hold four recruitment briefings. The Company also introduced occupational therapists to conduct professional assessments, providing employees with assistive device support and job accommodation recommendations to ensure a suitable working environment. In 2024, TSMC and VisEra Technologies Company Limited employed 607 and six individuals with disabilities, respectively, with weighted employment ratios of 1% and 0.5%.

Privacy Protection and Information Security Enhancement

TSMC adheres to internal information protection and information security policies, formulating retention and management guidelines for personal data to effectively prevent unauthorized access to and processing of employee information. Furthermore, in response to increasingly complex information security challenges, TSMC actively enhances the expertise of its information security team, which obtained 38 new top-tier international certifications in 2024, bringing the total to over 200. Additionally, the Company regularly runs online cybersecurity training courses, deepening employees' awareness of information security. In 2024, 80,921 employees completed the training, with a 95 percent employee approval rating for related policies.

Occupational Safety Protection

Regarding occupational safety and health, TSMC updated its Safety and Health Policy in 2024 and carries out annual occupational hazard identification and risk assessment procedures, with a tiered control system applied to minimize risks. To manage occupational safety and health concerns at the source, in 2024 the Corporate ESH Division collaborated with the R&D Department to develop a hazard identification system for mixed-acid chemical data to identify high-risk substances and assesses the hazards of chemical mixtures, mitigating exposure risks for operational personnel.

TSMC fosters a safety-oriented culture by focusing on three key areas: enhancing daily safety awareness among employees, strengthening safety communication, and developing multifaceted safety concept training. Each site promotes the "Safety Moment" program to reinforce workforce-wide attentiveness to safety. In conjunction with the Industrial Technology Research Institute, the Company also set up a VR training room to provide immersive simulation-based learning that sharpens workers' proficiency in replacing hazardous gas cylinders. In 2024, TSMC launched its first Environmental Protection, Safety and Health Month, featuring themed forums, lectures, poster exhibitions, and displays of personal protective equipment in a broad range of sizes, aiming to deepen employees' understanding of occupational safety and health. The event also invited experts from industry, government, and academia, along with suppliers and contractors, to jointly advance the quality and culture of environmental, health, and safety practices.

TSMC advocates for a safety culture and establishes an intrinsically safe working environment.

Adaptation Measures

- Remove overtime warning alerts from overtime request forms to encourage employees to submit accurate overtime hours based on actual time worked
- Implement staggered work schedules
- Establish working hour limits based on health risk levels
- Provide services from six on-site psychologists
- Collaborate with school resource centers and government employment service centers to hold recruitment briefings for people with disabilities
- Developed a hazard identification system for mixed-acid chemical data

Policy/Document Development

- Compensation and Benefit Policy
- Payroll, Allowance and Bonus Procedure
- Working Hours Procedure
- TSMC Brain and Cardiovascular Disease Prevention and Management C.I
- Candidate Interview Internal Control Procedure
- Anti-Harassment Policy
- Sexual Harassment Prevention Procedure
- Define data retention and management regulations for privacy information
- Safety and Health Policy

Red-flag Systems

- Proactively Monitor and Prevent Overtime through the HR Analytics Platform
- Prevent Overtime for Medium and High Health-Risk Employees via the HR Analytics Platform
- Apply occupational hazard identification and risk assessment procedures

Facility Upgrading

- Provide assistive device support for employees with disabilities
- Set up a VR training room

Trainings

- Pre-employment Training for New Employees
- Working Hours and Attendance and Leave Management Course for Technicians
- Mental Health Lecture
- World Mental Health Month Activities
- Inclusive Leadership Workshop
- Workplace Harassment TSMC Caring - In-Person Course
- Fostering a Positive Workplace Environment - Managers & Employees Online Courses
- TSMC Human Rights Policy - Build a Workplace Free of Sexual Harassment
- Human Rights Online Course
- Safety Moment Training Sessions
- VR-Based Hazardous Gas Cylinder Replacement Training
- Environmental Protection, Safety, and Health Month Event

2024 Education and Training Programs

Wages and Working Hours

Training Topics	Target Groups	2024	
		Number of Participants	Training Duration (Hours)
Pre-employment Training for New Employees	New employees	8,478	0.58
Working Hours and Attendance and Leave Management	New team leader employees	1,373	3

Health and Safety

Training Topics	Target Groups	2024	
		Number of Participants	Training Duration (Hours)
Mental Health Lecture	Non-managerial employees	3,107	0.5 ~ 1
	Managers	402	1.5

Terms of Employment, Workplace Discrimination, Gender Discrimination, Sexual Harassment

Training Topics	Target Groups	2024	
		Number of Participants	Training Duration (Hours)
Inclusive Leadership Workshop	Managers	3,490	2 ~ 4 [Note]
Workplace Harassment TSMC Caring - In-Person Course	Managerial employees in Operations organization	5,268	2
Fostering a Positive Workplace Environment - Managers & Employees Online Courses	Non-managerial employees and managers	48,491	Managers 0.33/ Employees 0.25
TSMC Human Rights Policy - Build a Workplace Free of Sexual Harassment	Non-managerial employees and managers	69,051	0.5
Human Rights Online Courses	All employees	69,801	0.16

Note: Senior managers: 2 hours; experienced managers: 3.5 hours; section and new managers: 4 hours; advanced course for new managers: 3 hours

Safety

Training Topics	Target Groups	2024	
		Number of Participants	Training Duration (Hours)
Safety Moment Training Sessions	All employees	19,099	0.08
VR-Based Hazardous Gas Cylinder Replacement Training	Resident contractor	43	1
Environmental Protection, Safety, and Health Month Event	All employees	3,300	1

TSMC introduces virtual reality (VR) technology to strengthen resident contractors familiarity with exchanging hazardous gas cylinders.

Remedy Process

Remedy is an independent and essential component of the due diligence process. When incidents involving adverse human rights impacts on employees occur, in addition to complying with relevant legal requirements, the Company also considers the Work Rules, precedents from previous cases, and the rights of affected individuals. Based on the nature and severity of the impact, TSMC adopts four key remedy measures: (1) restoring the employee to a condition equivalent to that prior to the incident, (2) providing financial or non-financial compensation, (3) taking necessary disciplinary actions, and (4) initiating preventive and corrective actions. These steps aim to eliminate the harm caused and ensure that employee rights receive due attention and protection.

Wages and Working Hours

Incidents in 2024

- 3 cases involving obstruction of leave requests
- 2 cases related to the control of leave categories
- 1 case concerning overtime application

Remedy Measures in 2024

Restoration to Pre-Incident Status

Assisted employees in resuming original leave plans, reinstated appropriate leave categories, and ensured payment of due overtime compensation

Corrective Actions

Established internal leave management principles and reinforced managers' communication and personnel management competencies

Sexual Harassment

Incidents in 2024

- 28 cases of sexual harassment

Remedy Measures in 2024

Financial / Non-Financial Compensation

Provided support through Employee Assistance Programs (EAPs), including but not limited to psychological counseling services

Disciplinary Actions

Applied varying levels of disciplinary measures—such as job reassignment or termination—based on the severity of the employee's misconduct

Corrective Actions

Launched the "TSMC Human Rights Policy - Build a Workplace Free of Sexual Harassment" course in 2024 to raise employees' awareness on preventing and addressing sexual harassment

Privacy

Incidents in 2024

- 1 complaint involving personal data

Remedy Measures in 2024

Disciplinary Actions

Issued a verbal reprimand as the case did not involve sensitive personal information

Corrective Actions

Strengthened personal data protection awareness campaigns and required employees to commit to avoiding future violations

Safety

Incidents in 2024

- 37 cases concerning employee disabling injury

Remedy Measures in 2024

Restoration to Pre-Incident Conditions

The majority of employee disabling injury incidents stemmed from falls and collisions during work. All cases were reported and addressed per Emergency Response Internal Control Procedures and Emergency Medical Care Internal Control Procedures.

Corrective Actions

- Rectified unsafe conditions that could result in falls or collisions and added warning signage and warning markings along the edges of loading and unloading docks to caution personnel against fall hazards
- Organized materials required for tool maintenance, including covers and extension cords, and defined step specifications and usage protocols for cleanroom tools, with access limited to authorized personnel only

Engagement & Grievance

TSMC values employees' voices and rights and provides multiple communication channels. Issues raised by employees are handled confidentially by the responsible departments based on their nature, with appropriate responses provided. Through interviews and in-depth investigations, the Company provides timely access to remedy processes, which serve as guidance for refining mitigation measures. By fostering two-way communication, the Company aims to build mutual trust with employees, strengthen internal cohesion, and drive a positive impact in human rights management.

Grievance Handling Process

Employee Voice Channels

Channels	Handled Issues	Responsible Parties
Ombudsman System	Major management deficiencies, workplace violence, and financial audit concerns	Vice President
Employee Opinion Box	Issues and suggestions regarding work and work environment	Director of Employee Communications and Relations
Whistleblower Procedures	Major management, financial, audit, and professional ethics issues	Audit and Risk Committee
Fab Caring Circle	Personal work and life-related issues, primarily serving direct labor	Fab Directors
Irregular Business Conduct Reporting System	Major management, financial, audit, and professional ethics issues	Ethics Committee
Sexual Harassment Investigation Committee	Complaints related to sexual harassment	3 managers from HR, Legal and other organizations
Silicon Garden Meeting (labor-management meeting)	Issues involving employee rights and their concerns	Chairs of respective Silicon Garden Meetings
Occupational Injury and Disease Investigation Committee and Safety and Health Feedback Channels	Investigation into suspected occupational disease cases, and critical safety and health issues that still need to be addressed even after handled by the fab's Industrial Safety and Environmental Protection Department	Corporate ESH Division

Number of Verified Cases through Employee Voice Channels

Employee Feedback Channels	2020	2021	2022	2023	2024
Ombudsman System	171	231	251	252	257
Employee Opinion Box	906	1,297	1,565	1,604	1,861
Whistleblower Procedures	5	4	1	8	12
Fab Caring Circle	3,192	2,831	2,899	2,924	2,994
Sexual Harassment Investigation Committee	4	14	19	35	50
Irregular Business Conduct Reporting System	70	92	83	88	89
Occupational Injury and Disease Investigation Committee and Safety and Health Feedback Channels	6	5	1	7	1

Note 1: The scope of the Fab Caring Circle, Employee Opinion Box, Ombudsman System, Sexual Harassment Investigation Committee, and Irregular Business Conduct Reporting System covers all TSMC fabs and domestic and overseas subsidiaries.

Note 2: Reported cases in the Irregular Business Conduct Reporting System include both external reports and internal employee reports.

Number of Verified Cases through Employee Voice Channels

Category of Complaints	2020	2021	2022	2023	2024
Attendance or leave management	2	3	1	1	5
Overtime requests and overtime pay control	4	2	3	2	1
Discrimination	0	0	0	0	0
Sexual harassment	2	11	14	23	28
Violation of personal data protection act	0	1	3	2	1
Breach of ethics	6	4	4	5	1
Occupational diseases, safety and health	0	2	0	1	1

TSMC values employee opinions and interests, and constructs a robust system for employee feedback.

Stakeholders: Suppliers / Contractors

As a global leader in the semiconductor industry, TSMC fully recognizes its pivotal role in the supply chain and remains committed to safeguarding human rights across its operational locations. The Company takes firm action to eliminate modern slavery practices such as forced labor and human trafficking, while incorporating the human rights scores from the SAQassessments of tier 1 suppliers into its sustainability management indicators, strengthening its governance and oversight of supply chain human rights. Concurrently, TSMC works closely with suppliers on environmental protection, occupational safety, and health matters by formulating policies, conducting regular audits, providing training, and organizing advocacy forums—advancing a sustainable future in collaboration with its supply chain partners.

Policy & Organization

The TSMC Material Management Division's Responsible Supply Chain ESG Management Team updated the Supplier Code of Conduct in 2024 based on Version 8.0 of the RBA Code of Conduct. By incorporating new provisions such as carbon reduction targets, modern slavery, and employment agreements, this revision requires suppliers to adhere to standards across five core areas: labor, health and safety, environment, ethics, and management systems. To support suppliers in meeting these expectations, the Company also introduced the Supplier Sustainability Standards. To minimize the environmental, social, and biodiversity impacts of raw materials, the Sustainable Raw Material Policy was issued in 2024. This policy enables comprehensive traceability and oversight of sources of metals, gases, chemicals, and other materials. Adopting a life-cycle perspective, it aims to mitigate ecological and human rights risks throughout the sourcing, transportation, and production stages, thereby building a resilient and sustainable value chain for raw materials.

To strengthen suppliers' awareness and capacity for independent management, TSMC launched the S.H.A.R.P. This initiative is jointly led by the Material Management Division's Supply Chain Sustainability Program and the Corporate ESH Division's Supply Chain ESH Management Team. Each year, teams conduct regular audits of significant suppliers, provide guidance resources, and monitor progress on corrective actions. In addition, the Contractor ESH Bluebook and the ESH Bluebook on Fab Construction serve as key references to assist contractors in understanding safety and health protocols, fostering a safe and healthy working environment throughout the supply chain.

Salient Issues

- Wages and Working Hours
- Health and Safety
- Discrimination and Harassment
- Pollution and Chemicals
- Climate and Energy
- Biodiversity
- Tier 2 Supply Chain Human Rights Management

Policies

- Supplier Code of Conduct
- Supplier Sustainability Standards
- Sustainable Raw Material Policy
- Contractor ESH Bluebook
- ESH Bluebook on Fab Construction

Organizations

- Material Management Division's Responsible Supply Chain ESG Management Team
- Material Management Division's Supply Chain Sustainability Program Team
- Corporate ESH Division's Supply Chain ESH Management Team

Investigation & Action

TSMC has established a three-stage supplier risk assessment and selection mechanism. The Company first examines the product and service categories and locations of suppliers to identify Tier 1 suppliers and requires them to complete an SAQ. Using SAQ responses, operational characteristics, and a structured risk evaluation matrix, TSMC identifies significant suppliers for further on-site, remote, or documentation-based audits. In 2024, the Company conducted 150 audits through the S.H.A.R.P. team and 70 audits via third-party organizations. For contractor safety and health oversight, TSMC annually monitors and analyzes their disabling injury severity and frequency rates at its worksites, while taking corrective measures and following up on their effectiveness. Contractors engaged in high-risk operations are required to adopt the ISO 45001 Occupational Health and Safety Management System, and the certification pass rate reached 100% in 2024. Moreover, in response to climate change and ecological challenges, the Company convenes supplier carbon reduction meetings, urging them to set carbon reduction targets, while continually monitoring performance in emissions reduction, renewable energy utilization, and progress in plant-level carbon inventories and footprint verifications. Additionally, the Company applies the LEAP approach from the Taskforce on Nature-related Financial Disclosures (TNFD) recommendations to assist suppliers in assessing nature-related risk factors.

Salient Human Rights Issues	Risk Assessment Factors	Meetings / Platforms	Systems / Processes
Wages and Working Hours	• Excessive working hours; wage deductions or penalties	• Supplier Human Rights Enhancement Workshop	• Third-party audits • SAQ
Discrimination and Harassment	• Transparency of publicly disclosed inclusive workplace related policies	• Supplier Workplace Inclusion Workshop	• Third-party audits
Health and Safety	• Workplace safety, implementation of occupational health policies, and incident investigation process and corrective actions • Fire incidents, chemical spills, tool safety concerns, and contractor-related disabling injuries	• Supply Chain ESH Technical Forum • Sustainable Supply Chain ESH Forum • Supplier Senior Executive ESH Improvement Program Workshop • Safety and health training for new contractors	• S.H.A.R.P. team audits • Third-party audits • Statistics on disabling injuries among contractors at TSMC worksites
Pollution and Chemicals	• Comprehensiveness of hazardous substance reduction programs	• Sustainable Supply Chain ESH Forum	• S.H.A.R.P. team audits • Third-party audits
Climate and Energy	• Status of net-zero emission target setting	• Supplier carbon reduction meeting • Sustainable Supply Chain ESH Forum	• Set carbon reduction targets • Track emissions reduction performance, renewable energy usage, and progress in plant-level carbon inventory and footprint verification

Salient Human Rights Issues	Risk Assessment Factors	Meetings / Platforms	Systems / Processes
Biodiversity	• Comprehensiveness and implementation of biodiversity policies and risk assessments	• Nature-Based Carbon Credits and Biodiversity Forum	• Biodiversity dependency and impact assessment using the LEAP methodology
Tier 2 Supply Chain Human Rights Management	• Assessment of Tier 2 supplier human rights compliance	• Supplier Human Rights Enhancement Workshop	• Third-party audits

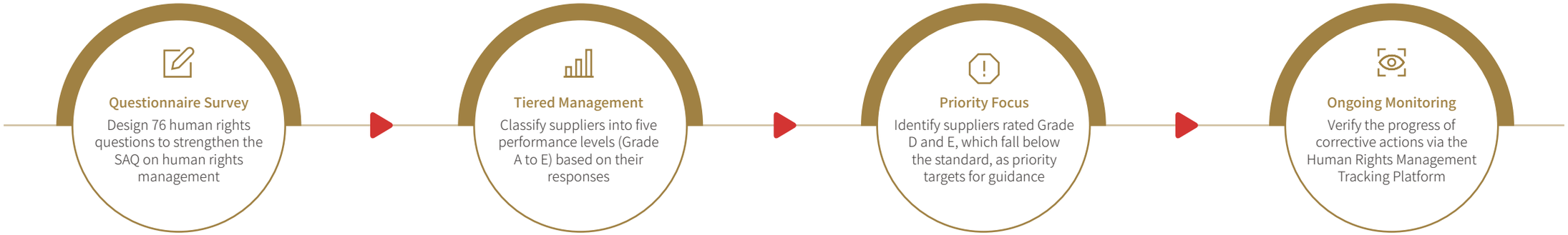
Management Indicators

	2020	2021	2022	2023	2024
Achieve an average human rights rating of Grade B (score 85) on the SAQ for tier 1 suppliers [Note 1]	–	–	–	–	Grade C (score 77)
Tier 1 suppliers' completion rate of the SAQ (%)	100	100	100	100	100
Significant suppliers' completion rate for receiving third-party audits (by RBA-certified auditing institutions) every year (%) [Note 2]	60	60	100	100	100
Total number of high-risk significant suppliers that have received audits for the S.H.A.R.P. Program [Note 3]	–	86	100	148	150
Total number of suppliers that participated in the ESH training program (base year: 2016)	558	759	960	1,154	1,879
High-risk significant suppliers that received safety and health support (%)	100	100	100	100	100
Disabling injury severity rate (SR) of contractors at TSMC's operation sites [Note 4]	5	9	11	82	72
Disabling injury frequency rate (FR) of contractors at TSMC's operation sites [Note 4]	0.07	0.19	0.37	0.18	0.30
Assist all high-risk contractors to obtain ISO 45001 certification for occupational safety and health management system (%)	60	65	65	80	100
Require suppliers to conduct due diligence for responsible mining; % of legally compliant mines (%)	100	100	100	100	100
Audit suppliers for due diligence in responsible mining each year [Note 3]	–	3	5	3	3
Ensure tier 1 suppliers stipulate an inclusive workplace related policy or statement (%) [Note 5]	–	–	–	40	100

Note 1: This management indicator was introduced in 2024, so there were no results from 2020 to 2023.
Note 2: To comply with COVID-19 prevention measures and avoid gatherings, the number of onsite audits was reduced in 2020 and 2021 to facilitate pandemic control.
Note 3: These management indicators were introduced in 2021, so there were no results in 2020.
Note 4: The data covers TSMC's Taiwan fabs, TSMC (China), TSMC (Nanjing), and VisEra.
Note 5: This management indicator was introduced in 2023, so there were no results from 2020 to 2022.

Human Rights Survey for Tier 1 Suppliers

To strengthen human rights management for Tier 1 suppliers, TSMC referenced the United Nations Development Programme's "Business and Human Rights Risk" indicators to develop 76 questions covering six dimensions: Governance and Security, Labor Rights, Services and Products Liability, Environmental Rights, Voice and Participation, and Gender Equality. These questions were incorporated into the SAQ to gain deeper insights into suppliers' human rights risks. Based on the SAQ results, TSMC completed 100% of its human rights risk assessments for tier 1 suppliers. Supplier performance in human rights was categorized into five levels, from A to E, with D- and E-level deemed non-compliant. These non-compliant suppliers accounted for 29% of those assessed and were designated as priority targets for guidance and improvement. To enhance the effectiveness of human rights management across the supply chain, the Company established a "Supplier Human Rights Management Tracking Platform" and developed online courses and in-person workshops to provide a variety of tools, including examples of industry best practices, educational materials, and online consultation services. Additionally, TSMC continues to monitor the progress of suppliers' corrective actions, and 100% of at-risk suppliers have received TSMC's guidance on mitigation measures.

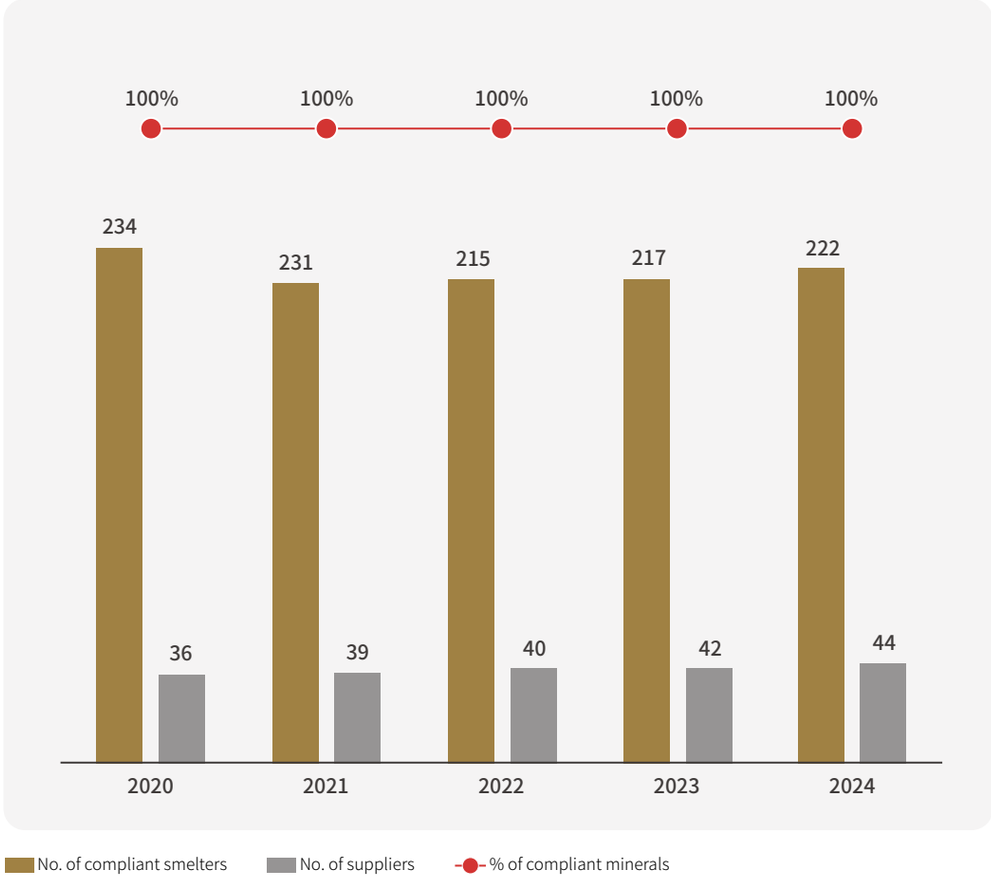


2024 SAQ Human Rights Questionnaire Analysis Results

Six Dimensions	Survey Themes	Summary of Analysis Results	
Governance and Security	Human rights governance, supplier accountability, and occupational safety	• 98% of suppliers provide a safe workplace for their employees	• 43% of suppliers assess human rights risks in their tier 2 supply chains
Labor Rights	Working hours, wages and benefits, non-discrimination, freely chosen employment, health and safety, and modern slavery risks	• 99% of suppliers designate regular weekly rest days	• 43% of suppliers evaluate modern slavery risks
Services and Products Liability	Conflict minerals due diligence, intellectual property rights, and hazardous substances management	• 99%of suppliers establish procedures for identifying and assessing hazardous chemicals	• 94% of suppliers conduct conflict minerals due diligence and manage intellectual property and harmful substances
Environmental Rights	Biodiversity, regulatory compliance, waste discharge, environmental stewardship and responsibility, air pollutant emissions, water stewardship, and carbon output	• 98% of suppliers maintain plans for waste disposal and air emissions control	• 27% of suppliers adopt biodiversity policies
Voice and Participation	Employee feedback, participation and grievance, anonymous reporting, and data privacy	• 88% of suppliers provide employee grievance channels	• 84% of suppliers implement anonymous whistleblowing mechanisms
Gender Equality	Maternity protection, diversity policies, and sexual harassment	• 97% of suppliers adopt maternity protection policies	• 96% of suppliers adopt anti-discrimination policies

Conflict Minerals Due Diligence

Tin, tantalum, tungsten, and gold are critical metals widely used in the semiconductor industry. To ensure responsible sourcing, TSMC observes the OECD's Model Supply Chain Policy for a Responsible Global Supply Chain of Minerals from Conflict-Affected and High-Risk Areas, and adheres to the due diligence framework of the Responsible Minerals Initiative. Each year, the Company audits no fewer than three suppliers that utilize these metals. In line with Rule 13p-1 of the U.S. Securities Exchange Act of 1934, TSMC discloses the due diligence findings in its annual Form SD filing with the U.S. Securities and Exchange Commission, ensuring the use of compliant minerals.



Mitigation Measures

TSMC is committed to creating an environmentally and socially responsible operational model. All suppliers are required to sign and comply with the Supplier Code of Conduct. Tier 1 suppliers are also encouraged to extend this commitment to their partners, contractors, and service providers. To reinforce communication and awareness efforts, the Company provides courses on the Supplier Code of Conduct and Supplier Sustainability Standards through TSMC's global responsible supply chain management platform, Supply Online 360. In 2024, the Company further incorporated supplier human rights performance into its 2030 long-term sustainability goals and, based on the results of SAQ human rights questionnaires, established a tiered supplier management system. Educational and training resources are provided to support suppliers in adopting business and human rights principles aligned with international standards.

To safeguard the environmental, health, and safety rights of supply chain workers, TSMC hosts both the Sustainable Supply Chain ESH Forum and the Supply Chain ESH Technical Forum. Under the Supplier Senior Executive ESH Improvement Program alert mechanism, the Company identified nine suppliers whose audit scores, assessed by the S.H.A.R.P. team and RBA-accredited third-party bodies in the previous year, fell between 70 and 80 for improvement actions, including joint on-site consultation together with external specialists, stronger executive-level engagement in ESH efforts, and the adoption of proactive safety and health performance indicators. Each supplier is required to select five out of 10 designated indicators as objectives for the following year's improvement plan. These are later reviewed on-site by the Corporate ESH Division's audit team. In 2024, the average score of supplier site reassessments rose by 11.7%, while the incidence of priority-level deficiencies dropped by 69%.

To address common deficiencies identified during audits regarding fire safety and emergency response, TSMC hosted the "Supplier Compliance Guidance for Public Hazardous Materials Facilities," "Supplier Fire Emergency Response Workshop," and interactive online courses, aiming to enhance suppliers' compliance with public hazardous materials regulations and their preparedness for fire emergencies. In addition, to facilitate contractors' understanding of ESH protocols and safeguard their safety and health, the Company issued the Contractor ESH Bluebook and the ESH Bluebook on Fab Construction, requiring all new contractors to complete basic ESH training. Pursuant to the Environmental Protection & Safety & Hygiene Training Control Instructions, TSMC also provides personal protective equipment instruction and annual emergency response drills for on-site contractors who handle chemicals, reinforcing their preparedness for potential risks. In 2024, the Company introduced virtual reality (VR) technology in training programs for on-site contractors engaged in gas cylinder replacement. By utilizing immersive and interactive simulations, the program strengthens operating personnel's proficiency in handling hazardous gas cylinders and ensures operational safety.

To assist suppliers in integrating environmental issues into their human rights management frameworks, the Company added a set of biodiversity questions to the 2024 SAQ, listing the completeness of supplier policies and risk assessment mechanisms. Meanwhile, TSMC organized its first-ever "Nature-Based Carbon Credits and Biodiversity" forum, bringing together experts from industry, government, academia, and research institutions to exchange practices on promoting nature-based carbon solutions and biodiversity conservation, raising broader environmental awareness among suppliers.

Adaptation Measures

- Enforce RBA audit implementation
- Convene the annual Sustainable Supply Chain ESH Forum
- Carry out the "Supplier Senior Executive ESH Improvement Program"
- Add biodiversity question set to the SAQ

Trainings

- Supplier Code of Conduct promotion
- Supplier Code of Conduct and Supplier Sustainability - Standards courses
- Supply Chain Human Rights Policy and Management Plan
- Guidelines on Respecting Human Rights for Taiwanese Enterprises and Supply Chains
- Supplier Workplace Inclusion Workshop
- Supplier Human Rights Enhancement Workshop
- Sustainable Supply Chain ESH Forum
- Supply Chain ESH Technical Forum
- Supplier Senior Executive ESH Improvement Program Workshop
- Supplier Compliance Guidance for Public Hazardous Materials Facilities
- SO360 Interactive Training Courses for Suppliers
- Supplier Fire Emergency Response Workshop
- Safety and Health Training for New Contractors
- Personal Protective Equipment Training for Contractors
- Annual Emergency Drills for Contractors
- Forum on Nature-Based Carbon Credits and Biodiversity

Policy/Document Development

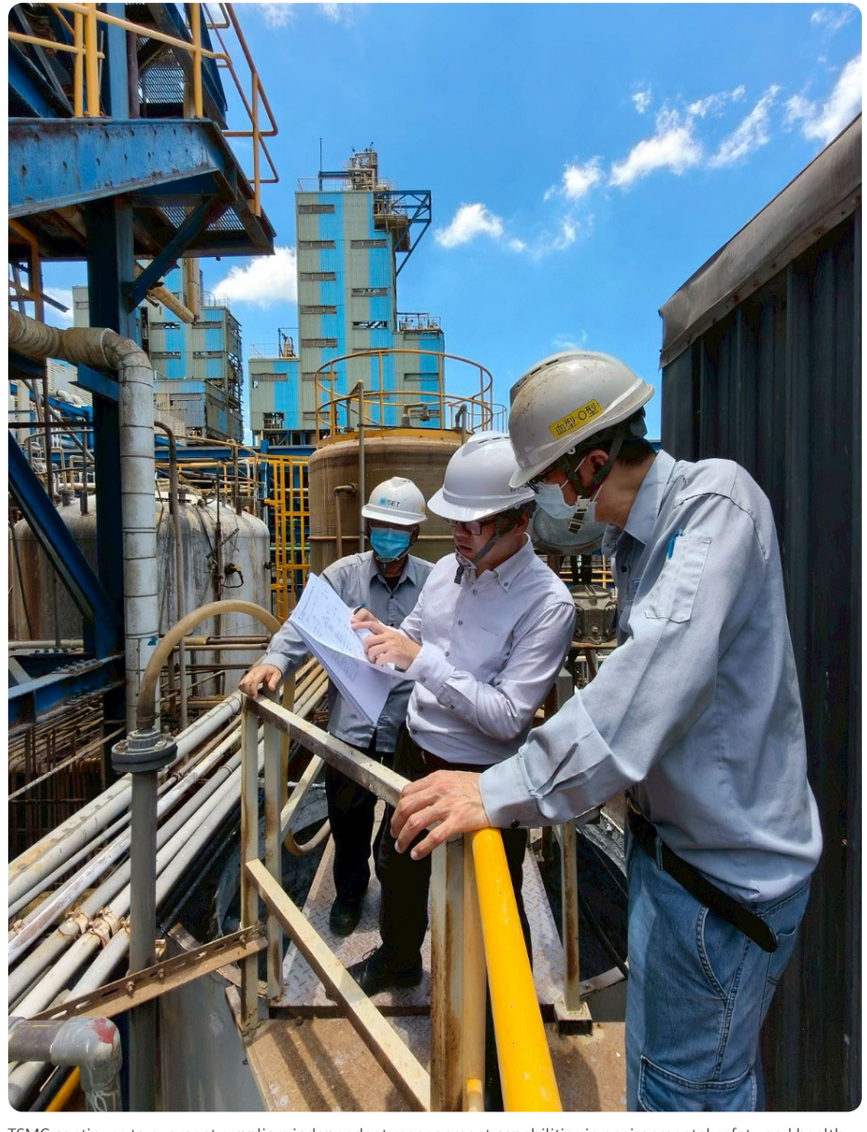
- Supplier Code of Conduct
- Supplier Sustainability Standards
- Sustainable Raw Material Policy
- Contractor ESH Bluebook
- ESH Bluebook on Fab Construction

Red-flag Systems

- Supplier Senior Executive ESH Improvement Program
- Develop AI Hazard Identification System

Facility Upgrading

- Set up a VR training room



TSMC continues to augment suppliers independent management capabilities in environmental safety and health.

2024 Human Rights Education and Training Programs

Wages and Working Hours | Health and Safety | Discrimination and Harassment | Pollution and Chemicals | Tier 2 Supply Chain Human Rights Management

Training Topics	Target Groups	2024	
		Number of Participants	Training Duration (Hours)
Supplier Code of Conduct promotion	Tier 1 suppliers	1,294	1.5
Supplier Code of Conduct and Supplier Sustainability Standards courses	All suppliers	204	4

Applicable to All Issues

Training Topics	Target Groups	2024	
		Number of Participants	Training Duration (Hours)
Supply Chain Human Rights Policy and Management Plan	Tier 1 suppliers	401	2
Guidelines on Respecting Human Rights for Taiwanese Enterprises and Supply Chains	Tier 1 suppliers	404	1.5
Supplier Workplace Inclusion Workshop	Tier 1 suppliers	191	2.5
Supplier Human Rights Enhancement Workshop	Suppliers with human rights performance rated as Grade D or E	161	3.5

Health and Safety | Discrimination and Harassment | Pollution and Chemicals | Climate and Energy | Tier 2 Supply Chain Human Rights Management

Training Topics	Target Groups	2024	
		Number of Participants	Training Duration (Hours)
Sustainable Supply Chain ESH Forum	Tier 1 suppliers	360	4

Biodiversity

Training Topics	Target Groups	2024	
		Number of Participants	Training Duration (Hours)
Forum on Nature-Based Carbon Credits and Biodiversity	Raw material and renewable energy suppliers	90	6

Health and Safety

Training Topics	Target Groups	2024	
		Number of Participants	Training Duration (Hours)
Supply Chain ESH Technical Forum	Tier 1 suppliers	199	3
Supplier Senior Executive ESH Improvement Program Workshop	Tier 1 suppliers (audit scores between 70 and 80 in the previous year)	60	6.5
Supplier Compliance Guidance for Public Hazardous Materials Facilities	Suppliers [Note 1]	10	6
SO360 Interactive Training Courses for Suppliers	All suppliers	211	0.5
Supplier Fire Emergency Response Workshop	Suppliers [Note 2]	62	6
Safety and Health Training for New Contractors	New contractors	29,097	1
Personal Protective Equipment Training for Contractors	Existing contractors	3,813	0.5
Annual Emergency Drills for Contractors	Existing contractors	1,618	0.5

Note 1: Taiwan-based suppliers whose production or use of public hazardous materials exceeds the regulatory control threshold.
Note 2: Taiwan-based suppliers whose facilities store combustible materials and are therefore at high risk of fire.

Remedy Process

When suppliers or contractors are involved in human rights violations, TSMC immediately activates an appropriate remedy process, including restoring conditions to the state prior to the adverse impact, implementing prompt corrective actions, and taking disciplinary measures. If a supplier fails to comply with the Company's Supplier Code of Conduct, refuses to cooperate with TSMC or third-party audits, or does not complete corrective actions within the designated timeframe, and remains noncompliant after communication, the Company will terminate the business relationship. In 2024, the top five most common findings identified during audits involved labor rights, occupational safety, emergency drills and fire safety, environmental protection, and occupational health. The overall corrective action completion rate reached 97%.

Regarding contractor management, TSMC undertakes daily random safety audits of on-site construction activities to ensure proper implementation of hazard communication. In the event of a contractor-related safety incident, a meeting will be held at the site where the event occurred to discuss response measures or assist the contractor with corrective actions. In 2024, a fatal accident involving a contractor employee occurred during an expansion project on the facility's chilled water pipeline system. The pipeline toppled during installation, injuring the worker, who later died despite medical treatment. In response, TSMC reviewed relevant procedures and revised the winch hoisting method for installing chilled water valves, while introducing additional safety precautions, including verification of the building's structural integrity, load-bearing capacity, and overload protection mechanisms where hoisting equipment is anchored. The updated guidelines mandate that the anchoring point's load capacity must exceed the overload protection specification to prevent similar incidents in the future.

Top Five Supplier Audit Findings in 2024

Actions on Audit Findings

	Subcategories	Common Audit Deficiencies	Actions Taken	Improvement Rates
Labor Rights	Non-Discrimination	Inadequate facilities or accommodations for persons with disabilities	Immediate Remedies: Provide appropriate accessible facilities Ongoing Mitigation: Introduce policies and procedures supporting persons with disabilities	100%
		Absence of sexual harassment prevention and grievance mechanisms	Immediate Remedies: Establish communication and grievance mechanisms for sexual harassment Ongoing Mitigation: Convene gender equality committees to review related issues	100%
	Freely Chosen Employment	Failure to return recruitment or medical examination fees	Immediate Remedies: Require employers to cover relevant recruitment-related expenses Ongoing Mitigation: Revise employment terms or propose supporting measures	92%
	Young Labor	Lack of policies and procedures for the employment of young workers (e.g., interns, apprentices)	Immediate Remedies: Amend workplace rulebooks Ongoing Mitigation: Develop management regulations for cooperative education and academia-industry partnerships	100%

Occupational Safety

Subcategories	Common Audit Deficiencies	Actions Taken	Improvement Rates
Tool Safety	Occupational injuries caused by machinery rotation and entanglement	Immediate Remedies: Install protective guards and safety enclosures Ongoing Mitigation: Install interlocking safety doors or light curtain sensors	100%
Maternity Protection	Insufficient workplace protection for female employees	Immediate Remedies: Implement maternity health protections by prohibiting pregnant or postpartum employees (within one year of childbirth) from engaging in hazardous work Ongoing Mitigation: Devise workplace maternity protection guidelines	98%

Emergency Drills and Fire Safety

Subcategories	Common Audit Deficiencies	Actions Taken	Improvement Rates
Fire Safety	Poor maintenance of fire safety equipment	Immediate Remedies: Replace or repair fire safety equipment Ongoing Mitigation: Conduct routine maintenance and testing of fire systems	98%
Emergency Drills	No emergency response drill planning	Immediate Remedies: Designate indoor assembly points for emergency shelter during extreme weather Ongoing Mitigation: Mandate incident reporting to TSMC within four hours and arrange regular emergency drills	99%

Environmental Protection

Subcategories	Common Audit Deficiencies	Actions Taken	Improvement Rates
Hazardous Substances	Improper waste management	Immediate Remedies: Organize waste by type and label; ensure containers at storage locations remain clean and intact Ongoing Mitigation: Audit waste collection contractors and enforce periodic inspections	98%
Water Stewardship	Absence of water stewardship measures	Immediate Remedies: Install rainwater barriers to prevent contamination of drainage systems Ongoing Mitigation: Install effluent monitoring systems prior to discharge	93%

Occupational Health

Subcategories	Common Audit Deficiencies	Actions Taken	Improvement Rates
Industrial Health	Inadequate chemical substance management	Immediate Remedies: Post chemical safety data sheets (SDS) and hazard signage, and install leak-proof devices Ongoing Mitigation: Reinforce on-site supervision and introduce chemical spill prevention and response procedures	98%
Public Health and Dormitory Conditions	Substandard living conditions in migrant worker dormitories	Immediate Remedies: Upgrade dormitory hygiene and living conditions Ongoing Mitigation: Formulate dormitory management standards	100%

Engagement & Grievance

TSMC established a "Supply Chain Employee Grievance Channel" accessible to all supplier personnel on the Supply Online 360 global responsible supply chain management platform, fostering interaction and open communication with supply chain partners. In 2024, the Company received and fully investigated seven grievance cases. Upon receipt, each case was promptly verified with the whistleblower and assigned to the relevant responsible units for handling. The TSMC Grievance Handling Committee monitored the progress of all investigations, while the Company's highest supply chain management officer confirmed the findings and corrective actions. Suppliers were then required to abide by the Supplier Code of Conduct for improvement, ensuring proper resolution and enhancing transparency and accountability in supply chain human rights management.

Grievance Handling Process

Supplier Employees

01

Supplier employees report via the "Supply Chain Employee Grievance Channel"

TSMC Grievance Handling Committee

02

A grievance handling representative clarifies complaint content and coordinates with the responsible unit to convene a meeting

Responsible Unit

03

The responsible unit investigates the complaint and contacts the supplier involved; conducts on-site inspections if necessary

Responsible Unit & Supplier

04

The responsible unit requests a corrective action report from the supplier or enforces disciplinary measures depending on the severity of the case

TSMC Grievance Handling Committee

05

The responsible unit logs the corrective actions into the grievance system and obtains approval from a division-level manager

06

The grievance handling representative closes the case and compiles the annual complaint report for the responsible person in TSMC's supply chain management

Number of Grievances Received through Supplier Feedback Channels

Details of Grievance Cases	2021	2022	2023	2024
Salary payment disputes, ambiguities in defining overtime hours, and non-payment of overtime	0	2	1	3
On-site operational concerns	0	0	3	0
Business disputes, unequal treatment, labor insurance	4	0	3	4
Proprietary information protection	0	1	1	0

Note: Supply Online 360 was launched at the end of 2020; therefore, there were no complaints in 2020.

Stakeholder: Customers

To strengthen its competitive advantage of "Customer Trust," TSMC has established a human rights management system concentrating on two salient human rights issues: "Managing Hazardous Substances in Products" and "Customer Proprietary Information and Personal Data Protection." The Company exercises strict oversight of product quality and reliability throughout the entire lifecycle to ensure compliance with relevant regulations and the customer's hazardous substance control requirements. At the same time, through rigorous information security and confidential information protection mechanisms, TSMC safeguards customers' trade secrets and personal data, assists customers in achieving success, and establishes long-term partnerships to unleash continuous innovation.

Policy & Organization

Regarding the management of hazardous substances in products, the Company follows the Hazardous Substance Free Policy as its guiding framework. Upholding the principle of "avoid if possible, minimize if feasible," the Customer Service Division first identifies customer requirements. The Corporate ESH Division then reviews and updates the list of hazardous substances. Subsequently, the Quality and Reliability Organization, Materials Management, Operations, Corporate ESH Division establish the system and set substance control procedures to ensure the absence of residual hazardous substances in products, delivering reliable solutions to customers.

In terms of protecting customer proprietary information and personal data, TSMC has updated its Privacy Policy in response to the expansion of its global manufacturing footprint and amendments to the European Union's General Data Protection Regulation (GDPR). The revised policy clarifies the purposes and legal basis for personal data processing, enabling the lawful collection and proper handling of personal data related to customers, suppliers, visitors, and other stakeholders. Furthermore, in line with the Information Security Statement, the Company's Global Security Management Organization oversees the development and enforcement of information security standards, risk management, and compliance audits. The Corporate & Compliance Legal Division closely monitors regulatory developments worldwide to ensure that the Company's privacy protection and information security practices align with applicable laws and standards in the relevant jurisdictions.

Salient Issues

- Managing Hazardous Substances in Products
- Customer Proprietary Information and Personal Data Protection

Policies

- Hazardous Substance Free Policy
- Privacy Policy
- Information Security Statement

Organizations

- Customer Service Division
- Corporate ESH Division
- Quality and Reliability Organization
- Materials Management
- Operations
- Global Security Management Organization
- Corporate & Compliance Legal Division

Investigation & Action

To identify risks to human health posed by residual hazardous substances, TSMC conducts risk identification based on its hazardous substances list and risk assessment procedures, while convening quarterly review meetings on hazardous substance management. Starting from the raw material procurement stage, the Company enforces strict control over chemical sources. Any introduction of new materials or changes to existing ones must undergo a green procurement process to avoid substances that are prohibited or restricted by regulations or customers. During the research and development phase, a rigorous chemical approval system is in place. The use of hazardous substances is strictly prohibited unless absolutely necessary and no alternatives exist. In such cases, the selected substances must comply with relevant domestic and international regulations, as well as the requirements of both the Company and its customers.

To ensure the proper protection of customer proprietary information, TSMC observes international information security standards and frameworks, clearly defining its security procedures and protocols. The Company has established the Proprietary Information Protection (PIP) and Risk Committee and the Information Technology (IT) Security Committee. These committees, chaired by the Chief Information Security Officer (CISO) and comprised of Vice President-level executives, meet regularly to review and approve critical information security policies and initiatives. The head of the Global Security Management Organization reports twice per year to the Audit and Risk Committee on information security operations and emerging risks. The Chair of the Audit and Risk Committee subsequently updates the Board of Directors on the performance of information security controls and risk mitigation measures. Additionally, the Company has adopted the Rules of Privacy and Personal Data Protection as the standard for handling personal data and respecting privacy in the safeguarding workplace privacy, with the Personal Data Protection Committee tasked with implementation and compliance monitoring. Through annual meetings, the Committee has created a cross-organizational communication platform for personal data protection compliance. These sessions cover topics such as the EU AI Act's impact on personal data protection and strengthening the principle of not collecting and utilizing sensitive personal data except within the scope permitted by law. In 2024, TSMC revised the Rules of Privacy and Personal Data Protection and established a Personal Data Protection Working TaskForce under the Committee. This taskforce convenes meetings to discuss compliance concerns raised by employees, ensuring all departments adhere to the Rules of Privacy and Personal Data Protection and process personal data for legitimate purposes. Discussion topics for the year included cross-functional surveys involving personal data collection and personal data protection notice obligations.

Salient Human Rights Issues	Risk Assessment Factors	Meetings / Platforms	Systems / Processes
Managing Hazardous Substances in Products	• Residual hazardous substances in products may pose health risks to customers upon contact	• Hazardous Substance Management Review Meeting	• Convene the Hazardous Substance Management Review Meeting quarterly to establish control plans
Customer Proprietary	• Cyberattacks or inadequate data protection by the Company may result in the leakage of customers' proprietary product information • Impact of the EU AI Act on personal data protection • Legal compliance concerning the protection of sensitive personal data	• PIP and Risk Committee • IT Security Committee • Personal Data Protection Committee • Personal Data Protection Working TaskForce	• The PIP and Risk Committee reviews and determines information security and protection policies on a quarterly basis • The Personal Data Protection Committee monitors the implementation of the Privacy and Personal Data Protection Guidelines • The Personal Data Protection Working TaskForce discusses issues and needs raised by employees

Management Indicators

	2020	2021	2022	2023	2024
Customer trust and satisfaction metrics (%)	93	88	92	94	96
Product complies with customer/regulatory hazardous substances requirements (%)	100	100	100	100	100
Third-party information security evaluation results (score)	99	99	99	98	99
Customer information security review/audit (occurrences)	2	4	4	6	9

Mitigation Measures

TSMC established a dual approach combining source control and industry collaboration to manage hazardous substances in products. For source control, the Advanced Materials Analytical Center has developed testing capabilities for carcinogenic, mutagenic, and reprotoxic (CMR) substances. In 2024, the Company proactively expanded the CMR substance spectrum database, increasing screening items from 178 to 273, and consistently completed 100% analysis of substances flagged as potentially concerning. Regarding industry collaboration, TSMC requires suppliers to formulate hazardous substance management protocols in accordance with its Supplier Sustainability Standards. The Company also provides training and audit support to assist suppliers in developing capabilities to detect and manage CMR substances in materials of concern. Suppliers must submit declarations confirming that raw materials do not contain hazardous substances, ensuring compliance with environmental protection and safety standards. To maintain rigorous hazardous substance management, the Company annually samples major products from each manufacturing site and sends them to third-party laboratories accredited under the ISO 17025 quality management system for testing. In 2024, 21 products were sampled and all passed the hazardous substance inspections.

To effectively protect and manage customers' personal data, TSMC's Customer Access Management System employs multiple measures to ensure data security, allowing only authorized customer service personnel to access and manage customer information. Additionally, the scope of authorization is reviewed quarterly to ensure its accuracy. In 2024, TSMC introduced and revised 25 information security standards and continued to maintain ISO/IEC 27001 certification for its information security management system. In addition, Fab 12A, Fab12B, Fab 14A, Fab 15A, Fab 15B, and Advanced Backend Fabs 6B and 6C obtained ISO/IEC 15408 Evaluation Assurance Level 6 (EAL6) certification from the German Federal Office for Information Security (BSI), strengthening end-product application security. In daily operations, the Company practices rigorous cybersecurity covering hardware, software, and personnel. Beyond continued security incident response drills, TSMC has implemented a default document confidentiality classification mechanism tailored to departmental business needs and strengthened personal data protection compliance education through annual Business Conduct and Compliance training. In 2024, TSMC introduced the "File Transfer Protocol (FTP) Account Service," providing customers with a safer and more convenient data transfer process. The FTP Account Service automatically verifies IP addresses to effectively prevent potential cybersecurity threats. In addition, the Customer Service Division continuously enhances employees' cybersecurity awareness through regular training courses, building a comprehensive protection system.

Adaptation Measures

- Required suppliers to establish hazardous substance management protocols in line with the Supplier Sustainability Standards
- Strengthened cybersecurity incident response drills
- Adopted default document confidentiality classification mechanisms

Trainings

- Provided an Introduction to the Hazardous Substance Process Management System
- Promoted Awareness of Personal Data Protection Regulations through the Annual Business Conduct and Compliance Course
- Delivered Online Information Security Training
- Information Security Training

Facility Upgrading

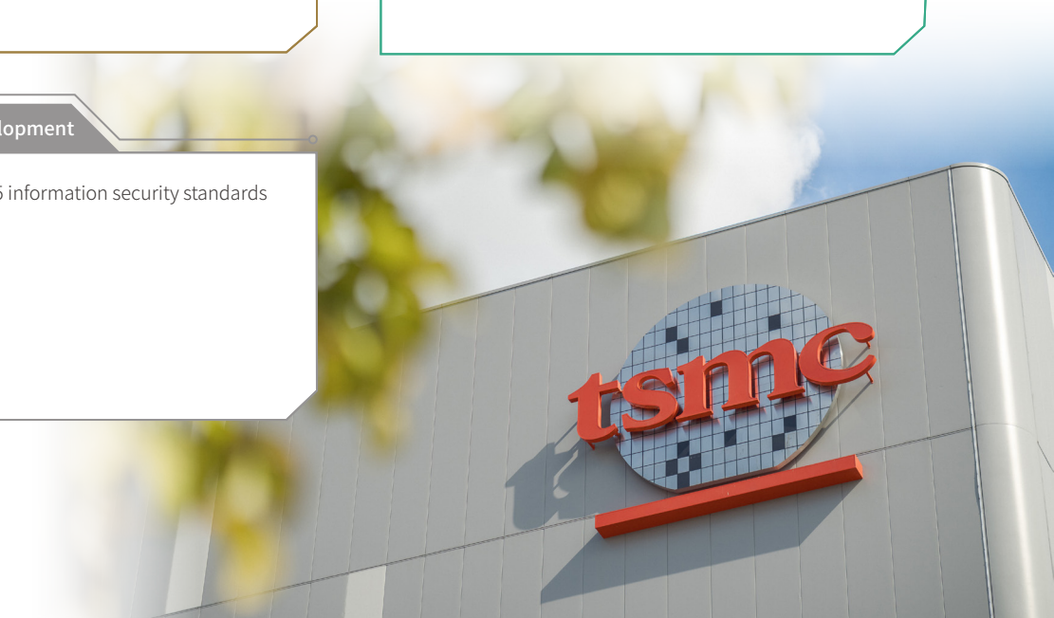
- Established the Advanced Materials Analytical Center
- Upgraded the CMR substance spectrum database, expanding screening items from 178 to 273
- TSMC-Online ™ Introduces New FTP Service

Red-flag Systems

- Submitted samples of major products for testing at ISO 17025-accredited laboratories
- Review permissions in the Customer Access Management System

Policy/Document Development

- Added and revised 25 information security standards



2024 Human Rights Education and Training Program

Managing Hazardous Substances in Products

Training Topics	Target Groups	2024	
		Number of Participants	Training Duration (Hours)
Introduction to the Hazardous Substance Process Management System	New employees in Operations, Quality and Reliability, and Research and Development organizations	3,243	0.5

Customer Proprietary Information and Personal Data Protection

Training Topics	Target Groups	2024	
		Number of Participants	Training Duration (Hours)
Online Information Security Course	All employees	80,921	0.2
Annual Course on Business Conduct and Compliance – Section on Personal Data Protection Regulations	All employees	87,320	0.2
Information Security Training	Employees of the Customer Service Division	110	0.5

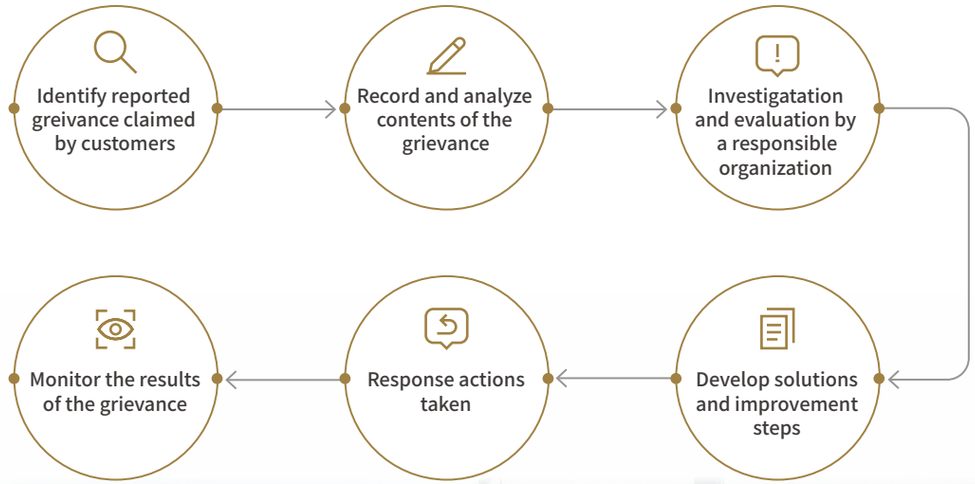
Remedy Process

In 2024, the Company did not experience any adverse impacts on human health resulting from its products. Should an incident involving hazardous substances occur, TSMC will work with the customer to immediately halt the negative impact and implement corrective actions without delay. During the same year, the Company successfully passed information security assessments from nine customers and completed evaluations regarding information security questionnaires from 32 customers. Audits related to information security revealed no significant deficiencies, and there were no major security incidents resulting in breaches, customer information leaks, or fines. In the event of harm to proprietary information or personal data protection, the Company will seek legal remedies, take disciplinary actions, and adopt improvement plans based on the nature and severity of the case, in an effort to prevent recurrence.

Engagement & Grievance

To better understand customers' needs and strengthen trust, TSMC utilizes communication channels including annual customer satisfaction surveys, quarterly review meetings, and periodic visits to gather customer feedback. At the same time, through thorough scrutiny and assessment, the Company integrates the feedback into daily management operations to prevent potential human rights risks. TSMC did not register any complaints concerning hazardous substances or customer confidentiality protection through its diverse communication channels and interactions in 2024.

Grievance Handling Process



Stakeholder: Communities

TSMC upholds its responsibility as a corporate citizen by advancing technological innovation and economic development while acknowledging its impact on communities and the environment. Prioritizing salient human rights issues such as pollution and chemicals, climate and energy, and biodiversity, the Company is committed to minimizing air and water pollution caused by chemical use and aligns its efforts with the goal of achieving net-zero emissions by 2050. Through sustained progress in green management and innovation, and by adhering to the principles outlined in the Biodiversity Statement, TSMC seeks to balance technological advancement with ecological sustainability, laying a solid foundation for a shared future for humanity and nature.

Policy & Organization

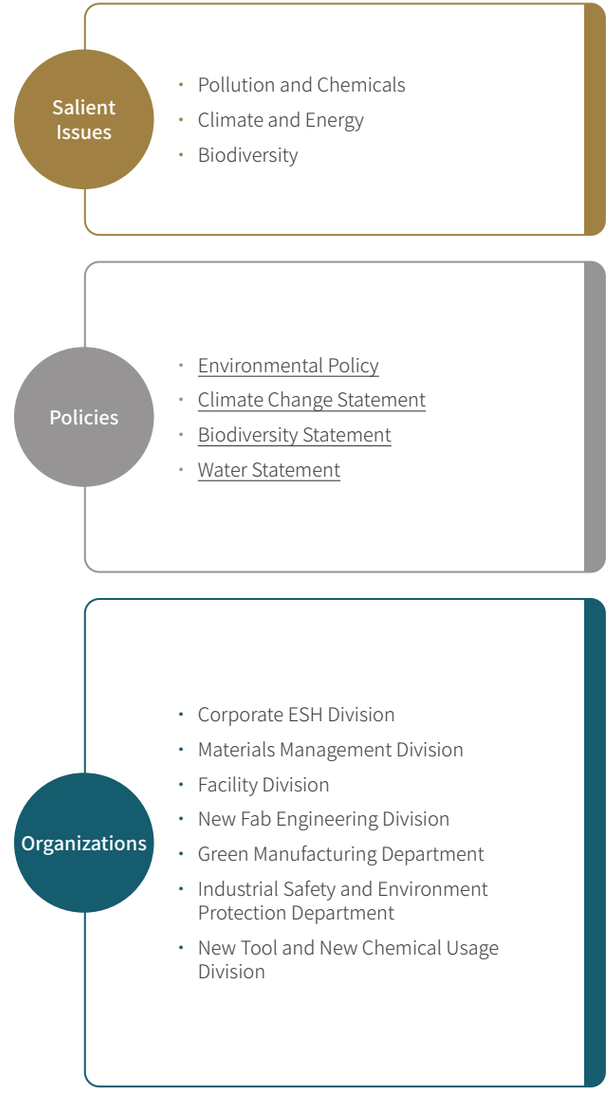
With the continued acceleration of urbanization and industrial development, TSMC recognizes the importance of community environmental rights and corporate-community co-prosperity. Through its Environmental Policy, the Company established a comprehensive environmental management framework and a mechanism for cross-functional collaboration. By coordinating resources and specialized expertise across multiple divisions—including the Corporate ESH Division, Materials Management Division, Facility Division, New Fab Engineering Division, Green Manufacturing Department, Industrial Safety and Environment Protection Department, as well as the New Tool and New Chemical Usage Division—the Company prevents and mitigates potential environmental impacts.

Moreover, through policy commitments such as the Climate Change Statement, Biodiversity Statement, and Water Statement, TSMC actively cultivates innovative technologies and practices low-carbon, environmentally friendly green manufacturing to accelerate progress toward environmental sustainability goals.

Investigation & Action

TSMC's Water Resources and Pollution Control Technology Committee holds monthly meetings, centering its efforts on three major strategies: Managing Water Resource Risks, Developing Diverse Water Resources, and Innovative Water Pollution Prevention Technology. At each meeting, the committee reviews water usage across all fabs. To manage water risks effectively, the Company identifies the risk level at each of its worldwide fabs every year using the World Resources Institute's (WRI) water risk assessment tool. For instance, assessments indicate that fabs in Taiwan face a medium-to-low level of water risk. In response, TSMC follows the Real-Time Water Condition Alert System provided by the Water Resources Agency and sets contingency measures in alignment with its Internal Control Procedures for Low Water Supply Crisis Management. Moreover, the Company annually reviews water usage plans based on allotments set by the local science park administration. All TSMC fabs in Taiwan have operated within allocated water supplies since they were established, without causing strain on community water sources or usage. For high-risk regions identified in the assessment, such as TSMC Arizona, the Company initiated a reclaimed water plant project in 2024, completed the design phase, and commenced construction in 2025, aiming to reduce reliance on natural water sources and enhance the fab's resilience to drought and arid climate conditions.

Regarding pollution and chemical management, TSMC's Taiwan fabs are required to apply for air pollutant emission quotas from the local authority prior to building any new facilities. Operations may only commence upon obtaining the operating permits issued by the park administration or local environmental authorities. Each year, the Company files reports detailing air pollution inspection results and emissions data to ensure that site operations do not have significant environmental impacts. In addition to legally mandated annual sampling and analysis by third-party certified laboratories, the Company operates its own Environmental Monitoring Center. This internal facility reinforces pollutant monitoring through baseline management, improves concentration levels in emission pipelines, enhances the performance of pollution control equipment, and mitigates pollution at the source. Furthermore, prior to fab construction, the Company conducts health risk assessments for community residents within a 10-kilometer radius of new facilities during the environmental impact assessment phase in accordance with Taiwan's Ministry of Environment "Technical Guidelines for Health Risk Assessment" to ensure its operations pose no threat to public health. Furthermore, pursuant to the Regulations for the Implementation of Workplace Environment Monitoring, the Company conducts workplace environment assessments every six months to monitor



chemical and physical hazard factors. For acidic/alkaline gases and volatile organic compounds, TSMC requires all new tools and new chemicals to undergo review by the New Tool and New Chemical Review Committee prior to installation or use. This process ensures that environmental, safety, and health risks remain within acceptable limits. For existing tools, any changes involving materials, devices, chemical supply and usage, or operational procedures that may pose safety concerns must be reviewed and approved according to the Change Management Procedure before proceeding.

In the area of climate and energy, TSMC's Corporate ESH Division reports annually to the ESG Committee on the results of climate risk and opportunity assessments, climate scenario analyses, financial impacts, and corresponding response strategies. To effectively address the potential implications for human rights, the Company adopts the Recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) as a framework to identify climate-related risks and opportunities across the value chain. In 2024, the Corporate ESH Division organized a Climate Risk and Opportunity Workshop, bringing together 23 cross-functional managers and employees. Participants identified potential impacts using a Climate Risk and Opportunity Materiality Assessment Matrix and prioritized them based on severity and likelihood of occurrence by applying an enterprise risk management impact assessment framework. The identification results indicated that the two most critical transition risks were "Net Zero Emissions" and "EIA Commitments," while the two leading physical risks were "Droughts Affecting TSMC Operations" and "Rising Temperatures." Additionally, the Company engages a third-party verification body each year to perform greenhouse gas inventories, ensuring the accuracy and reliability of emissions data. The findings serve as a basis for reviewing overall carbon reduction performance and taking continued corresponding actions.

Regarding biodiversity, TSMC recognizes that preserving the natural environment is essential to safeguarding community environmental rights. Following the LEAP approach recommended by the Taskforce on Nature-related Financial Disclosures (TNFD), the Company applied a three-step assessment process—collect and select data, identify ecologically sensitive sites, and evaluate restoration potential—to determine the ecological vulnerability of its locations. Assessment results indicate that none of TSMC's fabs in Taiwan fall within international or national protected areas or legally designated ecological zones. However, facilities located in the Central and Southern Taiwan Science Parks are potentially sensitive. Further examination of these sites' interaction with local ecosystems and habitats of species of concern reveals a low level of disturbance. Based on this analysis, the overall biodiversity risk from TSMC operations in Taiwan is considered low. For overseas facilities, the Company conducted geospatial overlay analysis and evaluated the relationship between operational activities and surrounding natural ecosystems, including potential environmental impacts, which confirms that international sites do not face elevated biodiversity risks. To address possible biodiversity impacts from operations, TSMC adopts Life Cycle Assessment (LCA) for in-depth analysis of contributing factors such as greenhouse gas emissions, water consumption, wastewater discharge, waste generation, and air pollution. Based on these findings, the Company sets appropriate action plans to mitigate ecological impacts.

Salient Human Rights Issues	Risk Assessment Factors	Meetings / Platforms	Systems / Processes
Pollution and Chemicals	• Water risk index • Environmental and health impacts from chemical usage	• Water Resources and Pollution Control Technology Committee • Water Signal from the Water Resource Agency (WRA) • New Tool and New Chemical Review Committee	• WRI Water Risk Atlas • Internal Control Procedures for Low Water Supply Crisis Management • Water contingency measures • Sampling and analysis by third-party certified laboratories • Technical Regulation of Health Risk Assessment by Taiwan's Ministry of Environment • Reports on air pollution inspection results and emissions • Regulations on Workplace Environmental Monitoring • New Tool and New Chemical Evaluation Process and Change Management System
Climate and Energy	• Impacts of climate change on employee health, safety, and well-being	• Climate Risk and Opportunity Workshop • ESG Committee	• Materiality assessment of climate risks and opportunities • Third-party verification of GHG inventory • Annual reporting of climate risks and opportunities to the ESG Committee
Biodiversity	• Ecologically sensitive sites • Biodiversity-related impacts	• LEAP Project Results Meeting	• Assessment of nature-related impacts using the LEAP methodology • Application of LCA to analyze biodiversity impacts

Management Indicators

	2020	2021	2022	2023	2024
Reductionin unit water consumption (liter/12-inch equivalent wafer mask layer) (base year: 2010) (%)	Down 8.9	Down 14.9	Down 2.6	Up 25.2	Up 14.3 Note 1
Replacement of water resources with reclaimed water (%) Note 2	—	—	—	12	17
Reduction rate of water pollution composite indicator (%) Note 3	42.4	42.5	54.3	63.4	63
Reduction in air pollutant emissions per unit of production (%)	46	54	59	50	47
Reduction rate of volatile organic gases (%)	>98.3	>98.4	>98.9	>99.0	>99.0
Abnormal occurrence of air pollution control equipment	0	0	0	0	0
Scope 1 GHG emissions (metric ton-CO_2 equivalent) Note 4	2,004,841	2,151,937	2,018,789	1,596,031	1,825,872
Scope 2 GHG emissions (metric ton-CO_2 equivalent) (market-based method)	7,459,856	8,152,497	9,539,765	10,187,387	10,957,397
Scope 2 GHG emissions (metric ton-CO_2 equivalent) (location-based method)	8,282,509	9,196,964	10,887,145	11,466,118	12,674,921
Scope 3 GHG emissions (metric ton-CO_2 equivalent) Note 5	5,511,486	6,049,256	7,429,158	7,616,655	8,223,173

Note 1: In 2024, TSMC added Fab 20 P1, Fab 22 P1, TSMC Arizona Fab P1, JASM Fab P1, and Advanced Backend Fab 6B. Although these sites had not started official production, they still have fixed water consumption, resulting in a higher unit water consumption compared to the base year.

Note 2: Reclaimed water replacement rate = consumption of reclaimed water / (consumption of reclaimed water + Consumption of tap water)

Note 3: Nine key pollutants were identified, including Chemical Oxygen Demand (COD), fluoride, suspended solids (SS), ammonia nitrogen, nitrate nitrogen, arsenic (As), boron (B), copper (Cu), and cobalt (Co). These pollutants were used as indicators for assessing the reduction of overall pollution concentrations and the effectiveness of pollution prevention measures.

Note 4: GHG emissions data for Scope 1 and Scope 2 include the parent company and all subsidiaries of TSMC.

Note 5: GHG emissions data for Scope 3 covered TSMC fabs in Taiwan (including the R&D Center and Zero Waste Manufacturing Center), TSMC (China), TSMC (Nanjing), TSMC Washington, LLC, JASM, TSMC Japan Tsukuba 3DIC R&D Center, and VisEra.

Mitigation Measures

Water is a precious resource and an essential element in semiconductor manufacturing processes. TSMC takes adaptive measures to conserve water and prevent water shortages. By leveraging its internally developed water resource platform, the Water Map, the Company regularly adjusts water usage strategies in response to real-time water conditions. TSMC also advances four major initiatives to improve water resource efficiency: Decrease Water Discharge Loss from the System, Reduce Facility System Water Consumption, Increase Wastewater Recycling by Facilities, and Improve Water Production Rate of the System. In 2024, the total volume of reclaimed water reached 284.6 million cubic meters, representing a 32% increase compared to 2023.

To strengthen water resource management across all fabs, TSMC adheres to the Alliance for Water Stewardship (AWS) Standard. In 2024, the Taichung and Tainan fabs underwent annual certification, while the Hsinchu fab completed its triennial recertification, all maintaining Platinum-level performance. To reach reach the goal of greater than 60% reclaimed water replacement rate by 2030, the Company continues to invest in reclaimed water technologies to improve efficiency. In addition to the TSMC Southern Taiwan Science Park Reclaimed Water Plant and Anping Reclaimed Water Plant already in operation, the Company in 2024 initiated a "Water Exchange" operational model in collaboration with the Tainan City Government. The Tainan Rende Reclaimed Water Plant is scheduled for completion and commissioning in 2025, contributing to the region's sustainable water development. At the same time, the Company is extending its experience in reclaimed water utilization to its overseas site in TSMC Arizona to alleviate local water stress. Moreover, to communicate the importance of water sustainability, the Company launched environmental education outreach efforts and established the TSMC Tainan Science Park Reclaimed Water Plant Environmental Education & Learning Park for public visits. In 2024, the facility received 1,930 visits.

In terms of chemical management, TSMC enforces source-level controls to minimize pollution and the impact of chemicals on surrounding communities. All substances used in development, production, and facility systems are managed through the Safety Data Sheet (SDS) database. Suppliers must register in the system and complete the safety data sheet review process before any chemicals are introduced on-site. In response to the use of blended chemicals in process development, the Company successfully implemented the i-SDS system in 2024, enabling digital hazard identification for 254 mixed substances and ensuring effective oversight of health and environmental risks.

To address end-of-pipe air pollution control and in its efforts to reduce emissions, TSMC developed a Real-time Air Pollution Monitoring System, which shortens detection time from one week to one minute. Through the Air/Water Pollution e-Data and Anomaly Tracking Platform, the Company performs automated analysis to enhance monitoring efficiency. In 2024, the Environmental Monitoring Center established a number of sampling and analytical technologies in accordance with in-house needs and regulatory requirements, including stack PM2.5 detection, total phosphorus and nitrate nitrogen testing for new effluents, and the addition of organic photochemical precursor

Adaptation Measures

- Introduce a chemical safety database system to ensure complete safety traceability of chemical management
- Introduce the i-SDS chemical safety database system to identify risks associated with mixed chemical usage
- Conduct a product carbon footprint assessment every three years and obtain third-party verification as per ISO 14067
- Climate transition investments

Facility Upgrading

- Construct reclaimed water plants
- Develop a Real-time Air Pollution Monitoring System
- Establish an Air/Water Pollution e-Data and Anomaly Tracking Platform
- Adopt diverse sampling and analytical technologies for the Environmental Monitoring Center
- Develop and adopt high-efficiency process equipment and low-carbon manufacturing technologies
- Set up the Zero Waste Manufacturing Center

Policy/Document Development

- Environmental Policy
- Water Statement
- Climate Change Statement
- Biodiversity Statement

Trainings

- Environmental Education Programs at the TSMC Tainan Science Park Reclaimed Water Plant
- Facility Academy Training Courses
- Air Pollution Control Technology Workshop
- Air Pollution Forum
- Internal Employee Education on Energy Conservation and Carbon Reduction
- Environmental Education Programs at the TSMC Taichung Ecological Campus
- Citizen Scientists Training Programs Through eBird Taiwan and iNaturalist
- Online Lecture: "The Joy of Bird Conservation – Discovering Taiwan's Avian Citizen Science"

Red-flag Systems

- Adjust water usage strategies in real-time using the Water Map platform
- Improve detection and response efficiency by the Real-time Air Pollution Monitoring System
- Monitor data and anomalies using the Air/Water Pollution e-Data and Anomaly Tracking Platform

monitoring at plant boundary areas. These efforts enable comprehensive oversight of air and wastewater emissions and ensure timely adjustments to control measures, safeguarding surrounding communities and the environment. Furthermore, to strengthen employees' air pollution management capabilities, the Company organized four Air Pollution Control Technology Workshops and one Air Pollution Forum in 2024 in addition to regular courses offered by the Facility Academy. Regulatory authorities and academic experts were invited to share insights on policy trends, innovative technologies, and control practices, fostering internal knowledge development and cross-sectoral exchange.

Amid global climate change and environmental challenges, TSMC actively uses both mitigation and adaptation strategies by optimizing energy consumption and process technologies while prioritizing community rights and environmental protection. Every three years, the Company carries out a product carbon footprint assessment covering stages such as raw material production, transportation, product manufacturing, testing, and packaging. These assessments undergo third-party verification to accurately determine the environmental impact of production and to furnish stakeholders with clear and reliable evaluation data. To limit impact from operations, TSMC develops and adopts high-efficiency process equipment and low-carbon manufacturing technologies. Capital expenditures are invested toward climate transition initiatives, including the construction of the Zero Waste Manufacturing Center, which aims to minimize waste generation. In addition, the Company has been executing the Low Global Warming Potential Gas Substitution Project, which is expected to achieve a 16% reduction in hydrofluorocarbon use by 2025. Furthermore, the Company supports community environmental stewardship and climate education. Through energy conservation and carbon reduction workshops, TSMC raises employees' environmental awareness and encourages participation in climate-related actions, seeking to balance economic development with social responsibility.

TSMC is committed to ecological conservation and upholds the principles set out in its Biodiversity Statement. Drawing on methodologies recommended by the TNFD guidelines, the Company follows the four-step LEAP approach—Locate, Evaluate, Assess, and Prepare—to gain a deeper understanding of the interdependence between its facilities and surrounding ecosystems, as well as its reliance and impact on nature. Based on these insights, TSMC designs and implements a range of ecological initiatives, including periodic ecological surveys around the fabs, the creation of on-site ecological ponds and channels, the promotion of a firefly habitat restoration program, and conservation projects targeting near-natural forests and rare species. Moreover, the Company extended its on-site ecological conservation efforts to off-site restoration initiatives. In addition to launching the Tree Planting Legacy Program in 2021, TSMC also promotes green building and ecological education through the TSMC Taichung Ecological Campus, which is certified as an environmental education facility. This initiative aims to raise public environmental awareness and foster community engagement, attracting a total of 3,056 visitors in 2024. In the same year, to consolidate broader ecological conservation efforts, TSMC advanced the Eco Plus! Ecological Harmony Program, centered on three core themes: "habitat, species, and knowledge," strengthening collaboration with government agencies, nonprofit and non-governmental organizations, academic institutions, research bodies, and industry partners. The initiative aims to strengthen connections between habitats, bolster species protection, and initiate incentive mechanisms to empower emerging talent and research in biodiversity. At the same time, the Company promoted citizen science engagement through platforms such as eBird Taiwan and iNaturalist, cultivating avian conservation volunteers and ecological ambassadors to further integrate biodiversity into mainstream environmental practices. In support of the Eco Plus! Ecological Harmony Program, TSMC also hosted an internal online lecture titled "The Joy of Bird Conservation: Discovering Taiwan's Avian Citizen Science," to deepen employees' understanding of biodiversity.

TSMC embraces a vision of shared prosperity with the community to promote resilient green operations.

2024 Human Rights Education and Training Program

Pollution and Chemicals

Training Topics	Target Groups	2024	
		Number of Participants	Training Duration
Environmental education programs at the TSMC Tainan Science Park Reclaimed Water Plant	General Public	1,930	2 hours
Facility Academy – Entry-Level Water Treatment System Course	Facility Staff	49	78 days
Facility Academy – Intermediate Water Treatment System Course	Facility Staff	40	3 days
Facility Academy – Advanced Water Treatment System Course	Facility Staff	69	16 days
Facility Academy – Entry-Level Air Pollution Control System Course	Facility Staff	61	82 days
Facility Academy – Intermediate Air Pollution Control System Course	Facility Staff	1,144	45 days
Facility Academy – Advanced Air Pollution Control System Course	Facility Staff	236	40 days
Air Pollution Control Technology Workshop	All Employees	280	4 hours
Air Pollution Forum	Government Agencies, Academia, and All Employees	208	4.5 hours

Climate and Energy

Training Topics	Target Groups	2024	
		Number of Participants	Training Duration
Internal Employee Education on Energy Conservation and Carbon Reduction	All Employees	837	3 hours

Biodiversity

Training Topics	Target Groups	2024	
		Number of Participants	Training Duration
Environmental Education Programs at the TSMC Taichung Ecological Campus	General Public	3,056	2 hours
eBird Taiwan	General Public	277	2.7 hours
iNaturalist Citizen Scientists Training Programs	General Public and students	1,153	3.4 hours
Online Lecture: "The Joy of Bird Conservation – Discovering Taiwan's Avian Citizen Science"	All Employees	303	1 hour

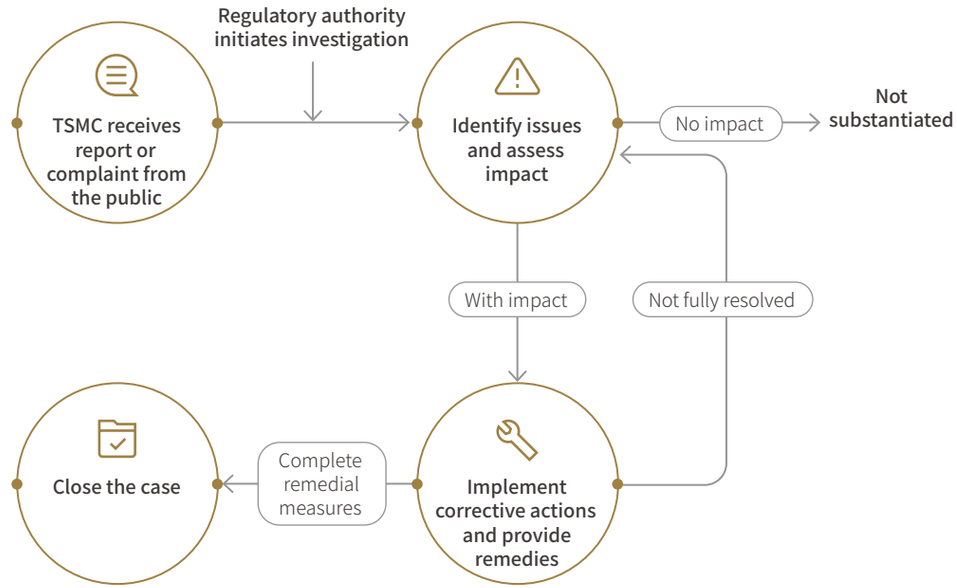
Remedy Process

In 2024, TSMC did not encounter any occurrence of adverse impacts related to environmental rights. Should an event impacting human rights occur, the Company prioritizes the restoration of affected stakeholders to their pre-impact state, depending on the nature and severity of the incident. Additionally, the Company will assign the responsible department to take corrective actions, provide appropriate compensation, and mitigate negative impacts in a timely manner to safeguard the rights of those affected.

Engagement & Grievance

TSMC welcomes public feedback through the ESG mailbox and the Irregular Business Conduct Reporting System, and enhances human rights management effectiveness through environmental education. In 2024, local residents filed separate reports to authorities regarding visible white smoke at the Hsinchu, Taichung, and Tainan fabs. The investigations confirmed that the white smoke was condensed water vapor from cooling towers—a natural phenomenon that poses no negative impact on water resources or the environment.

Grievance Handling Process



Collaboration Case Study

TSMC Joins Forces with Citizen Scientists to Deepen Biodiversity Conservation

Recognizing the importance of mutual prosperity between business operations and the natural environment, TSMC proactively integrated three core environmental principles—green building, ecological preservation, and water circulation—into the early planning stages of Fab 15, located at the foothills of Dadu Mountain area in central Taiwan. The Company actively restores native species, establishes close-to-nature forests, and promotes environmental education by offering thematic courses on green manufacturing technologies and organizing 12 distinctive ecological tours at its sites. In 2018, TSMC became the first semiconductor enterprise in Taiwan to be accredited as an Environmental Education Facilities, with a total of 7,914 participants joining related activities to date.

In 2024, TSMC assumed the role of leadership of the Central Taiwan Environmental Education Venues Alliance, along with 21 certified partners to advance environmental education initiatives. Through the "Eco Plus! Ecological Harmony Program," the Company encouraged the public to document local biodiversity via the iNaturalist app, empowering individuals to become citizen scientists and contribute to the planet. Moreover, in partnership with local beekeepers and Tunghai University, TSMC also developed an environmentally friendly beekeeping model, successfully restoring bee populations and supporting sustainable ecological development. Looking ahead, the Company will continue planting host and nectar plants throughout its sites to extend habitats for beneficial insects, and will engage in the conservation of the endangered Squalidus Banarescui, ensuring its survival and reintroduction into its native environment through collaborative, phased protection strategies involving industry, government, academia, and research institutes.

Year	2013	2017	2018	2020	2021	2022	2024
	Constructed Fab 15 with green building techniques, integrating biodiversity concepts and practices	Established the first close-to-nature forests at Fab 15 P5	Fab 15 became the first to receive "Environmental Education Facilities" accredited by the Ministry of Environment	Initiated firefly population restoration at Fab 15 P1	Fab 15 was selected for Excellence in Environmental Education Site Evaluation	Launched rhinoceros beetle habitat creation at the site	• Initiated the "Honey TSMC Program" to restore bee populations at the site • Assumed leadership of the Central Taiwan Environmental Education Venues Alliance, organized educational activities, and promoted iNaturalist app

Appendix: UNGPs Reporting Framework Index

Part A: Governance of Respect for Human Rights

			References
A1. Policy commitment	A1.1	How has the public commitment been developed?	8-9
	A1.2	Whose human rights does the public commitment address?	8-9
	A1.3	How is the public commitment disseminated?	7-9
A2. Embedding respect for human rights	A2.1	How is day-to-day responsibility for human rights performance organized within the company, and why?	10
	A2.2	What kinds of human rights issues are discussed by senior management and by the Board and why?	10、38
	A2.3	How are employees and contract workers made aware of the ways in which respect for human rights should inform their decisions and actions?	23、33
	A2.4	How does the company make clear in its business relationships the importance it places on respect for human rights?	20、22、32、39、44
	A2.5	What lessons has the company learned during the reporting period about achieving respect for human rights, and what has changed as a result?	18-19

Part B: Defining the Focus of Reporting

			References
B1. Statement of salient issues	–	State the salient human rights issues associated with the company's activities and business relationships during the reporting period.	12
B2. Determination of salient issues	–	Describe how the salient human rights issues were determined, including any input from stakeholders.	11
B3. Choice of focal geographies	–	If reporting on the salient human rights issues focuses on particular geographies, explain how that choice was made.	4
B4. Additional severe impacts		Identify any severe impacts on human rights that occurred or were still being addressed during the reporting period, but which fall outside of the salient human rights issues, and explain how they have been addressed.	The Company does not currently experience severe impacts resulting from issues that fall outside of the salient human rights issues

Part C: Management of salient human rights issues			
			References
C1. Specific policies	C1.1	How does the company make clear the relevance and significance of such policies to those who need to implement them?	8-9、22、32、39、44
C2. Stakeholder engagement	C2.1	How does the company identify which stakeholders to engage with in relation to each salient issue, and when and how to do so?	13、18-19、25、30、36、40、46
	C2.2	During the reporting period, which stakeholders has the company engaged with regarding each salient issue, and why?	10、13、18-19、20、30、47
	C2.3	During the reporting period, how have the views of stakeholders influenced the company's understanding of each salient issue and/or its approach to addressing it?	10、18-19、20、30、47
C3. Assessing impacts	C3.1	During the reporting period, were there any notable trends or patterns in impacts related to a salient issue and, if so, what were they?	17、18-19、20、30
	C3.2	During the reporting period, did any severe impacts occur that were related to a salient issue and, if so, what were they?	24、34-35
C4. Integrating findings and taking action	C4.1	How are those parts of the company whose decisions and actions can affect the management of salient issues, involved in finding and implementing solutions?	10
	C4.2	When tensions arise between the prevention or mitigation of impacts related to a salient issue and other business objectives, how are these tensions addressed?	There is currently no tension between TSMC's prevention or mitigation measures and business objectives
	C4.3	During the reporting period, what action has the company taken to prevent or mitigate potential impacts related to each salient issue?	21-23、31-33、39-40、44-46
C5. Tracking performance	C5.1	What specific examples from the reporting period illustrate whether each salient issue is being managed effectively?	16、29、38、43
C6. Remediation	C6.1	Through what means can the company receive complaints or concerns related to each salient issue?	18-19、25-26、30、36、40、46
	C6.2	How does the company know if people feel able and empowered to raise complaints or concerns?	18-19、25-26、30、36、40、46
	C6.3	How does the company process complaints and assess the effectiveness of outcomes?	25-26、36、40、46
	C6.4	During the reporting period, what were the trends and patterns in complaints or concerns and their outcomes regarding each salient issue, and what lessons has the company learned?	18-19、26、30、36
	C6.5	During the reporting period, did the company provide or enable remedy for any actual impacts related to a salient issue and, if so, what are typical or significant examples?	24、34、40、46