A Responsible Purchaser A Practitioner of Green Power An Admired Employer An Innovation Pioneer Power to Change Society



# Customer Relations

## **React with Precise Response**

Provide excellent customer service through close collaboration with customers and regular customer meetings/surveys to understand their requirements and respond to their feedback



#### 2030 Goals

# 2024 Targets

#### **2023 Achievements**

Maintain a customer trust and satisfaction rating of over 90% Note

Reduce cases of problematic engineering quality to 20% of the level in 2019 for every one million 12-inch wafers shipped

Maintain a customer trust and satisfaction rating of over 90%

Reduce cases of problematic engineering quality to 30% of the level in 2019 for every one million 12-inch wafers shipped

- Customer trust and satisfaction rating of 94% Target: >90%
- Reduced cases of problematic engineering quality to 25% of the level in 2019 for every one million 12-inch wafers shipped Target: 30% of the level in 2019

#### **Establish Virtual Fab Service**

Provide comprehensive information promptly to ensure the success of customer's products; strengthen processes and systems to ensure that customer product information receives protection of the highest standard



Provide >1,200 wafer manufacturing and process technologies and >170 advanced packaging technologies in line with the TSMC technology roadmap

Pass customer product information security audits with no major flaws

Provide >1028 wafer manufacturing and process technologies and >153 advanced packaging technologies in line with the TSMC

Pass customer product information security audits with no major flaws

↑ Provided >994 wafer manufacturing and process technologies and >149 advanced packaging technologies in line with the TSMC technology roadmap

Target: 994 wafer manufacturing and process technologies and 147 advanced packaging technologies

✓ Passed customer product information security audits with no major flaws

Target: No major flaws





Applicable to all TSMC fabs around the world Applicable to TSMC fabs in Taiwan and other specific fabs Only applicable to TSMC fabs in Taiwan





↑ Exceeded ✓ Achieved — Missed target

Note: To comprehensively evaluate the customer relations management, TSMC included the customer trust indicator in 2023, and the Company adjusted its long-term goal to "maintain a customer trust and satisfaction rate of over 90%"



An Innovation Pioneer

A Responsible Purchaser A Practitioner of Green Power An Admired Employer

Power to Change Society



Consistent innovation in technologies and the provision of highest quality are the keys to gaining customer trust. TSMC's vision is to become the world's largest and most advanced dedicated IC design and manufacturing service provider. To provide the optimal customer service experience, TSMC assembled service teams dedicated to customers to facilitate communication and coordination with customers. The Company also keeps implementing digital transformation and enhanced the TSMC Online™ user experience. In 2023, the customer trust and satisfaction rate reached 94% as TSMC provides premium technologies and services to improve the competitiveness of customer product, achieving a win-win situation.

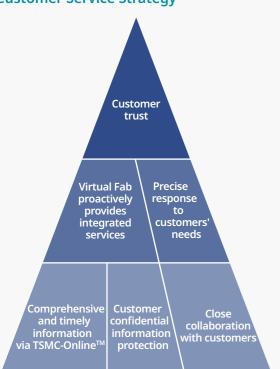
#### **Precise Response**

TSMC values customers' feedback and considers it as a reference to continuously improve service quality. The customer service teams obtain customers' needs and opinions through annual surveys, quarterly evaluations, and irregular meetings, and regularly reviews and analyzes them to propose improvement plans, strengthen the partnership between both sides. In 2023, TSMC conducted the annual trust and satisfaction survey with more than 200 customers and held over 100 guarterly evaluation meetings with more than 30 customers, hosting more than 1,500 online and offline meetings for the managerial level.

TSMC continues to collaborate closely with customers and achieved 91% customer satisfaction rate in 2023. To comprehensively measure the performance of customer relations management, TSMC adjusted the "customer satisfaction rate" to "customer trust and satisfaction rate" in 2023 and adopted a long-term goal to maintain an over 90% customer trust and satisfaction rate. In addition, TSMC is also advancing manufacturing technologies to achieve better quality and yield. In 2023, cases of engineering quality problem for every one million 12-inch wafers shipped were reduced to 25% of the level in 2019, exceeding the annual target of 30%. As such, the Company continued to strive for the long-term goal of 20% by 2030.

Effective communication is a management highlight for the customer relations of TSMC. To precisely understand customers' demand for the provision of diverse and comprehensive solutions, TSMC's customer service teams worked with domestic and overseas organizations to organize customer communication skill seminars. Through case discussions and exercises, the seminars will help the customer service teams master the crucial requirements of customers and respond effectively to improve the interaction quality. A total of five seminars were held in 2023 with 284 participants. Over 90% of participants agreed that the program can effectively improve the effects of customer communications and improve employees' daily work efficiency.

#### **Customer Service Strategy**



#### **Various Communication Channels for Customers**



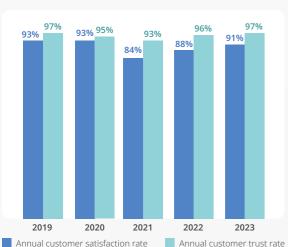
#### An Innovation Pioneer

A Responsible Purchaser A Practitioner of Green Power An Admired Employer



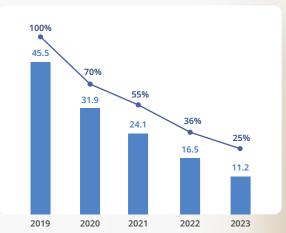
Power to Change Society





Note: Figures for customer satisfaction rate include TSMC fabs in Taiwan and overseas subsidiaries

#### **Cases of Problematic Engineering Quality** for Every Million Wafers Shipped



- Cases of Problematic Engineering Quality
- The proportion of Problematic Engineering Quality cases decreased to the level of 2019

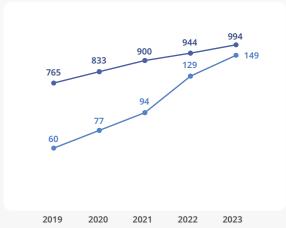
### **Virtual Fab**

In response to the constant evolution of semiconductor designs and process technologies, TSMC upgraded TSMC-Online™ by adhering to the vision of Everyone's Foundry to allow customers to easily obtain and manage information related to wafer fabrication. In 2023, the monthly browsing rate of TSMC-Online™ exceeded 50,000 times, employing innovative digital collaboration to help improve the convenience and efficiency of the system.

In 2023, to accommodate the technology development roadmap and support diverse product demands from customers, TSMC provided over 994 wafer manufacturing technologies and over 149 advanced packaging technologies for customers. The Company also implements customer confidential information protection by complying with international regulations and standards and obtaining ISO 27001 certification, the international standard for information security management. TSMC has also implemented its Information Protection Policy and SOP to provide customers with the highest level of protection, just like their own factories, to protect customer interests.

TSMC is committed to delivering products of the highest quality and pursuing innovative, collaborative models based on the core value of Customer Trust and by adhering to customer-oriented services. As a trusted technology and capacity provider in the global logic IC industry, TSMC deems customers' success as TSMC's success to jointly create a sustainable operations in the future.

# **Types of Technology for Customers**



- Types of wafer manufacturing technology
- Types of advanced packaging technology

Note: Figures for customer satisfaction rate include TSMC fabs in Taiwan





An Innovation Pioneer



# TSMC Upgrades the User Experience of TSMC-Online™ to Serve as the Best Assistant for Customers in Product Management

To create the best customer service experience and allow customers to gain the information easily, TSMC continued to optimize TSMC-Online™. The User-centered Design (UCD) was introduced to reorganize the system structure. Through three new methods, including standard operation interface, personalized workspace, and intelligent guidance service, the convenience and execution efficiency of the system were improved to provide customized TSMC-Online™ experience.

Meanwhile, in response to the increasingly complicated semiconductor technologies and commercial models, TSMC provides services within the scope of product design, mask fabrication, wafer fabrication, and 3DFabric<sup>™</sup>. To help new customers rapidly understand the operations of different services, TSMC produced 10 tutorial videos for three service categories, introducing the service platform systems and operating models in detail to reduce the barrier to use.

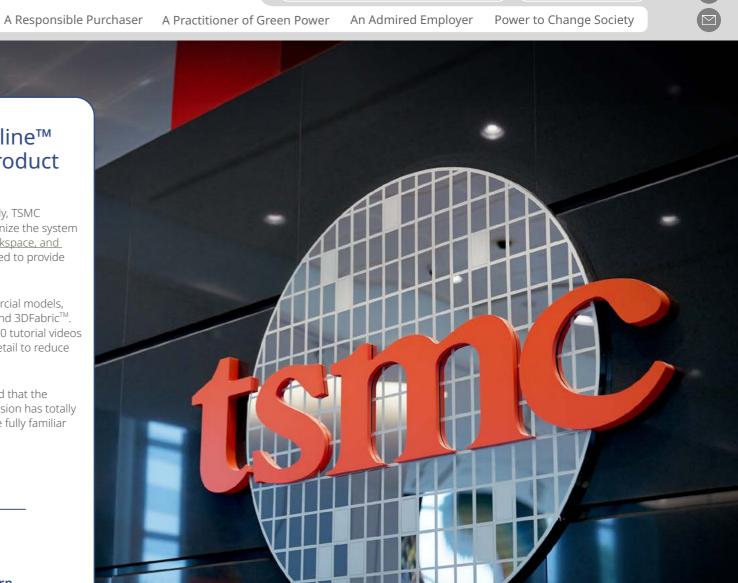
In 2023, the survey results from 325 questionnaires regarding the TSMC-Online™ revision showed that the Company received over 6 out of 7 points positive rating. Over 70% of customers said that the revision has totally updated the users' experience, making it much more efficient to obtain information. Users can be fully familiar with the new operating interface within just one week.

#### **Customer Feedback**

The new interface structure is clear, and the instructions are accurate, which allow me to rapidly find the information I need.

The tutorial video is very useful, so I can easily learn how to use the system!





Fab 10



An Innovation Pioneer

Pab 23

A Responsible Purchaser A Practitioner of Green Power An Admired Employer

Power to Change Society

# **TSMC Delivers Unrivalled Manufacturing Excellence**

# >16 Million

**Products** 

2023 total managed capacity reached over 16 million 12-inch wafer equivalents



HQ and Fab 12 Fab 2/3/5/8 Fab 15

Fab 6/14/18

Fab 11

Fab 21

