Sustainable Governance

- Corporate Social Responsibility Policy & Matrix
- Corporate Governance
- CSR Management
- Materiality Analysis and Stakeholder Communication
- Sustainable Value Creation
- Carry Out the UN Sustainable Development Goals
Since its establishment, TSMC has not only strived for the highest achievements in its core business of dedicated IC foundry services but has also actively developed positive relationships with all stakeholders including employees, shareholders, customers, suppliers, and society to fulfill its responsibility as a corporate citizen and pursue a sustainable future.

"TSMC Corporate Social Responsibility Policy" is the top guiding principle for our sustainable development. The "CSR Matrix" set by TSMC’s Founder, Dr. Morris Chang clearly defines the scope of TSMC’s corporate social responsibility. The horizontal axis shows the seven areas where TSMC aims to set an example: morality, business ethics, economy, rule of law, sustainability, work / life balance and happiness, and philanthropy. On the vertical axis are actions that TSMC has taken to fulfill its responsibilities.

### Corporate Social Responsibility Policy

**Our Vision**

To Uplift Society

**Our Missions**

- Acting with Integrity
- Strengthening Environmental Protection
- Caring for the Disadvantaged

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### Corporate Social Responsibility Matrix

<table>
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<tr>
<th>TSMC</th>
<th>Society</th>
<th>Morality</th>
<th>Business Ethics</th>
<th>Economy</th>
<th>Rule of Law</th>
<th>Sustainability</th>
<th>Work / Life Balance</th>
<th>Philanthropy</th>
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<td>Provide Well-paying Jobs</td>
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TSMC advocates and acts upon the principles of operational transparency and respect for shareholder rights. We believe that the basis for successful corporate governance is a sound and effective Board of Directors. In line with this principle, the TSMC Board delegates various responsibilities and authority to two Board Committees, the Audit Committee and the Compensation Committee. Each Committee’s Chairperson regularly reports to the Board on the activities and actions of the relevant committee. The Board of Directors plays the role to oversee and provide guidance to the Company’s comprehensive sustainable management strategies. TSMC established the Corporate Social Responsibility Executive Committee in 2019. TSMC’s Chairman chairs the CSR Executive Committee, and the Chairperson of the CSR Committee serves as Executive Secretary. The Chairperson of the CSR Committee reports annually to the Board of Directors on implementation results of the prior year and the future work plan.

Corporate Governance

Board of Directors and Committees

Inheriting the spirit of TSMC’s Founder, Dr. Morris Chang’s philosophy on corporate governance, under the leadership of Chairman Dr. Mark Liu and CEO & Vice Chairman Dr. C.C. Wei, TSMC’s Board of Directors takes a serious and forthright approach to its duties and is a dedicated, competent and independent Board.

Four Board Responsibilities

- Supervise
- Evaluate the management’s performance & appoint and dismiss officers
- Resolve the important, concrete matters
- Provide guidance to the management team

TSMC’s Board of Directors

9 Members

- Great breadth of experience as world-class business leaders or professionals

Audit Committee

5 Members

- Independent Directors

Compensation Committee

6 Members

- Independent Members

Note: In addition to all five Independent Directors, the Board appointed Mr. Yancey Hai (current Chairman of Delta Electronics Inc.) as a member of the Compensation Committee on February 11, 2020.

Diversity on Board

TSMC’s Board is comprised of a diverse group of professionals from different backgrounds in industries, academia, law, etc. These professionals include citizens from Taiwan, Europe and the U.S. world-class business operating experience, two of whom are female.

Corporate Governance Officer

In 2019, the Board of Directors appointed Ms. Sylvia Fang, the Vice President of Legal and General Counsel, as the Corporate Governance Officer responsible for corporate governance matters, including handling of matters relating to Board, Audit Committee, Compensation Committee and Shareholders’ meetings in compliance with law, assistance in onboarding and continuing education of directors, provision of information required for performance of duties by directors, and assistance in directors’ compliance of law, etc.

Ethics and Regulatory Compliance

In order to build an effective compliance system of ethical standards and regulatory compliance initiatives, TSMC established not only the Ethics Code, but also the internal policies and procedures in major areas of law. We also track and identify any relevant regulatory changes to ensure that TSMC’s internal policies and procedures are effective and up to date. For more details of Ethics and Regulatory Compliance at TSMC, please also refer to TSMC’s 2019 Annual Report “3.5 Code of Ethics and Business Conduct” and “3.6 Regulatory Compliance”.

Nomination and Election of Directors

In 2019, the Board of Directors established “Guidelines for Nomination of Directors”, which describes the procedures and criteria for the nomination, qualification and evaluation of candidates for Directors.

Risk Management

Based on both its corporate vision and its long-term, sustainable, responsibility to both industry and society, TSMC operates an enterprise risk management (ERM) program to integrate and manage potential sustainability risks including strategic, operational, financial and hazardous risks (climate change, utility supply, earthquake, fire, chemical spill, and conflict mineral) that represent potential negative consequences to operations and financial results. The TSMC risk management organization is composed of RM Steering Committee, RM Executive Council, RM Program and RM Task Force. The risk management framework including risk identification and assessment, risk control and mitigation, risk response, risk monitoring and reporting is applied to identify and prioritize risk controls, implement various controls and risk treatment. The risk management organization periodically briefs the audit committee on the ever-changing risk environment facing TSMC, the focus of the Company’s enterprise risk management, and risk assessment and mitigation efforts. The Audit committee’s chairperson also reports on the risk environment and risk mitigation actions to be taken. For more details of Risk Management, please refer to TSMC’s 2019 Annual Report “6.3 Risk Management”.

Our Business Sustainable Governance Our Focuses and Progress Appendix
Our commitment to society and stakeholders is our core value of Integrity, good corporate governance, a culture of strict adherence to regulatory compliance, and intellectual property protection. These commitments are key to ensuring TSMC’s sustainable future.

Sylvia Fang
Vice President, Legal and General Counsel / Corporate Governance Officer

Quality is fundamental in our work and the services we provide. TSMC is unequivocally devoted to developing sustainable operations and the continued improvement of supply chain quality. We strive to do so through strengthening a culture of quality, sharing case studies of success, working closely with customers and suppliers, coalescing around common core values, and continued innovation.

Dr. Jun He
Senior Director, Quality and Reliability

Customers are important partners of TSMC. Through continuous innovation and manufacturing excellence, we strive to build long-term relationships with our customers and serve as a trusted, long-term partner that clients can rely on for success.

Wendell Huang
Vice President, Finance and Chief Financial Officer

As a corporate citizen, TSMC adheres to its core values, and does its utmost to serve as a world-class company trusted by global investors through solid financials and transparent corporate disclosures.

Y .P . Chin
Senior Vice President, Operations / Product Development

In compliance with the vision and mission of the TSMC Corporate Social Responsibility Policy, TSMC has further connected to the international sustainability trend in 2019 by establishing a CSR Executive Committee to serve as the highest level decision-making center for corporate social responsibilities. TSMC’s Chairman acts as the chairperson for the committee, and the CSR Committee chairperson serves as the executive secretary. They work with senior executives across different functions to assess TSMC’s core operational capability, establish mid-to-long term development goals for CSR, and map out a blueprint for sustainable development that connects TSMC’s core advantages with UN sustainable development goals (SDGs).

CSR Management

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Corporate Social Responsibility Executive Committee

Chairperson
Chairman
Chairman of Corporate Social Responsibility Committee

Executive Secretary
Senior executives from research/technology development, business development, operations, materials and risk management and human resources, etc.

Committee Members
Chairman leads the management team to formulate the Company’s vision and long-term strategy in CSR, and works with the CSR Committee to promote related actions, cultivate sustainable culture, and drive for more positive changes

Mission
Chairman appoints a senior executive to serve as chairperson of the committee

Functional organizations related to the economy, environment, society, and corporate governance propose representatives

Corporate Social Responsibility Committee

Chairperson
Chairman appoints a senior executive to serve as chairperson of the committee

Committee Members
Functional organizations related to the economy, environment, society, and corporate governance propose representatives

Quarterly Meetings to
- Identify issues of sustainability that need to be monitored, and formulate corresponding action plans
- Supervise interdepartmental communications and resource integration/coordination
- Track the performance results of all facets to sustainable issues, and establish continuous improvement plans

Annually
- The chairperson of the Committee reports to the Board of Directors annually on the performance results of the current year and work plans for the upcoming year

Note: Passages by sequence of the chapters
Green manufacturing is the cornerstone of sustainable operations. While pursuing technological innovations, TSMC continues to emphasize energy conservation, water conservation, waste reduction, and environmental protection in general. TSMC is committed in cultivating a corporate culture with strong environmental protection awareness. We also continue to adopt renewable energy, recycled water, and circular economy to ensure that such resources are used at maximum efficiency levels. We hope to work with our supply chain to become a stabilizing force in environmental protection and sustainability.

J.K. Wang
Senior Vice President, Operations / Fab Operations

Our employees are our most important asset in maintaining a competitive edge. They are the driving force for social development and upgrading industry. Looking ahead, we will increase partnerships with academic institutions to cultivate a talent pool for TSMC and the semiconductor industry. We continue to build a diverse and inclusive work environment so talents are willing to join us and contribute to TSMC. At the same time, we also encourage employees to participate in society and care for the disadvantaged.

Connie Ma
Vice President, Human Resources

TSMC values corporate social responsibility and continues to require commitment and effort from global supply chain partners. We buy responsibly and use our actions to help propel the semiconductor supply chain into a sustainable future. We expect our suppliers to set goals, achieve them, and continue to raise the bar for themselves and the industry.

J.K. Lin
Senior Vice President, Information Technology and Materials Management & Risk Management

TSMC is cultivating talents for the semiconductor industry and leading the world in the latest semiconductor technology. We continue to drive Moore’s Law forward and help our customers develop innovative, high-tech products. In doing so, we hope to create a sustainable future through the power of technology.

Dr. Y.J. Mii
Senior Vice President, Research & Development / Technology Development

The existing CSR Committee serves as the communication platform that integrates and brings together different departments and employees to carry out TSMC’s sustainable development blueprint. Task forces that are set up for quarterly meetings and based on issues identify sustainable topics related to company operations and of stakeholders’ interest. The task forces formulate corresponding strategies and guiding principles, compile CSR budgets for each organization, coordinate resources, plan and carry out the annual plans, and track progress to ensure that CSR strategies are fully fulfilled in the daily operations of TSMC.
CSR Reporting to the Board of Directors in 2019

Achievements

 ● In response to climate change, the committee strengthened the performance of green manufacturing, developed diverse technologies for resource regeneration, realized circular economy, and used more renewable energy.
 ● TSMC pushed for a sustainable supply chain and continued to conduct supplier risk assessments, asking all suppliers to sign the Supplier Code of Conduct, and carry out the Responsible Supply Chain Action Plan.
 ● According to the sustainable development blueprint mapped out by the CSR Executive Committee, TSMC continued to align its core business with SDGs.
 ● The TSMC Education and Culture Foundation and the TSMC Charity Foundation actively supported our youth, arts education, education in remote areas, and the disadvantaged to bring positive changes to society.

2020 Work Plans

 ● Develop renewable energy & recycled water, realize the circular economy, and continue to promote green manufacturing.
 ● Reinforce human rights, environmental protection, safety, and operational resilience among suppliers to build a sustainable supply chain.

CSR Committee Achievements in 2019

 ● Formulated 2030 goals and execution plans for each organization according to the nine UN SDGs selected by Chairman and CSR Executive Committee members.
 ● Fulfilled green manufacturing, helped Taiwan develop renewable energy, developed green tools with suppliers, advocated for building water recycling plants, increased the percentage of resource recycling, and realized the circular economy.
 ● Led the domestic supply chain to upgrade, continued plans to purchase locally, and established a comprehensive auditing and coaching system for suppliers. Conducted environmental P&L assessments for suppliers for the first time to ensure sustainable development across the supply chain.
 ● The TSMC Charity Foundation established the Sending Love charity platform, leveraging digital technology to improve education in remote areas. The TSMC Education and Culture Foundation promoted exquisite arts, increased its momentum to support youth cultivation, and built a diversified education program that can be tailored to each student’s needs.

Note: Passages by sequence of the chapters
Materiality Analysis and Stakeholder Communication

Each year, TSMC complies with GRI Standards for Stakeholder Inclusiveness, Sustainability Context, Materiality, and Completeness. Through three phases that include identification, analysis, and confirmation, we assess sustainability issues and carry out materiality analysis to align TSMC’s strategies for sustainability management with our long-term goals. The GRI Standards also serve as a guideline for compiling our CSR report, allowing us to examine TSMC’s current progress in sustainability, promote improvement within organizations, and create shared value for society and TSMC.

Step 1: Define Major Stakeholders

In compliance with the AA 1000 SES (Stakeholder Engagement Standards, SES) and taking into account the level of importance and relevance, TSMC regards the following six stakeholders: employees, shareholders/investors, customers, suppliers/vendors, and government & society (community, academic institutions, media, NGO/NPO) as the major stakeholders for communication. In 2019, we identified 16 sustainability issues to serve as the basis for materiality analysis. The issues of sustainable products was divided and then integrated into innovation management and product quality, allowing disclosure to be more focused and comprehensive. Other result-oriented issues that are part of GRI general disclosures such as corporate governance, risk management, stakeholder communication, financial performance, and taxes will be regularly disclosed in the Company’s annual report, website, CSR Report, and CSR website, instead of being mapped in the materiality matrix.

Step 2: Collect Sustainability Issues

We have compiled 16 issues related to TSMC’s sustainability from four major sources: international sustainability standards and regulations (GRI Standards, ISO26000, UN Global Compacts, RBA, and UN SDGs), sustainability-oriented investment agencies (DJSI, CDP, TCFD, MSCI ESG Index, and SDGs Invest), TSMC’s development targets and vision, and stakeholder communication.

Step 3: Assess Level of Interest

Applying sustainability to the Company’s daily operations is the core mindset of promoting sustainability management at TSMC. In 2019, we attempted to involve ourselves in daily operations in order to truly understand what our stakeholders feel through various channels. This is in addition to the usual survey on sustainability that we hand out to all stakeholders and we were able to collect 436 surveys this year. For employees, TSMC hosted over 2,000 cross-level meetings, face-to-face discussions, interviews, and various forms of meetings to strengthen our understanding of what our colleagues expect from TSMC and their recommendations for promoting sustainability within the company. For suppliers, we’ve included, for the first time, a section on sustainability in surveys for suppliers to which we were able to collect 383 responses during the Supplier Management Forum. We also raised the level required for participating in discussions on materiality in 2019. Chairman Mark Liu leads the CSR Executive Committee, along with CSR Committee Chairperson and Senior Vice President Lora Ho, to analyze the impacts of each issue on operations (profitability, revenue, customer satisfaction, employee cohesion, risk) with a total of 114 colleagues that include TSMC’s vice presidents, senior fab directors, and fab directors. We hope that this can help us reach a consensus of major issues and map out a future roadmap to sustainability.

Step 4: Analyze Impact on Operations

TSMC’s sustainability from four major sources: international sustainability standards and regulations (GRI Standards, ISO26000, UN Global Compacts, RBA, and UN SDGs), sustainability-oriented investment agencies (DJSI, CDP, TCFD, MSCI ESG Index, and SDGs Invest), TSMC’s development targets and vision, and stakeholder communication.

Step 5: Map the Materiality Matrix

According to the results from step 3 & 4, we have mapped out the materiality matrix for TSMC. The CSR Committee have discussed and agreed on the results, identifying 13 material issues and three potential issues.
The CSR Committee was able to identify 13 sustainability issues as material based on analysis from the materiality matrix with three remaining issues identified as potential subjects that require attention. Based on these sustainability issues, we have established a long-term target, strategy, and action plan for 2030. We are also assessing each issue’s impact on TSMC’s value chain including supply chain, company operations, and customers. In pursuant to GRI Standards, we have also identified 20 material topics specific to TSMC. Based on reporting requirements, we have collected company information, data, and management approach to be disclosed in the 2019 CSR Report that will serve as motivation for continued improvement. Compared to assessment results in the last year, there was improvement in Water Management and Occupational Safety and Health. Management contributed the improvement to the growing importance of these two issues on company operations which led to adjustments to the materiality matrix and resulting in it becoming a focus of sustainability within the company.

Step 6: Decide Disclosure Boundaries
Procurement, wafer fabrication, packaging/testing, and customer use are the four major stages of TSMC’s value chain, which determine sustainability disclosure boundaries to help identify the impact of such issues on our upstream and downstream stages.

Step 7: Review Disclosed Content
We have aligned the 13 major issues with the 20 specific topics in the GRI Standards to collect and disclose relevant information based on the reporting requirements and management approach dictated by GRI. Other sustainability issues deemed significant by the CSR Committee were disclosed at the same time.

TSMC Materiality

Note: Corporate governance, risk management, stakeholder communications, financial performance, and taxes were generally disclosed and result-oriented issues. While they were not mapped in the materiality matrix, relevant information will be regularly disclosed in the Company’s annual report, CSR Report, and CSR website.
# Material Issues & the TSMC Value Chain

<table>
<thead>
<tr>
<th>Focus</th>
<th>Material Issues</th>
<th>Operational Impact</th>
<th>GRI Standard Specific Topics</th>
<th>Upstream&lt;sup&gt;Note 1&lt;/sup&gt;</th>
<th>Company Operations&lt;sup&gt;Note 2&lt;/sup&gt;</th>
<th>Downstream&lt;sup&gt;Note 3&lt;/sup&gt;</th>
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<tbody>
<tr>
<td></td>
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<td>Profitability</td>
<td>Revenue Customer Satisfaction Employee Engagement Risk Anti-corruption &amp; Anti-competitive Behavior</td>
<td>Purchase Stage</td>
<td>Wafer Fabrication</td>
<td>Packaging/Testing Customer Use</td>
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<td>Regulatory Compliance</td>
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<td>Innovation and Service</td>
<td>Innovation Management</td>
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<td>Economic Performance, Labor/Management Relations, Diversity and Equal Opportunity, and Market Presence</td>
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<td>Common Good</td>
<td>Social Participation</td>
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<td>Economic Performance, Indirect Economic Impacts, and Local Communities</td>
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Note 1: "Upstream" boundaries are raw materials, equipment, and related services purchased by TSMC

Note 2: "Company Operations" boundaries are wafer fabrication and packaging/testing services offered by TSMC

Note 3: "Customer Use" boundaries are customer products manufactured by TSMC
Material Issues & Risk Management

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<thead>
<tr>
<th>Material Issues &amp; Risk Management</th>
<th>Risk Consideration</th>
<th>Risk Type</th>
<th>Risk Mitigation</th>
<th>Our Approach</th>
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<tbody>
<tr>
<td>Code of Ethics and Business Conduct</td>
<td>Employee violations of the TSMC Ethics Code</td>
<td>Strategic, Operational, Hazardous</td>
<td>Reinforce Both Internally and Externally: The management team of TSMC takes ethics and regulatory compliance seriously. It is reflected not only internally in the formulation of compliance policies and procedures, providing training and promotion activities, and periodic assessments and declarations, but also externally through the participation of third parties. Furthermore, the culture of ethics and regulatory compliance is cultivated through effective reporting channels and whistleblower protection.</td>
<td>Please refer to &quot;Ethics and Regulatory Compliance&quot; in this Report</td>
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<tr>
<td>Regulatory Compliance</td>
<td>Regulatory non-compliance by the company</td>
<td>Strategic, Operational, Hazardous</td>
<td>Regulatory Compliance: Ensure the Company’s regulatory compliance through a series of measures to track and evaluate legislation, set and implement plans for regulatory compliance, conduct compliance training and maintain open reporting channels.</td>
<td>Please refer to &quot;Ethics and Regulatory Compliance&quot; in this Report</td>
</tr>
<tr>
<td>Innovation Management</td>
<td>Inability to foresee changes in technologies and develop innovative technologies</td>
<td>Strategic, Operational, Hazardous</td>
<td>Technology Leadership: Continuous investment and efforts on leading-edge technology development to maintain TSMC’s technology leadership in the semiconductor industry.</td>
<td>Please refer to &quot;Innovation Management&quot; in this Report</td>
</tr>
<tr>
<td>Product Quality</td>
<td>Challenges to product quality and yield</td>
<td>Strategic, Operational, Hazardous</td>
<td>Quality Capability Improvement: Leverage machine learning to construct an outstanding visual defect inspection and classification system for 12-inch wafers to increase employee productivity.</td>
<td>Please refer to &quot;Product Quality&quot; in this Report</td>
</tr>
<tr>
<td>Customer Service</td>
<td>Losing customers</td>
<td>Strategic, Operational, Hazardous</td>
<td>Precise Response: Provide excellent customer service through close collaboration with customers and customer meetings and surveys on a regular basis to understand and respond to their requirements and feedback.</td>
<td>Please refer to &quot;Customer Service&quot; in this Report</td>
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<tr>
<td>Supplier Sustainability Management</td>
<td>Supplier concentration and supplier non-compliance with TSMC or legal requirements</td>
<td>Strategic, Operational, Hazardous</td>
<td>Improve Supply Chain Sustainability: Carry out the four major management approaches of Code Compliance, Risk Assessment, Audit Participation, and Constant Improvement. Following the TSMC Business Continuity Management Policy, we will reinforce supply chain resilience and continue to disperse production sites as well as assess new suppliers to achieve a diverse sourcing strategy.</td>
<td>Please refer to 2019 TSMC Annual Report: 6.3 Risk Management</td>
</tr>
<tr>
<td>Energy Management</td>
<td>Energy shortage or power outage</td>
<td>Strategic, Operational, Hazardous</td>
<td>Increase Energy Efficiency: Plan for new energy-saving measures each year and actively implement energy-saving measures, increasing the efficiency of power consumption.</td>
<td>Please refer to 2019 TSMC Annual Report: 6.3 Risk Management</td>
</tr>
<tr>
<td>Climate Change</td>
<td>Operational impact and rising GHG emissions brought on by climate change</td>
<td>Strategic, Operational, Hazardous</td>
<td>Drive Low-carbon Manufacturing: Continue to use best available technology to reduce emissions of greenhouse gases (GHG), becoming an industry leader in low-carbon manufacturing. Use Renewable Energy: Continue to purchase renewable energy while establishing a solar-energy power system, increasing the use of renewable energy. Strengthen Climate Resilience: Establish climate change countermeasures and preemptive precautions, lowering the risks of climate change.</td>
<td>Please refer to 2019 TSMC Annual Report: 6.3 Risk Management</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Material Issues</th>
<th>Risk Consideration</th>
<th>Risk Type</th>
<th>Risk Mitigation</th>
<th>Our Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste Management</td>
<td>Environmental impact of waste or waste management vendors’ non-compliance with TSMC or legal regulations</td>
<td>Hazardous</td>
<td>Source Reduction: Promote waste reduction by waste source separation and demand low consumption chemical equipment from our suppliers. Circular Economy: Collaborate with business partners to develop new waste recycling technology in order to increase the amount of waste recycled and reused. Audit and Guidance: Conduct joint evaluation and supervision based on standards of waste management firms in the high-tech industry.</td>
<td>Please refer to “Waste Management” in this Report.</td>
</tr>
<tr>
<td>Air Pollution Control</td>
<td>Environmental impact of air pollutants</td>
<td>Hazardous</td>
<td>Use Best Available Technology: Adapt best available technology to deal with pollution caused by operations and mitigate environmental impact. Strengthen Monitoring of Prevention Facilities: Leverage backup systems and dual-track management, along with pollutant monitors, to ensure that equipment functions as intended and prevent abnormal occurrences.</td>
<td>Please refer to “Air Pollution Control” in this Report.</td>
</tr>
<tr>
<td>Talent Attraction and Retention</td>
<td>Unable to attract talent</td>
<td>Strategic</td>
<td>Hire Employees with Shared Visions &amp; Values: Establish a standard for talent selection; build diverse recruiting channels; promote the internship program and the Overseas Recruitment Project; and work with top universities around the world to facilitate momentum for long-term growth.</td>
<td>Please refer to “Talent Attraction and Retention” in this Report.</td>
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<tr>
<td>Talent Development</td>
<td>Talent cultivation and training programs are unable to support innovative technologies and operations of new fabs in TSMC</td>
<td>Strategic</td>
<td>Advocate for Self-learning: Offer diverse learning resources and channels to encourage self-learning among employees and improve their technical capabilities in order to achieve of technology development or volume production tasks.</td>
<td>Please refer to “Talent Development” in this Report.</td>
</tr>
<tr>
<td>Human Rights</td>
<td>Allegations of human rights violations</td>
<td>Strategic</td>
<td>Human Rights Due Diligence: Continue to strengthen our commitment to human rights and risk mitigation according to the TSMC Human Rights Policy and Responsible Business Alliance Code of Conduct. Sustainability Risk Management: All suppliers are required to comply with the Code of Ethics and Business Conduct, and to follow regulations on human rights and conflict-free minerals. TSMC continues to conduct sustainability risk assessments, and encourages major critical suppliers to join the Responsible Business Alliance (RBA).</td>
<td>Please refer to “Human Rights” in this Report.</td>
</tr>
<tr>
<td>Occupational Safety and Health</td>
<td>Occupational accidents, occupational diseases, earthquakes, fires, chemical hazards, emerging infectious diseases (e.g. COVID-19)</td>
<td>Hazardous</td>
<td>Advocate Safety Culture: Deeply instill a people-oriented safety culture, manage safety risks and establish an intrinsically safe working environment. Comprehensive Health Management: Implement the prevention of occupational diseases and promote a comprehensive health management. Internal-External Alliance: Collaborate with external parties to establish a safer working environment in our supply chain. Reinforce Responses to Compound Disasters: Regularly carry out drills for compound disasters, e.g. fire drill for earthquake-induced fires, to enhance the aseismic capabilities of tools and equipment, enhance production recovery capability and new fab planning. Prevention of Infectious Diseases: Establish a guideline for the response of notifiable diseases; convene a committee for disease prevention when necessary; identify, implement, and monitor the pandemic to adopt appropriate measures.</td>
<td>Please refer to 2019 TSMC Annual Report: 6.3 Risk Management.</td>
</tr>
</tbody>
</table>
Stakeholder Communication

**Employees**

We strive to uphold the Company's values, strengthen awareness of ethics among employees, offer a challenging and enjoyable work environment, foster an open-style management model, and become the most appealing employer for our employees.

- **60** Labor-management meetings
- **3,998** Cases handled by internal communication channels

**Communication Channels / Frequency**

- Communication and work meetings within organizations / daily
- Communication meetings of all levels / quarterly
- Labor-management meetings / quarterly
- Fab Caring Circle, Employee Opinion Box and Ombudsman System / as needed
- Employee survey / annually
- Ethics training / annually
- Employee core values survey / biannually

**Issues**

- Talent Attraction and Retention
- Talent Development
- Human Rights
- Social Participation
- Ethics and Regulatory Compliance

**Focus Areas**

- Strengthen industry-academia collaborations around the world to discover and cultivate more young talent
- Expand interaction and cooperation across functions to broaden employee vision and foster well-rounded talent
- Leverage big data or AI tools to upgrade office automation to improve productivity and reduce work hours
- Participate in more events hosted by the TSMC Education and Culture Foundation and the TSMC Charity Foundation for deeper social participation
- Suggest the Company to include technical staff into annual ethics and regulatory compliance trainings

**Responses from TSMC**

- Launched semiconductor courses in universities for the first time, hosted a large-scale IC layout competition, and continued to offer shuttle programs and IC layout courses in universities
- Strengthened framework for employee development, and adopted a dual-track system covering both management and technical expertise to allow employees to develop to their full potential in the right places according to their personal characteristics and skills
- Emphasized on talent transfer and development internally; enhanced internal transfer management to achieve 100% internal transfer rate
- Dedicated to intelligent knowledge by introducing the latest Industry 4.0 and Industrial AI technology to build a knowledge base for engineering analysis
- Encouraged employees to serve as volunteers and build greater connections with the community; devoted resources to those in need through the TSMC Education and Culture Foundation and the TSMC Charity Foundation to help employees engage deeply in social participation
- Technical staff were included to receive annual ethics and regulatory compliance trainings for the first time, with a completion rate of 99.71%. We also offered trainings on conflicts of interest for 1,134 production line managers as part of efforts to raise ethics awareness.

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I’ve served at TSMC for over 12 years and I’m very lucky to have been tasked with expanding into a new field that we direly need to expand into. With support from management, I’ve been given a high degree of freedom in carrying out the task, making it highly fulfilling.

Dr. Bharath Pulicherla
2019 TSMC Academician
Shareholders / Investors
To help investors understand TSMC’s investment value, TSMC communicates with investors about its growth strategies, stable profitability, good shareholder returns, and performance in sustainability.

Communication Channels / Frequency
- General shareholders’ meeting / annually
- Investor conferences / quarterly
- Domestic and overseas broker conferences / periodically
- Face-to-face meetings and telephone conference calls / as needed
- Emails / as needed
- Annual report, CSR report, and annual report on Form 20-F with the US Securities and Exchange Commission / annually
- Major announcements on the Market Observation Open System / as needed

Issues
- Financial Performance
- Innovation Management
- Risk Management
- Climate Change

Focus Areas
- Impact from global politics and economy on the Company’s operations and its countermeasures
- Changes in the competitive environment
- Future growth potential and profitability
- Dividend policy
- Measures in response to climate change and energy policy

Responses from TSMC
- In 2019, through quarterly investor conferences and 322 investor meetings, TSMC communicated with its investors about market trends, growth strategies, and profitability, and expressed its opinions on changes in the business environment.
- With the support of strong operating performance and future growth potential, TSMC has been providing positive return on investment to investors for 11 consecutive years.
- TSMC started distributing cash dividends on a quarterly basis in 2019. Shareholders of TSMC common shares received a total of NT$10 cash dividend per share in 2019, a 25% increase from 2018.
- Increased usage of renewable energy and identified climate change risk and opportunities within the TCFD framework. TSMC proposed a Project for Increasing Energy Efficiency in Manufacturing, making it the first in the industry to implement the New Generation Equipment Energy Conservation Program.

TSMC is one of the best Asian companies in sustainability practices. The company continues to push the envelope of technology and improves power efficiency of its products, and communicates with stakeholders in compliance with international practices. These efforts are reflected in the company’s robust ROC, which underpins its outperformed share price. We look forward to seeing greater success from TSMC in coming years.

Toby Hudson
Head of Asia ex Japan Equity Investments / Schroders Investment Management (Hong Kong), LTD.

TSMC is making technologies become more energy-efficient and affordable in the future, which will help us manage the world’s resources to improve our lives and drive future innovation. We would like to see further improvement in the Company’s carbon footprint, becoming the benchmark for sustainability report disclosure in Asia and around the world.

Michael McBrinn
Partner / Generation Investment Management LLP.
We offer customers high-quality products, services as well as the highest degree of protection for proprietary information through innovations and cutting-edge process technologies.

**Communication Channels / Frequency**

- Business and technology assessment / quarterly
- Customer satisfaction survey / annually
- Customer meetings / as needed

**Issues**

- Innovation Management
- Product Quality
- Customer Service

**Focus Areas**

- Technology development schedules and plans
- Capacity planning and production information
- Manufacturing excellence
- Information transparency and protection

**Responses from TSMC**

- Offered customers 765 types of manufacturing and process technologies in line with the technology roadmap
- Continued to optimize the TSMC-Online™ function, allowing customers to make production orders such as batches of experiment or product transfers
- Set up an Early Failure Rate System internally to ensure product information is updated in real-time, resolve process flaws, increase product yield, lower reliability risk, and strengthen partnership with customers
- Fab 14B all received security certifications with the highest security standard for products and related PIP protection. TSMC is now qualified to produce security IC products and receive orders for high-security products.

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TSMC offers transparent and predictable manufacturing information, so we have no surprises on our operations. They deliver products on time, respond quickly when we have urgent needs, take responsibility, and are very professional.

Sunny Gupta
Renesas Electronics Corporation / Vice President, Worldwide Operation

Xilinx’s 16nm new products achieved single-digit FIT (Failure in Time) rate soon, and has since maintained an outstanding record on quality and reliability. TSMC Q&R team’s hard work, as well as their leadership, contributed greatly to our success.

Dr. Antai Xu
Senior Director of Reliability Xilinx, Inc.
Suppliers and contractors are important partners to TSMC’s operations, and together we strive to develop new process technologies, improve quality, comply with environmental safety and health regulations, and better business ethics and code of conducts. We also hope to strengthen partnerships with suppliers to create a sustainable supply chain.

Communication Channels / Frequency

- Supplier Management Forum, Responsible Supply Chain Forum, Supply Chain Environment, Safety, and Health Forum, Advanced Materials Forum / annually
- On-site support & audit / as needed
- TSMC supplier code of conduct campaign / annually
- Supplier ethics survey / biannually
- Supplier self-assessment questionnaire / annually

Issues

- Ethics and Regulatory Compliance
- Product Quality
- Sustainable Management in the Supply Chain; Environmental Protection, Safety and Health

Focus Areas

- Stayed focus on TSMC’s ethics and regulatory compliance and supplier code of conduct
- Carried out sustainable actions and continued to improve
- Emphasized on the quality requirements of raw materials
- Built an efficient mechanism for waste management

Responses from TSMC

- All tier 1 suppliers signed the Supplier Code of Conduct and complied with business ethics (completion rate: 100%)
- 98.8% of suppliers believe that Supplier Code of Conduct training materials and case files were helpful in realizing and promoting the code; 84.9% of suppliers are now aware of reporting channels in TSMC
- 46 critical suppliers completed third-party supplier audits on sustainability risk by RBA-certified institution; 16 suppliers received consultation on process advancement and quality improvement
- Worked with suppliers to develop electronic-grade materials recycling; held the Responsible Supply Chain Forum and related training courses, sharing practical experiences which were then applied into the factory operations of our suppliers

Protecting the environment is an important corporate social responsibility, and we will continue to promote green manufacturing and work with TSMC to build a better, sustainable supply chain.

Doris Hsu
Chairperson of GlobalWafers Co., Ltd. & Taiwan Speciality Chemicals Co., Ltd., received recognition at the Supply Chain Management Forum

With a belief in respecting the environment and life sustainability, sustainable development is at the foundation of all the businesses we build and we are happy to work with TSMC to create a green supply chain.

Al Chuang
Taiwan Country Manager of Versum Materials Taiwan
Focus on TSMC’s patent applications and overall technology, profit-seeking enterprise income tax payments and increasing investment incentives, purchasing renewable energy, programs for recycled water, and TSMC’s promotion and experience sharing on Occupational Safety and Health.

Issues
- Tax Policies
- Innovation Management
- Climate Change and Energy Management
- Water Management
- Occupational Safety and Health

Focus Areas
- Development trends of advanced semiconductor technology and the current situation of TSMC’s technologies
- Purchase of renewable energy
- Use of recycled water
- Waste management and promotion of circular economy
- Compliant to regulations on water pollution prevention and control, air pollution prevention, and chemical substances control, etc.
- Assisted in improving occupational safety and health management in the supply chain

Responses from TSMC
- Offered a general course on the process technology, development, and applications of the semiconductor industry to the National Tax Administration of Northern Taiwan Province under the Ministry of Finance so the government can be familiar with the semiconductor industry
- Overseas locations are all using renewable energies now; Taiwan factories continued to purchase renewable energy in order to achieve the goal that 20% of electricity consumption of 3nm technology production will be renewable energy, and to reach the long-term goal that 25% of all the Company’s electricity consumption will be renewable energy in 2030.
- Participated in the government’s promotion of recycled water. TSMC is scheduled to begin to use first-phase water supplies from the Yongkang water regeneration facility by the end of 2020.
- On behalf of the Taiwan Semiconductor Industry Association and the Taiwan Science Park Association of Science and Industry to discuss with the Environmental Protection Administration regarding air pollution emission standards and the Toxic and Concerned Chemical Substances Control Act for the semiconductor industry
- Held four Environmental, Safety, and Health Experience-sharing Workshops; Suppliers are required to better manage energy conservation, fire safety, and occupational safety and health

In addition to creating economic value in the industry, TSMC is devoted to promoting circular economy, proving its outstanding performance in economic development and environmental protection through recycled water, refinement of sulfuric acid waste, and recycling of copper metals.

Dr. Yuh-Ming Lee
Distinguished Professor and Director, Institute of Natural Resource Management, National Taipei University
TSMC hopes that the TSMC Education and Culture Foundation can offer resources for education and arts to cultivate well-rounded talents in the new era; focuses of the TSMC Charity Foundation are on emergency relief aid, volunteer service, and various charity programs.

**Issues**

- **Social Participation**

- **Focus Areas**
  - Promotion of charity, education and culture programs
  - Increased the number of cooperating charity groups as well as beneficiaries and the scope of our volunteer service
  - Focused on TSMC’s efforts to resolve social issues and its impact
  - Continued to promote art and cultural activities; expanded sponsorships for outstanding local art groups

**Responses from TSMC**

- In 2019, the TSMC Education and Culture Foundation expanded its support for the diverse education program and devoted NT$ 96.69 million; it was also the first time that TSMC participated in the ATCC Case Competition and we expanded the event to include the TSMC Youth Dream Building Project, encouraging youth to act on their creative ideas and participate in social issues. Eighty-nine groups of students from Taoyuan, Hsinchu, Miaoli, and Tainan in a total of 21 colleges and universities attended the competition.

- In 2019, the TSMC Charity Foundation devoted funds, resources, and volunteers to target four charity projects: Caring for Elders Living Alone, Promoting Filial Piety, Taking Care of the Disadvantaged, and Environmental Protection. The foundation focused on putting resources into Education in Remote Areas and Aid for the Disadvantaged, with 8,174 volunteers serving nearly 84,000 hours. Donations exceeded NT$143 million.

We are grateful for the support and counseling provided by the TSMC Education and Culture Foundation. Right now, we are still a small social enterprise but we will strive to create value in society through charity work just as the TSMC Education and Culture Foundation has consistently done.

Allen Yeh
Leader of Package Plus, the TSMC team that participated in the 17th ATCC Case Competition

The Ten Thousand Dollars Per Household Program initiated by the TSMC Charity Foundation has eased the burden of financial stress and warmed our hearts. My work and family life was able to get on track when we were receiving aid so we really appreciate all your efforts!

Ms. Shih
Beneficiary of the Ten Thousand Dollars Per Household Program in Tainan
Sustainable Value Creation

Promoting corporate sustainability has been TSMC’s commitment since the Company was established. As the Company continues to grow, we’ve established a clear mechanism for sustainable management through our efforts into the six main capitals, four core elements, and seven sustainable management competencies. In order to consistently create value for our stakeholders, we have also established concrete, measurable long-term goals as well as corresponding action plans that we can continue to review and correct. We are also taking advantage of our role as an industry leader, hoping that we can extend our operational beliefs to each stage of our value chain. We hope that all of the sustainable management competencies can indeed make an impact on our industry and society to drive a sustainable management model that maximizes net positive impact and minimizes negative impact.

### Six Main Capitals

- **Finance**: Generate economic value and return by effectively managing financial resources.
- **Manufacturing**: Provide products that meet the needs of each client by carefully maintaining equipment and infrastructure resources.
- **Intelligence**: Strengthens the power of knowledge capital through constant dedication in innovative research and development and patents.
- **Human Resource**: Strengthens talent cultivation to be the Company’s key capital by looking for outstanding, like-minded colleagues.
- **Environment**: Reduce consumption of natural resources and maintain optimal usage efficiency by managing sources.
- **Society**: Give back to society and obtain its trust through community participation.

### Process and Methods

#### Senior Management Support

The chairman personally participates in the promotion of corporate social responsibilities, existing senior executives lead functional organizations to propose sustainable solutions based on the core competencies of TSMC to tackle environmental and social problems and create greater positive influences.

#### Mid-level Management Involvement

Mid-level managers are the driving force behind the Company’s advocacy for sustainability, conducting inter-organizational and inter-departmental cooperation in the face of complex sustainability issues in order to bring about material changes.

#### Organization Culture

Foster an organization culture that doesn’t commit easily, but make all efforts to fulfill the commitment when it does. Set long-term goals and periodically review results on key issues that are in line with international sustainability trends and operational needs.

### Four Core Elements

- **Integrity Leadership**
  - Ethics Code
  - Regulatory Compliance
- **Innovation Research Management**
  - Innovation Management
  - Product Quality
- **Customer Relationship Management**
  - Customer Service
- **Supply Chain Management**
  - Supply Chain Sustainability Management

### Seven Sustainable Management Competencies

- **Environment Management**
  - Energy Management
  - Climate Change
  - Water Management
  - Air Pollution Control
- **Human Resource Management**
  - Talent Attraction and Retention
  - Talent Development
  - Human Rights
  - Occupational Safety and Health
- **Stakeholder Engagement**
  - Social Participation

### Sustainable Value

In 2019, TSMC completed a sustainability analysis in terms of the triple bottom line (TBL) by evaluating the economic, environmental, and social impact of our own operations, while the analysis also added an Environmental Profit and Loss (EP&L) methodology and valuation results of the upstream supply chain. For more information, please refer to the “Sustainability project valuation” section of this report.

#### Note

1. "Production Value Driven by the Supply Chain" was calculated with assistance from the Industrial Economics & Knowledge Center. In 2019, the Directorate-General of Budget, Accounting and Statistics (DGABS) issued the Input-Output Table for 2016, therefore the "Production Value Driven by the Supply Chain" for 2017 to 2019 was calculated based on the 2016 Input-Output Table.

2. Environmental Profit and Loss (EP&L) presented in this section is the monetary assessment of possible external impacts from TSMC’s purchase and production. For the costs and economic benefits arising from the implementation of environmental protection projects, please refer to "Environmental Cost" in TSMC’s 2019 annual report. For the methodologies of environmental benefits arising from the implementation of environmental protection projects, please refer to the"Environmental Impact Valuation" section of this report.

3. The impact of water consumption was originally calculated based on the environmental characteristics of each country where each production site was located. Taking into consideration of regional differences in water stress, we adjusted the methodology to calculate the impact of water consumption based on the environmental characteristics of where the fab is located (i.e., Headquarters Taiwan) in 2019. We also updated calculations for 2017 and 2018 accordingly.

4. Environmental impact of the supply chain includes only for 1 suppliers which TSMC had more than two transactions with them in 2019 with the transaction amount exceeding NT$ 30 million. A list of 441 suppliers met the criteria. We then calculated their willingness to pay price to avoid occupational injury.

5. Calculation of industrial injury value = industrial injury cost + medical cost + willingness to pay price to avoid occupational injury.
Sustainability Impact Valuation

Common good is TSMC’s vision for fulfilling corporate sustainability. We’ve integrated concepts of Profit and Loss (P&L) with sustainable management to establish a Strategy Map by focusing on causal relationship, using an outside-in perspective to measure the social impact of TSMC’s value chain. For “Customer Use”, we’ve leveraged the latest process technologies to help our customers enable their innovations and improve energy efficiency. We hope to promote health, safety and convenience with technology while helping to build a low-carbon society. For “Upstream Procurement”, we are taking advantage of our role as an industry leader in the global semiconductor industry to improve the technologies and competency of local suppliers, and propel development and production value for the semiconductor industry chain. In the face of environmental issues within the supply chain, we also advocate for a responsible supply chain that can reduce its impact on the environment and society. In “TSMC Operations”, we work on renewable energy, green manufacturing, reclaimed water sources, and the circular economy based on innovations. In doing so, we hope that we are able to reduce the costs and impact of resource consumption on the society.

Meanwhile, TSMC is working with a team from the Corporate Sustainability and Social Responsibility Center of the Tunghai University. Since 2018 we have introduced an assessment for Environmental Profit & Loss (EP&L) which puts a monetary value on the social costs incurred throughout the global production process. The introduction of EP&L allows us to consider our environmental footprint and its external costs throughout our decision-making process. In 2019, we further expanded our EP&L analysis towards upstream procurement, hoping that we are able to discover more opportunities to reduce environmental footprint and increase social welfare, creating a more sustainable supply chain and generating greater synergy for our value chain.

In 2019, in terms of TSMC Operations, TSMC generated NT$1.07 trillion in revenue, made a provision of NT$286.9 billion for depreciation and amortization, and issued NT$259.3 billion in cash dividend. TSMC not only helped customers and suppliers succeed, but also offered good returns to its investors. In terms of social value, we paid NT$168.7 billion in taxes and payroll, supporting our government to expand infrastructure and social welfare, and to create more job opportunities, while occupational injuries resulted in NT$13 million cost to society. Environmental footprint and resource consumption during the production process also resulted in NT$14.6 billion of environmental costs. For upstream procurement, TSMC helped drive NT$458.6 billion of production value in the supply chain while incurring NT$6.7 billion in environmental costs.

Looking into the future, TSMC will continue to promote sustainability impact assessment. We will improve sustainable management performance through four major principles of insight, collaboration, transformation, and impact to create more significant value for society.
Sustainability Impact
Strategy Map

From purchasing and production to customer usage, TSMC has outlined a strategy map for the value chain derived from the causal relationship between these interconnected lines for inspecting our various actions comprehensively. A monetary value is embraced as a sustainable management tool to measure the potential external costs (−) and values (+) that TSMC generates on the economy, environment, and society.

Note 1: The “Strategy Map” is derived from the Balanced Scorecard, a performance management tool researched and developed by Robert S. Kaplan and David P. Norton in the late 1990s. The Balanced Scorecard connects goals with driving factors to serve as a tool for management.

Note 2: The “TSMC Sustainability Impact Strategy Map” employs concepts of performance management to connect predicted results in value chain activities with causality among driving factors. We then apply the concept of P&L to identify positive or negative impacts to the economy, environment, and society. Such positive or negative impacts include direct or indirect economic value as well as the external costs or benefits brought onto the natural environment or society.
Carry Out the UN Sustainable Development Goals

Grounded in our mission to build a lasting foundation, TSMC is steadfastly committed to our business principles and four core values of integrity, commitment, innovation, and customer trust. By adhering to our core business, TSMC is focused on our core competencies and primary business while actively carrying out the United Nations’ Sustainable Development Goals (SDGs). We hope that TSMC’s efforts can bring about positive changes and impacts to the challenges faced by humanity. In 2019, Chairman Mark Liu and CSR Committee Chairperson and Senior Vice President Lora Ho established the CSR Executive Committee with senior management from Technology Development, Business Development, Operations, Materials and Supply Chain Management, and Human Resources. Starting with six sustainability focuses, the CSR Executive Committee has established five major development paths for CSR, collaborating to build a vision and blueprint for implementing SDGs. In 2019, TSMC chose nine major SDGs, drafted 37 long-term goals, and implement 23 sustainable approaches. With Goal 17 of the SDG – global partnerships – at the core, we collaborate with stakeholders inside and outside of TSMC as well as business partners along the value chain. Through participation, cooperation, and dialogue, we hope to build an inclusive and prosperous future together.
Linking SDGs and TSMC’s Sustainable Development Goals for 2030

**Good Health and Well-being**
Offer better medical care to elder people living alone
- Provide 12,000 service visits to elder people living alone through Network of Love

**Quality Education**
Promote filial piety among young generations
- Promote filial piety education in 120 educational institutions
Care for the educationally disadvantaged
- Continuously collaborate with public and private educational organizations and provide no less than NT$12 million in resources annually
Volunteer readers for children in remote areas
- Provide more than 10,000 hours of reading service each year

**Clean Water and Sanitation**
Reduce water consumption
- Reduce unit water consumption (liter/8-inch equivalent wafer mask layers) by 30% (Base year: 2010)
Raise the standard for wastewater
- Water pollution composite indicator 30% above (Base year: 2010)
Increase usage of reclaimed water
- Adopt renewable energy
- Reduce unit water consumption (liter/8-inch equivalent wafer mask layers) by 20% (Base year: 2014)

**Affordable and Clean Energy**
Aim for energy-efficient production
- Double energy efficiency (8-inch equivalent wafer mask layers/WH), after five years of mass production for each process technology

**Decent Work and Economic Growth**
Offer competitive compensation
- Continue to maintain a position above the 75th percentile among industry peers in total compensation

**Industry, Innovation and Infrastructure**
Encourage innovation
- To maintain TSMC’s technology leadership, annual R&D expenditure amounts to 8.5% of revenue
- Exceed 50,000 global patent applications granted (Base year: 2010)

**Climate Action**
Implement strategies in response to climate risks
- Reduce greenhouse gas emissions per unit of production (metric ton of carbon dioxide equivalents (MTCO2e)/8-inch equivalent wafer mask layers) by 40% (Base year: 2010)
- 0 days of production interruption due to climate disasters
Enhance the resilience against climate risks
- A cumulative total of 300 suppliers observe annual emergency response drills (Base year: 2018)

**Responsible Consumption and Production**
Reduce the output of industrial waste
- Outsource unit waste disposal per wafer (kilogram/8-inch equivalent wafer mask layers) ≤ 0.22
Promote a circular economy
- Develop multiple types of electronics-grade chemicals for TSMC’s resource circulation
- Reduce waste production among major local suppliers by 35% (Base year: 2014)
Improve recycling abilities
- Develop the ability to analyze 100% of CMR (Carcinogenic, Mutagenic and Reprotoxic) substances and help major suppliers develop the same capabilities
Advocate for personal health management
- Zero cases of occupational hazard caused by exposure to chemicals