



## 7. Corporate Social Responsibility

TSMC was named *Semiconductors and Semiconductor Industry Group Leader* by Dow Jones Sustainability Index in 2013.

### 7.1 Overview

#### CSR Guidelines

TSMC believes a company's corporate social responsibility is to uplift society. As an important part of the technology industry, looking to the future, we not only aim to maintain our leadership in worldwide competition and promote Taiwan's globalization and economic growth, but we will also continue to carry out our corporate social responsibility and do our utmost to be good corporate citizens.

Our 10 principles for practicing corporate social responsibility are important standards for continuing to support positive change in society:

1. We insist on honesty and integrity. We are honest to our shareholders, employees, customers, and to the public alike.
2. We respect the rule of law and always obey the law.
3. We abhor cronyism. We do not seek favoritism from the government or any government official, and we do not bribe.
4. We practice good corporate governance, and balance the interests of shareholders, employees, and all stakeholders in the Company.
5. We do not engage in politics.
6. We provide good job opportunities with a safe, comfortable, and intellectually challenging environment to give our employees both physical comfort and mental stimulation.
7. We do our part to control climate change and place great importance on the protection of the environment.
8. We emphasize and reward innovation, and actively manage the risks that innovation may bring.
9. We invest in green businesses such as solid state lighting and solar to contribute to a greener world.
10. We support educational and cultural activities, and care for our communities over the long term.

TSMC fulfills its social responsibilities to all stakeholders. As we carry out the principles listed above, it is our firm belief that customers will trust us more because of our honesty and integrity, respect for the law, and good corporate governance. Investors will be more willing to invest over the long term because of our clear core values, and employees will feel closer to the Company as they identify with those values. Carrying out TSMC's social responsibilities brings us greater competitive advantage, creates greater value for shareholders, and benefits all of our stakeholders.

The following table shows TSMC's view of CSR. TSMC's social responsibility is to "uplift society", and on the vertical axis are matters that TSMC considers its responsibilities. The horizontal axis lists areas where TSMC believes its values can affect society.

### Corporate Social Responsibility: Uplift Society

TSMC \ Society	Morality	Business Ethics	Economy	Rule of Law	Sustainability	Work/Life Balance Happiness	Philanthropy
Integrity	▼	▼					
Law Compliance				▼			
Anti-Corruption Anti-Bribery Anti-Cronyism	▼	▼		▼			
Environmental Protection Climate Control Energy Conservation				▼	▼		
Corporate Governance		▼	▼	▼			
Provide Well-paying Jobs			▼			▼	
Good Shareholder Return			▼				
Employees' Work-life Balance						▼	
Encourage Innovation		▼	▼				
Good Work Environment						▼	
Volunteers Organization					▼	▼	▼
Education and Culture Foundation							▼

### CSR Management Approach

TSMC's decision-making and operations in corporate social responsibility (CSR) are led by the Company's Chief Financial Officer, who was appointed by the Chairman to act as an overall coordinator for the entire Company's CSR activities. To better carry out and coordinate sustainability efforts, the Company founded the "Corporate Social Responsibility Committee" in 2011, which brings together representatives from all of TSMC's CSR-related business segments, including Customer Service, Human Resources, Investor Relations, the Legal Department, Material and Supply Chain Management, Operations, Public Relations, Quality and Reliability, R&D, Risk Management, the Environment, Safety & Hygiene Department, the independent TSMC Education & Culture Foundation and the TSMC Volunteer Association. Since 2012, CSR has been a topic on TSMC's Board meeting agenda. Annual CSR performance is reported to the Board.

The CSR Committee holds quarterly meetings to discuss related topics, led by the CFO and the President of the Volunteer Program. The quarterly CSR meeting systematically and effectively carries out our corporate social responsibilities by following a "Plan-Do-Check-Act" cycle to regularly review interaction with stakeholders and the issues that concern them, discuss progress in CSR activities and set future plans. Through close cooperation between organizations, CSR is now an integral part of TSMC's daily operations.

### DJSI Industry Group Leader

In 2013, TSMC was recognized by the Dow Jones Sustainability Indexes (DJSI) as the Semiconductors and Semiconductor Equipment Industry Group Leader, setting a milestone for the Company's achievements in sustainability and corporate social responsibility. TSMC is the first Taiwan company, and one of just four Asian companies, to win the highest score out of its industry peers in the DJSI's 24 industry groups, made up of 59 industries and the 2,500 largest companies in the world. Moreover, TSMC is one of only two semiconductor companies chosen as index components for 13 consecutive years.

### 2013 CSR Awards and Recognitions

Category	Organization	Awards and Recognitions	
Overall CSR	Dow Jones Sustainability Index (DJSI)	•First Taiwan company to be recognized as the DJSI Semiconductors and Semiconductor Equipment "Industry Group Leader" (i.e. the company with the highest sustainability score out of its industry peers in the DJSI's 24 industry groups, made up of 59 industries and the 2,500 largest companies in the world) •RobecoSAM Sustainability Award "Gold Class" •Membership in the Dow Jones Sustainability World Index for a 13th consecutive year	
	Goldman Sachs	•Membership on the GS SUSTAIN Focus List, which incorporates 59 global industry leaders	
	CommonWealth Magazine	•Most Admired Company Rank No.1 in Taiwan •Excellence in Corporate Social Responsibility Award	
	Globalviews Magazine	•Excellence in Corporate Social Responsibility, Occupational Health First Prize	
	Taiwan Institute for Sustainable Energy	•Award for Corporate Sustainability Reports - Excellent for Manufacturing Industry •Model Award for Corporate Sustainability Development Performances - Category of Transparency and Integrity	
	FinanceAsia	•Best Corporate Social Responsibility - Ranked No.2 in Taiwan	
	R.O.C. Ministry of Culture	"Wenxin Award" for the 10th consecutive year	
Economy, Governance	Institutional Investor	•Best CEO (Technology/Semiconductors) - 1st Place (buy-side) •Best CEO (Technology/Semiconductors) - 1st Place (sell-side) •Best CFO (Technology/Semiconductors) - 1st Place (buy-side) •Best CFO (Technology/Semiconductors) - 2nd Place (sell-side) •Best IR Team (Technology/Semiconductors) - 1st Place (buy-side) •Best IR Team (Technology/Semiconductors) - 1st Place (sell-side) •Best IR Professional (Technology/Semiconductors) - 1st Place (buy-side) •Best IR Professional (Technology/Semiconductors) - 1st Place (sell-side)	
	IR Magazine	•Best corporate governance and disclosure •Best overall IR by a Taiwanese company •Best IRO - Taiwan	
	EUROMONEY	•Asia Best Managed Companies 2013 - IT/software/technology	
	FinanceAsia	•Asia's Best Managed Companies: Hong Kong, Korea and Taiwan •Best Managed Company - Ranked No.1 in Taiwan •Best Corporate Governance Company - Ranked No.1 in Taiwan •Best CEO - Ranked No.1 in Taiwan •Best CFO - Ranked No.2 in Taiwan •Most Committed to a strong Dividend Policy - Ranked No.1 in Taiwan •Best Investor Relations - Ranked No.1 in Taiwan	
	Global IR Awards	•Global Top 50 Gold: Ranked No.12	
	International Law Office	•Asia-Pacific Counsel Awards 2013 - General Counsel of the Year	
	R.O.C. Securities & Futures Institute	•10th Information Disclosure of Public Companies Ranking - Ranked A+	
	Environment, Safety and Wellness	U.S. Green Building Council Leadership in Energy and Environmental Design (LEED) certification	•"Gold" certification in LEED-Existing Building: Operation and Maintenance (LEED-EB O&M) - Fab 14 Phase 1 Office Building, Fab 14 Phase 1/2 Manufacturing Facility •"Gold" certification in LEED - NB - Fab 12 Phase 6 Manufacturing Facility, Fab 15 Phase 1/2 Manufacturing Facility Note: Up to the end of 2013, TSMC received 11 U.S. LEED certifications (1 "Platinum" class, 10 "Gold" class)
		R.O.C. Ministry of the Interior "Ecology, Energy Saving, Waste Reduction and Health (EEWH)" certification	•Diamond class "Green Building" certification - Fab 12 Phase 6 Manufacturing Facility, Fab 14 Phase 3 Office Building Note: Up to the end of 2013, TSMC received 1 Taiwan EEWH Diamond class "Intelligent Green Building," 6 Taiwan EEWH Diamond class "Green Building" certifications.
		R.O.C. Ministry of Economic Affairs Industrial Development Bureau	•"Green Factory Label" - Fab 12 Phase 5
ISO 50001 Energy Management System certification		Fab 12 Phase 6, Fab 15	
R.O.C. Environmental Protection Administration		•"Annual Enterprise Environmental Protection Award" - Fab 15 •"Energy Conservation and Carbon Reduction Action Mark" - Fab 6, Fab 8, Fab 12 Phase 6, Advanced Backend Fab 2 •"Excellence in Toxic Substance Management Award" - Fab 14B •"Enterprise Green Procurement Award" - Headquarter	
R.O.C. Ministry of Economic Affairs		•"Excellence in Carbon Reduction Award" - Fab 8, Fab 12 Phase 4/5 •"Water Conservation Award" - Fab 3, Fab 12 Phase 4/5, Fab 15 •"National Sustainable Development Award" - Fab 3	
Hsinchu Science Park Administration		•"Low Carbon Enterprise Award" - Fab 12 Phase 6 •"Excellence in Environmental Protection" - Fab 12 Phase 1/2 •"Excellence in Labor Safety and Hygiene Award" - Fab 3 and Fab 12A (Note)	
Southern Taiwan Science Park Administration		•"Excellence in Environmental Protection" - Fab 14A	
Hsinchu County Environmental Protection Bureau		•"Enterprise Green Procurement Award" - Fab 2 and 5 •"Mobile Pollution Sources Control" - Fab 2 and 5	
Hsinchu City Environmental Protection Bureau		•"Mobile Pollution Sources Control" - Fab 12 Phase 1/2 •"Environmental Education Award" - Fab 12 Phase 1/2	
Employees	Council of Labor Affairs, Executive Yuan	•Large Enterprise Award of National TrainQuali Prize (NTQP)	
	Health Promotion Administration, Ministry of Health and Welfare	•Health Management Award •Healthy Weight Management Award •Pioneering Weight Management Award	
	GlobalView Magazine	•First place in CSR Award for Workplace Health	

Note: Fab 12A includes Fab 12 Phase 1/2/3.

## 7.2 Environmental, Safety and Health (ESH) Management

TSMC believes its environmental, safety and health practices must not only comply with legal requirements, but also measure up to or exceed recognized international practices. TSMC's ESH policy aims to reach the goals of "zero incident" and "sustainable development," and to make TSMC a world-class company in environmental, safety and health management. The Company's strategies for reaching these goals are to comply with regulations, promote safety and health, strengthen recycling and pollution prevention, manage ESH risks, instill an ESH culture, establish a green supply chain, and fulfill its related corporate social responsibilities.

All TSMC manufacturing facilities have received ISO 14001:2004 certification for environmental management systems and OHSAS 18001:2007 certification for occupational safety and health management systems. All fabs in Taiwan have also been TOSHMS (Taiwan Occupational Safety and Health Management System) certified since 2009.

TSMC strives for continuous improvement and actively seeks to enhance pollution prevention, power and resource conservation, waste reduction, safety and health management, fire and explosion prevention and minimize the impact of other risks, such as climate change, earthquakes, in order to reduce the overall environmental, safety and health risk.

In 2006, in order to meet regulatory and customer needs for the management of hazardous materials, TSMC began to adopt the IECQ QC 080000 Hazardous Substance Process Management (HSPM) System. All TSMC manufacturing facilities have been QC 080000 certified since 2007. By practicing QC 080000, TSMC ensures that its products comply with regulatory and customer requirements, including the European Union's Restriction of Hazardous Substances (RoHS) Directive, EU Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), the Montreal Protocol on substances that deplete the ozone layer, the halogen free in electronic products initiative, and Perfluorooctane Sulfonates (PFOS) restriction standards.

Since 2011, TSMC adopted ISO 50001 Energy Management System for the continuous improvement of energy conservation. TSMC Fab 12 Phase 4 data center is Taiwan's first facility to earn the ISO 50001 certification for a high density computing data center. As of early

2014, TSMC has three fabs – Fab 12 Phase 4/5/6, Fab 14 Phase 3/4 and Fab 15 – that earned the ISO 50001 certifications. Other TSMC fabs also implement energy management measures consistent with ISO 50001.

TSMC regularly communicates with suppliers and contractors regarding environmental, safety and health issues and encourages them to improve their ESH performance. In line with this policy, TSMC uses priority work management and self-management to govern work performed by contractors. TSMC requires contractors performing high-risk operations to complete certification for technicians, and to establish their own OHSAS 18001 safety and health management system before bidding on contracts. This self-management is aimed at increasing the sense of responsibility of TSMC's contractors, with the goal of promoting safety awareness and technical improvement for all contractors in the industry.

TSMC collaborates with suppliers to improve the sustainability of the Company's supply chain regarding ESH-related issues such as carbon and water footprinting, and conflict mineral management. TSMC not only performs on-site ESH audits at its suppliers manufacturing sites, but also proactively assists them with improving ESH performance.

Reducing the carbon and water footprints of TSMC's supply chain is essential to the Company's green supply chain ideals. Since 2009, TSMC has required suppliers to set up their carbon inventory procedures. Since 2010, TSMC collaborated with selected suppliers to set up product carbon footprints and has received PAS2050 certifications for 6-inch, 8-inch and 12-inch finished wafer.

TSMC also monitors potential water shortages in the supply chain and investigates the supply chain's water inventory. TSMC is also preparing to work with suppliers on water footprinting and conservation plans. The ESH management programs of TSMC suppliers are tied to a sustainability index that includes three components: the Green Index, the Social Index and the Risk Index. The "Green Index" includes environmental management systems, regulatory compliance, hazardous substance management, conflict mineral investigation, greenhouse gas inventory, carbon footprinting, water footprinting and other green activities. The "Social Index" includes labor and ethical conduct and participation in social activities. Both of the "Green" and "Social" indexes are consistent with the Electronic Industry Citizenship Coalition (EICC) code of conduct. The "Risk Index" includes safety and health management, fire prevention, natural disaster mitigation, IT interruption recovery,

transportation reliability, supply chain management, pandemic response planning and a business continuity plan. This sustainability index is applied to TSMC's critical suppliers.

### 7.2.1 Environmental Protection

#### Greenhouse Gas (GHG) Emission Reduction

TSMC is an active participant in international environmental regulatory and protection programs. TSMC achieved its voluntary PFC emissions reduction goal as per its commitment to the World Semiconductor Council (WSC) and the Taiwan Environmental Protection Administration (EPA) in 2010.

In 2005, TSMC was Taiwan's first semiconductor company to make a complete inventory of its GHG emissions and to gain ISO 14064 certification for its processes and outputs. The purpose of the inventory was to serve as a baseline reference for TSMC's strategy to reduce GHG emissions, to meet future domestic regulatory requirements, and to prepare for carbon trading and corporate carbon asset management. All TSMC facilities conduct an annual GHG. The inventory result shows that the major direct GHG emissions are perfluorinated compounds (PFCs), which are used in the semiconductor manufacturing process. The primary indirect GHG emission is electricity consumption.

TSMC is taking measures to reduce its emission of GHGs. TSMC endorsed a memorandum of understanding between the Taiwan Semiconductor Industry Association, the Taiwan EPA, and the WSC, whereby TSMC committed to reducing PFC emissions to 10% below the average of 1997 and 1999 by 2010, a commitment that it was proud to achieve. This emissions target remains fixed as TSMC continues to grow and expand its manufacturing facilities.

TSMC is active in WSC's activities to set up a global voluntary PFC emissions reduction goal for the next 10 years, and has integrated past experience to develop best practices. The implementation of best practices for new semiconductor fabs has been adopted by WSC for the major element of the 2020 goal. In 2013, according to the "EPA Early Actions for Carbon Credit of Greenhouse Gases Reduction" regulation, TSMC applied for the recognition of greenhouse reduction that committed to the WSC and EPA, and has received carbon credits from 2005 to 2011. Those carbon credits can be used to offset greenhouse gas emissions of new manufacturing facilities regulated by Environmental Impact Assessment (EIA) Act. It will mitigate climate change risk to support the Company's sustainable operation.

Coal-fired power generators are the major source of electricity in Taiwan and emit large amounts of carbon dioxide (CO<sub>2</sub>). TSMC has not only adopted energy-conserving designs for both its manufacturing fabs and offices, but has also continuously improved the energy efficiency of facilities during operation. These efforts simultaneously reduce both carbon dioxide gas emissions and costs.

#### Air and Water Pollution Control

TSMC has installed effective air and water pollution control equipment in each wafer fab to meet regulatory emissions standards. In addition, TSMC maintains backup pollution control systems, including emergency power supplies, to lower the risk of pollutant emission in the event of equipment breakdown. TSMC centrally monitors the operations of air and water pollution control equipment around the clock and tracks system effectiveness to ensure the quality of emitted air and discharged water.

To make the most effective use of Taiwan's limited water resources, all TSMC fabs make an effort to increase water reclamation rates by adjusting the water usage of manufacturing equipment and improving wastewater reclamation systems. New fabs are able to reclaim more than 85% of process water, meeting or exceeding the standards of the each Science Park Administration and outperforming most semiconductor fabs around the world. TSMC also strives to reduce non-manufacturing-related water consumption, including water used in air conditioning systems, sanitary facilities, cleaning, landscaping and kitchens. TSMC uses an intranet website to collect and measure water recycling volumes company wide.

Since water resources are inherently local, TSMC shares its water saving experiences with other semiconductor companies through the Association of Science-Based Industrial Park to promote water conservation. At the same time, TSMC collaborates with the Science Park Administrations to assist small facilities in each Science Park with water resource management in order to achieve the Science Park's goals and ensure a long-term balance of supply and demand.

#### Waste Management and Recycling

TSMC has established a designated unit responsible for waste recycling and disposal. To meet the goal of sustainable resource utilization, TSMC's first priority is to reduce process waste before considering recycling or disposal. TSMC carefully selects waste disposal and recycling contractors and performs annual audits of certification documents, site operations and transportation routes to ensure the legal and proper disposal of waste. TSMC achieved a 92.41% waste recycling rate in 2013, surpassing its goal of 90%. The Company's landfill rate has remained at less than 1% since 2008.

## Environmental Accounting

The purpose of TSMC's environmental accounting system is to identify and calculate environmental costs for internal management. At the same time, we can also evaluate the cost reduction or economic benefits of environmental protection programs so as to promote economically efficient programs. With environmental costs expected to continue growing, environmental accounting can help us manage more effectively. TSMC's environmental accounting measures define the various environmental costs and set up independent environmental account codes, then provide these to all units for use in annual budgeting. This online system can output data for environmental cost statistics.

Our economic benefit evaluation calculates cost savings for reduction of energy, water or wastes and waste recycling benefits according to our environmental protection programs.

The environmental benefits disclosed in this report include real income from projects such as waste recycling and savings from major environmental projects. In 2013, 92 environmental projects were completed and the total benefits including waste recycling are more than NT\$1,451 million.

### 2013 Environmental Cost of TSMC Fabs in Taiwan

Unit: NT\$ thousands

Classification	Description	Investment	Expense
1. Direct Cost for Reducing Environmental Impact			
(1) Pollution Control	Fees for air pollution control, water pollution control, and others	4,303,659	3,139,691
(2) Resource Conservation	Costs for resource (e.g. water) conservation	1,904,749	106,175
(3) Waste Disposal and Recycling	Costs for waste treatment (including recycling, incineration and landfill)	-	426,887
2. Indirect Cost for Reducing Environmental Impact (Managerial Cost)			
	(1) Cost of training (2) Environmental management system and certification expenditures (3) Environmental measurement and monitoring fees (4) Environmental protection product costs (5) Environmental protection organization fees	306,030	190,105
3. Other Environment-related Costs			
	(1) Costs for decontamination and remediation (2) Environmental damage insurance and environmental taxes (3) Costs related to environmental settlement, compensations, penalties and lawsuits	-	-
Total		6,514,438	3,862,858

### 2013 Environmental Efficiency of TSMC Fabs in Taiwan

Unit: NT\$ thousands

Category	Description	Efficiency
1. Cost Saving of Environmental Protection Projects		
	Energy saving: completed 35 projects	665,300
	Water saving: completed 11 projects	95,900
	Waste reduction: completed 5 projects	10,100
	Material reduction: completed 41 projects	499,000
2. Real Income of Industrial Waste Recycling		
	Recycling of used chemicals, wafers, targets, batteries, lamps, packaging materials, paper cardboard, metals, plastics, and other wastes	181,000
Total		1,451,300

## Other Environmental Protection Programs

TSMC conducts "Product Life Cycle Assessments" (Product LCA), collecting and analyzing data from the entire semiconductor manufacturing chain from raw materials suppliers to finished products, including statistics for such items as energy, raw material consumption, and pollution. The Product LCA study has established "Eco-Profiles" for all TSMC fabs and helps the Company to meet international regulations, such as the European Union's "Energy-Using Product" directive. These "Eco-Profiles" can also be provided to customers who require such documentation.

TSMC also maintains "green procurement" procedures, requiring raw materials suppliers to declare that the materials they supply to TSMC do not contain any prohibited substances. This ensures that products manufactured by TSMC comply with customer requirements and the regulatory requirements of the European Union's RoHS Directive. TSMC also encourages employees to use "Green Mark" products in offices, such as recycled paper, desktop PCs, LCD monitors, and batteries. In 2013, TSMC received the Best Green Procurement Company Award from Taiwan EPA.

TSMC has adopted both the Taiwan "Green Building" and the U.S. Leadership in Energy and Environmental Design (LEED) standards for new fab and office building designs since 2006 to achieve better energy and resource efficiency than conventional designs. At the same time, TSMC continues to upgrade existing office buildings to comply with the LEED standard each year. From 2008 to 2013, eleven of TSMC's fabs and office buildings achieved LEED certifications (one Platinum, ten Gold class). Six of them also won Taiwan's EEWI Diamond class certification.

TSMC believes that manufacturing companies should convert their facilities into green factories to effectively improve the environment and lower construction costs. Therefore, TSMC freely shares its practical experience with industry, government, and academia. As of the end of 2013, more than 6,297 visitors from 159 different industry, government, academia and general community groups contacted TSMC to gain understanding on the Company's green factory practices. TSMC led industry to support the Taiwan government to establish "Green Factory Labeling System" from 2009, a system that included "Clean Production Evaluation System" and "Green Factory Evaluation System". TSMC received Taiwan's first "Green Factory Label" from the government and four labels in total for Fab 12 Phase 4, Fab 14 Phase 3, Fab 14 Phase 4, and Fab 12 Phase 5.

## Environmental Compliance Record

As of 2014, TSMC had not received any environmental penalties or fines during or related to 2013 and early 2014.

### 7.2.2 Green Products

TSMC collaborates with upstream material suppliers and downstream assembly and testing service providers to reduce environmental impact. We reduce the resources and energy consumed for each unit of production to provide more advanced, efficient and ecologically sound products. In addition to helping customers design low-power, high-performance products to reduce resource consumption over the product's life cycle, TSMC implements clean manufacturing practices that provide additional "green value" to our customers and our other stakeholders.

TSMC-manufactured ICs are used in a broad variety of applications covering various segments of the computer, communications, consumer, industrial and other electronics markets. Through our manufacturing technologies, our customers' designs are realized and incorporated into peoples' lives. These chips make significant contributions to the progress of modern society. TSMC works hard to achieve profitable growth while providing products that add environmental and social value. We have listed below several examples of how TSMC-manufactured products significantly contribute to society and the environment.

### Environmental Contribution by TSMC Foundry Services

#### 1. Providing New Process Technology to Achieve Lower Power Consumption

- The continuous development of TSMC's advanced semiconductor process technologies follows Moore's law, which holds that process technology moves forward one generation every 24 months. In each new generation circuitry line widths shrink, making circuits smaller and lowering the energy and raw materials consumed per unit area. At the same time, the smaller IC die size consumes less power. TSMC's 28nm technology, for example, can accommodate approximately four times the number of electronic components as the 55nm technology. ICs made with 28nm technology in active or standby mode consume roughly one third the power of 55nm products, according to our internal test results. The Company continuously provides process simplification and new design methodology based upon its manufacturing excellence to help customers reduce design and process waste.

- TSMC continues to lead the foundry segment in technology, having achieved volume production at the 28nm node. TSMC's 28nm processes include 28nm High Performance (28HP), 28nm High Performance Low Power (28HPL), 28nm Low Power (28LP), and 28nm High Performance Mobile Computing (28HPM). Customer 28nm production tape-outs are more than double the number of 40nm customer tape-outs. The TSMC 28nm process also has surpassed the previous generation's production ramp and product yield at the same point in time due, in part, to closer and earlier collaboration with customers. TSMC will continue to encourage customer designs that result in the most advanced, energy-saving, and environmentally friendly products.

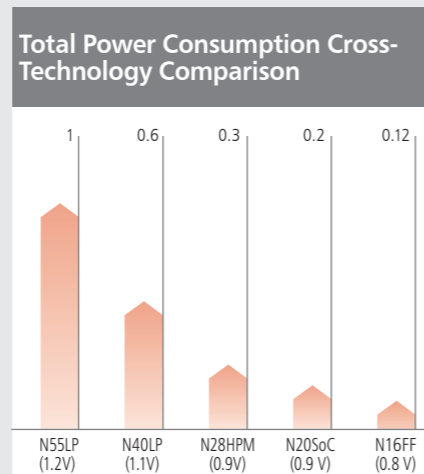
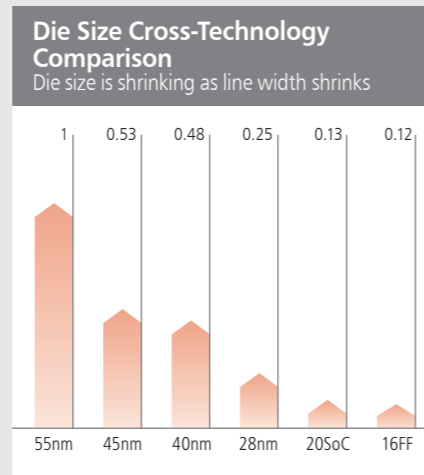
- TSMC quickly ramped its 28nm technology in 2013. The 28nm contribution to revenue grew significantly from 12% in 2012 to 30% in 2013, representing approximately NT\$180 billion, or US\$6 billion. This reflects the fact that TSMC's advanced manufacturing process technology helps the Company achieve both profitable growth and energy savings.

**28nm Contribution to Total Revenue**

Unit: %

2009	2010	2011	2012	2013
-	-	1	12	30

- TSMC continues to deliver performance-per-watt scaling in its 20nm SoC and 16nm FinFET process technologies. With energy-efficient transistors and interconnects, the 20nm SoC process can reduce total power consumption of the 28nm process by one third, and by migrating from planar to FinFET technology, the 16nm FinFET process can further reduce total power consumption to about 40% of 28nm technology. The 20nm SoC process was qualified in 2013 and produced first silicon success on multiple customer production tape-outs. The 16nm FinFET process entered risk production in 2013.



**2. Manufacturing Power Management ICs with the Highest Efficiency**

- TSMC's leading manufacturing technology helps its customers design and manufacture green products. Power management ICs are the most notably green IC products. Power management ICs are the key components that regulate power consumption in all electronic devices. TSMC's analog power technology research and development team uses 6-inch and 8-inch wafer fabs to develop Bipolar-CMOS-DMOS and Ultra-High Voltage technology, producing industry-leading power management chips with more stable and efficient power supplies and lower energy consumption for broad-based applications in the consumer, communication, and computer markets.
- TSMC also provides power-efficient design platforms. Customers use these platforms to develop energy-saving products.
- Power management ICs generate material revenue to TSMC's industrial market segment. In 2013, TSMC's HV/Power technologies collectively shipped more than 1.3 million customer wafers. In total, the Power management ICs manufactured by TSMC for our customers accounted for more than one-third of global computer, communication and consumer (3C) systems.

**HV/Power Technologies Shipments**

Unit: 8-inch equivalent wafer

2009	2010	2011	2012	2013
>400K	>700K	>800K	>1,000K	>1,300K

**3. Green Manufacturing that Lowers Energy Consumption**

- TSMC continues to develop manufacturing technologies that provide more advanced and efficient manufacturing services. Improvements reduce per-unit energy consumption, resource consumption and pollutant generation. They also lower energy consumption and reduce pollution during product use. To see the total energy savings benefits realized through TSMC's green manufacturing, please refer to page 98, "Environmental Accounting".

**Social Contribution by TSMC Foundry Services**

**1. Providing Mobile and Wireless Chips that Enhance Mobility and Convenience**

- The rapid growth of smartphones and tablets in recent years reflects strong demand for mobile devices. Mobile devices offer remarkable convenience and TSMC contributes significant value to these devices. For example: (1) new process technology helps chips provide faster computing speeds in a smaller die area, leading to smaller form factors for these electronic devices. In addition, SoC technology integrates more functions into one chip, reducing the total number of chips in electronic devices, which also leads to a smaller system form factor; (2) new process technology helps chips consume less energy. People can therefore use mobile devices for a longer period of time, increasing their convenience; and (3) with more convenient wireless connectivity, such as 3G/4G and WLAN/Bluetooth, people communicate more efficiently with each other, can "work anytime and anywhere," significantly improving the mobility of modern society.
- Mobile-related products, such as Baseband, RF Transceiver, AP (Application Processors), WLAN (Wireless Local Area network), NFC (Near Field Communication), Bluetooth, GPS (Global Positioning System) and others, represent more than 36% of TSMC annual revenue, reaching more than NT\$213 billion or US\$7.2 billion in revenue in 2013. TSMC's growth in recent years was largely driven by the growing global demand for these mobile IC products.

**Contribution of Mobile-related Products to TSMC Total Revenue**

Unit: %

2009	2010	2011	2012	2013
25	27	31	33	36

**2. Enhancing Human Health and Safety with MEMS (Micro Electro Mechanical Systems)**

- TSMC-manufactured ICs are widely used in medical treatment and health care applications. Through the Company's advanced manufacturing technology, more and more IC products are providing major contributions to modern medicine. Customers' MEMS products are used in a number of advanced medical treatments. MEMS are also widely used in preventative health care, such as early warning systems that limit the number of injuries to the elderly resulting from falls, systems that detect physiology changes, car safety system and other applications that greatly enhance human health and safety.

### 7.2.3 Safety and Health

#### Safety and Health Management

TSMC's safety and health management is built on the framework of the OHSAS 18001 system, and adheres to the management principle of "Plan, Do, Check, Act" to prevent accidents and protect employee safety and health as well as Company assets. TSMC fabs in Taiwan have also received TOSHMS (Taiwan Occupational Safety and Health Management System) certification.

Besides accident prevention, TSMC has established emergency response procedures to protect the lives of employees and contractors if disasters should occur, as well as to minimize the negative impact on society and the environment. TSMC continually communicates with its suppliers to ensure that potential risk in the operation of production equipment is minimized, and rigorously follows safety control procedures when installing production equipment. The Company places stringent controls on high-risk operations and also evaluates the seismic tolerance of its facilities and equipment to reduce the risk of earthquake damage.

TSMC believes that employees' physical and mental health is not only fundamental to maintaining normal business operations but also part of a corporation's responsibility.

In 2013, TSMC collaborated with government and academia to hold the third Labor Health Forum. The theme of the 2013 forum is "industry, government, and university collaboration to improve occupational health," a response to the new Occupational Safety and Health Act signed in July, 2013. This legislation introduces new requirements in corporate occupational health risk management and also strengthens corporate responsibility to protect the physical and mental health of employees.

The Labor Health Forum was founded in 2011 by TSMC and the NTU College of Public Health for the business community to discuss occupational health issues, and has become a major annual event in this field for enterprises in Taiwan. In 2013, China Steel Corp., CPC Corp., LCY Chemical Corp., Uni-President Enterprises, and Chimei Innolux Corp. were invited to join as co-sponsors of the event. We specially added the form of a "global citizen café," a brainstorming session between business, universities, and government to discuss how to collaborate and adopt the most up-to-date knowledge and methods in occupational health, and fulfill the spirit of the Occupational Health and Safety Act. Through enthusiastic discussion, the six participating industries each collected points of consensus to serve as guidelines for future action in occupational health.

TSMC also developed occupational management tools tailored for TSMC by industry-academic cooperation, including the promotion of personnel stress management and the measurement of radio frequency (RF) exposure to wireless network antennas and mobile phone in the offices. TSMC offers annual employee health examinations and consultation services as well as on-site clinics and a dental clinic for a better access to medical assistance.

In order to avoid infectious disease epidemics, TSMC has established company-level prevention committees and procedures for emergency response to infectious diseases outbreak.

#### Working Environment and Employee Safety Protection

TSMC's ESH policy is focused on establishing a safe working environment, preventing occupational injury and illness, keeping employees healthy, enhancing every employee's awareness and sense of accountability to ESH, and building an ESH culture. TSMC safety and health management operations apply to:

##### • Hardware Equipment Safety and Health Management

In addition to meeting regulatory requirements and internal standards, as well as mitigating ESH-related risks when building or rebuilding facilities, TSMC also maintains procedures governing new equipment and raw materials, safety approvals for bringing new tools online, updating safety rules, seismic protection measures, and other safety measures.

##### • Environmental, Safety and Health Evaluation of New Tools and New Chemical Substances

TSMC, as a technology leader in the worldwide semiconductor industry, operates many diversified process tools and new chemicals in the R&D stage. Before using those new tools and new chemicals, they are reviewed carefully by the "New tools and new Chemical Review Committee". The purpose is to ensure that new tools are compliant with semiconductor industry's safety standards (such as SEMI S2) and that new chemicals' environmental, safety and health concerns can be well controlled, including engineering controls, application of personal protection equipment, and operational safety training during storage, transportation, usage, and disposal.

##### • General Safety Management, Training and Audit

All TSMC manufacturing facilities hold environmental, safety and health committee meetings on a monthly basis. TSMC takes preventive measures such as controls on high-risk work, contractor management, chemical safety management, personal protective equipment requirements, and safety audit management. In addition, TSMC also maintains detailed disaster response procedures and

performs regular drills designed to minimize harm to employees and property, as well as the impact on society and the environment in the event of a disaster.

##### • Working Environment Measurement

TSMC conducts workplace hazard assessment and interventions to provide a comfortable and safe workplace to Company employees. TSMC also requires employees to use personal protective equipment (PPE) to prevent hazard exposures.

As office work is primarily performed on computers, TSMC launched an office ergonomics program to adjust the height of office chairs and desks to meet the needs of taller or shorter employees. Whenever new employees of significantly above or below-average height enter the Company, the assessment and intervention will be initiated proactively by site ESH professionals.

TSMC requires that all new tools meet SEMI-S8 requirements and that appropriate supplementary control measures be taken to reduce ergonomic risk. Moreover, TSMC endeavors to automate 300mm front-opening unified pod (FOUP) transportation to prevent accumulative damage caused by long-term manual handling of 300mm FOUPs. TSMC 300mm fabs have achieved 99.9% in automatic transportation control.

TSMC performs semi-annual workplace environment assessments of physical and chemical hazards, including CO<sub>2</sub> concentration, illumination, noise, and hazardous chemical substances regulated by domestic laws. When abnormal measurements or events happen, site ESH professionals will conduct onsite observation and interventions to ensure exposure risk acceptable. TSMC also conducts Indoor Air Quality Program to set up indoor air quality standard, measurement, and control measures to continuously provide a safer and more comfortable workplace.

##### • Emerging Infectious Disease Response

TSMC has a dedicated corporate ESH organization which monitors emerging infectious diseases around the world, assesses any potential impact on the workplace and provides a strategic response plan. In previous outbreaks (such as SARS in 2003 and the H1N1 influenza outbreak in 2009), TSMC convened the Corporate Influenza Response Committee to develop the Company's strategies. These strategies include educating employees in prevention and response, publishing guidelines for managers, establishing guidelines for employee sick leave due to flu, and installing alcohol-based hand sanitizers at appropriate locations. The Committee also monitors the status of

employee leave due to illness and, at the same time, develops a continuous plan to address manpower shortages as well as minimize business impact.

##### • Emergency Response

The planning and execution of an effective emergency response requires big-picture thinking, continuous improvement and practice drills. TSMC's emergency response plans include procedures for rapid response to accidents and disaster recovery as well as establishing response procedures for potential disasters.

All TSMC fabs conduct major annual emergency response exercises and evacuation drills. TSMC's Tainan-site fabs initiated quarterly spot drills, which have been recognized as good practices. TSMC's on-site service contractors also participate in emergency response planning and exercises to ensure cooperation in handling accidents and to effectively minimize any damage caused by disasters.

In addition to the regular emergency response drills held by engineering and facilities departments each quarter, the Company's laboratory, canteen, dormitory, and shuttle bus personnel also hold emergency response drills to prepare for events such as earthquakes, chemical leakage, ammonia release, fires and automobile accidents.

##### • Employee Health Enhancement

Workplace stress and employee health have recently become new topics of concern for the government, society, employers, and employees as areas that require further attention and effort. The TSMC Employee Assistance Program (EAP) provides free individual counseling sessions, group sharing, workshops, and mental assessment, as well as lectures on personal and family issues to take care of employees' well-being.

Health promotion activities for employees include fitness programs, women's health care programs, mother's rooms, body weight control programs, sleep problem management, massage and chiropractic services, hepatitis and flu vaccinations, and health lectures. TSMC believes employees who are physically and mentally fit can enjoy a better quality of life and be more productive.

#### Supplier and Contractor Management

##### • Supplier Management

As a means of enhancing its supply chain management, TSMC is committed to communicating with and encouraging its contractors and suppliers to improve their quality, cost effectiveness, delivery performance and sustainability on environmental protection, safety

and health. By means of communication between senior managers, site audits and experience sharing, TSMC collaborates with major suppliers and contractors to enhance partnership and ensure continual improvement for better performance and increased joint contributions to society. Contractors performing high-risk activities must lay out clearly defined safety precautions and preventative measures. In addition, contractors working on high-risk engineering projects must establish OHSAS 18001 systems and the workers must successfully complete work skill training.

#### ● Supply Chain Sustainability

TSMC has been working together with our suppliers in several fields of sustainable development, such as greening our supply chain, carbon management for climate change, mitigation of fire risk, ESH management and business continuity plans for natural disasters. In 2013, TSMC announced our sustainability standard for suppliers through benchmarking with EICC Code of Conduct standard as operating principles and encouraged our suppliers to create sustainable value in these fields. To enhance the supply chain sustainability and partnership with our suppliers, TSMC also shared its experience and practice to assist suppliers in the field of anti-quake engineering, hazardous chemical management etc.

TSMC is subject to the new U.S. SEC disclosure rule on conflict minerals released under Rule 13p-1 of the U.S. Securities Exchange Act of 1934. As a recognized global leader in the hi-tech supply-chain, we at TSMC acknowledge our corporate social responsibility to procure our minerals from conflict-free areas.

TSMC is one of the strongest supporters of the Electronic Industry Citizenship Coalition (EICC) and the Global e-Sustainability Initiative (GeSI), which will help our suppliers source conflict-free materials. TSMC in general supports the humanitarian and ethical principles contained in the OECD's Model Supply Chain Policy for a Responsible Global Supply Chain of Minerals from Conflict-Affected and High Risk Areas issued in 2011. The Company encourages suppliers to source from facilities or smelters that have received a "conflict-free" designation by a recognized industry group, such as the EICC, and also requires suppliers to disclose information on smelters and mines in 2013. TSMC adopts and follows global semiconductor industry conflict minerals procurement practices such as sourcing from the same suppliers used by other semiconductor companies. To date, TSMC is conflict-free for gold, tantalum, tin and tungsten because according to the results of our reasonable inquiry into the country of origin of these minerals as defined under relevant law, TSMC has not used any of these conflict minerals from the Democratic Republic of Congo and/or its surrounding countries. It is TSMC's goal to strive use tantalum, tin, tungsten and gold in our products that are DRC conflict-free. TSMC will continue to renew its supplier survey annually

and require suppliers to improve and expand their disclosure to fulfill regulatory and customer requirements.

### 7.3 TSMC Education and Culture Foundation

The TSMC Education and Culture Foundation, established in 1998 to coordinate the Company's sponsorship as part of its efforts in corporate social responsibility, devotes its resources towards education, promotion of art and culture events, community building, and the employee volunteer program.

In 2013, the TSMC Foundation contributed over NT\$73.5 million to its long-term projects of promoting education, culture, and arts. In 2013, the Foundation infused more resources in science education. In addition to supporting a long-term science educational project, The Foundation for the first time in 2013 sponsored the Center for the Advancement of Science Education at National Taiwan University (CASE) to hold "TSMC Cup – Competition of Scientific Story Telling," which target young people aged 15 to 18 nationwide in order to inspire their interest for science, and to train short talks by incorporating the four major capacities of listening, speaking, reading and writing into this innovative contest.

In continuing to promote arts and Chinese Culture, the TSMC Foundation sponsored the National Symphony Orchestra to produce the stage version of Wagner's Die Walküre for the very first time in Taiwan. Following "The Analects of Confucius" and "The Writings of Chung-tzu," Professor Hsin Yih-yun, invited by the Foundation, launched the broadcasting program "Mo-tzu in Hsin's View" to lead the audience to understand Mo-tzu's philosophy. TSMC's six-year consecutive support of the broadcasting program shows the commitment and endeavors toward the Classical Chinese Philosophy.

Aside from financial sponsorships of culture and educational projects, the TSMC Foundation supports TSMC Volunteer Society, organizing employees to devote themselves to the caring of the underprivileged of the communities.

#### Commitment to Education – Supporting Educational Programs to Target the Needs at Different Age Levels

Talents are essential to the development of the society. As a leader of Taiwan's knowledge-based industry, TSMC regards cultivating talented people for society as a core responsibility. Thus the TSMC Foundation tailors various programs to target a whole range of education needs at different age levels.

At the primary-school level, the TSMC Foundation is concerned about the unbalanced development between urban and rural education. To bridge the urban-rural gap, the "TSMC Aesthetic Tour" and "TSMC Science Tour" takes children from remote townships to visit National

Palace Museum, Taipei Fine Arts Museum, National Taiwan Science Education Center, National Museum of Natural Science and National Science and Technology Museum. Over the last 11 years, more than 87,000 students from remote townships have participated in the tour to cultivate their appreciation of art and experience the charisma of science. The Foundation also continued to support *CommonWealth Magazine's* highly successful "Hope Reading Project". Through the project, the Foundation offers 200 primary schools of remote townships 20,000 books every year. By providing 190,000 good books with children in remote and underprivileged areas of Taiwan since 2004, the Foundation hopes to promote literacy and inspire interest in reading among these children so that they will have the opportunity to open the window of hope. In addition to sponsoring these activities, the TSMC Foundation supports the Taipei Fine Arts Museum's expansion of the "TSMC Children's Art Education Center," due for completion and inauguration in 2014. The center will be an important cradle for cultivating children's art appreciation.

At the high school level, to enhance teenagers' full development to knowledge of science and humanity, the Foundation supported and organized scientific camps, contests, and humanity activities. In 2013, the TSMC Foundation for the first time sponsored the Center for the Advancement of Science Education at National Taiwan University to hold "TSMC Cup – Competition of Scientific Story Telling". Racing through the different stages of the Competition, students will cultivate the capacity of logical thinking, argumentation and presentation skills. Together with the dynamics of teamwork, the Competition provides a complete scientific experience and training, and gained overwhelmingly responses from teachers and students. In 2013, 188 teams across the nation participated. The Foundation also continued to support three science talent camps – Wu Chien-Shiung Science Camp, Wu Ta-Yu Science Camp and Madame Curie Senior High School Chemistry Camps – to provide talented students with the opportunity to hold discussions with world-class scientists with the goal of inspiring students and helping them realize their potential. "Senior High School Academic Train," organized by National Tsing hua University, invited professors from the University to introduce senior high school students to the latest knowledge of technology and common knowledge for daily life and science. The courses will be held in 12 senior high schools located in northern, central, southern, eastern and Kinmen areas. The TSMC Foundation also collaborates with the Wu Chien-Shiung Foundation to work on "Lifting the Ability of High School Physics Experiments," providing professional development for 282 science teachers.

In the humanities, "the TSMC Youth Literature Award" has for 10 years encouraged talented young writers to create new works. AS

being the most important stage for the youth of Taiwan to inspire their interest and talents to literacy, in addition to the writing competition and lectures, the activity also created the special editorial pages of United Daily for the former winners, who were invited to create new works, showing their talents and progress. The sixth "TSMC Youth Calligraphy Contest" held three workshops at three high schools to inspire students to appreciate the beauty and cultural richness of calligraphy. The Foundation arranged the former winners and the calligraphy devotees to visit Taiwan Calligraphy master Professor Chung-Kao Du. Professor Du, who shared his 50-year experience of calligraphic writings with the participants and encouraged them to keep on pursuing the art of calligraphy.

At the college and society level, the TSMC Foundation held the 2nd TSMC Literature Award to encourage under-40-year-old writers to create Chinese novels between 60,000 words and 80,000 words. Winners not only received big cash prizes but also a contract with the book publisher, INK. This competition offers young writers an excellent forum to showcase their talent and opportunity to be published, underscoring TSMC's commitment to supporting literature. The TSMC Foundation continued "TSMC Scholarship" to support and encourage underprivileged students attending National Tsing Hua University and National Central University. Also, the Foundation continued to endow chair professorships to enhance academic research of Taiwan universities.

#### Promotion of Arts and Culture – Sponsoring Taiwan Arts Groups and Promoting the Chinese Classics

The TSMC Education and Culture Foundation has, for years, devoted its efforts to promoting Taiwan Art Groups. In 2013, the TSMC Foundation supported National Symphony Orchestra to produce the stage version of Wagner's Die Walküre for the very first time in Taiwan. Under the leadership of Maestro Shao-Chia Lü, Die Walküre gathered together the prestigious director Hans-Peter Lehmann, who for years has served as assistant director at the Bayreuth Festival Theatre, along with Taiwan art groups and top vocal singers from Taiwan and abroad, all of whom showed marvelous creativity and performance levels. The production indeed set a milestone of Taiwan Opera Performing Art history.

In addition to support Taiwan Art Groups, the TSMC Foundation commits to promote Chinese Traditional Classics in the long term. Through presenting lectures, producing broadcasting programs and publishing audio books, the Foundation relives the Classics and enables audiences to easily understand traditional Chinese philosophy and wisdom. Among these projects, since 2008 the Foundation and IC broadcasting company collaborated to invite Professor Hsin

and health. By means of communication between senior managers, site audits and experience sharing, TSMC collaborates with major suppliers and contractors to enhance partnership and ensure continual improvement for better performance and increased joint contributions to society. Contractors performing high-risk activities must lay out clearly defined safety precautions and preventative measures. In addition, contractors working on high-risk engineering projects must establish OHSAS 18001 systems and the workers must successfully complete work skill training.

#### ● Supply Chain Sustainability

TSMC has been working together with our suppliers in several fields of sustainable development, such as greening our supply chain, carbon management for climate change, mitigation of fire risk, ESH management and business continuity plans for natural disasters. In 2013, TSMC announced our sustainability standard for suppliers through benchmarking with EICC Code of Conduct standard as operating principles and encouraged our suppliers to create sustainable value in these fields. To enhance the supply chain sustainability and partnership with our suppliers, TSMC also shared its experience and practice to assist suppliers in the field of anti-quake engineering, hazardous chemical management etc.

TSMC is subject to the new U.S. SEC disclosure rule on conflict minerals released under Rule 13p-1 of the U.S. Securities Exchange Act of 1934. As a recognized global leader in the hi-tech supply-chain, we at TSMC acknowledge our corporate social responsibility to procure our minerals from conflict-free areas.

TSMC is one of the strongest supporters of the Electronic Industry Citizenship Coalition (EICC) and the Global e-Sustainability Initiative (GeSI), which will help our suppliers source conflict-free materials. TSMC in general supports the humanitarian and ethical principles contained in the OECD's Model Supply Chain Policy for a Responsible Global Supply Chain of Minerals from Conflict-Affected and High Risk Areas issued in 2011. The Company encourages suppliers to source from facilities or smelters that have received a "conflict-free" designation by a recognized industry group, such as the EICC, and also requires suppliers to disclose information on smelters and mines in 2013. TSMC adopts and follows global semiconductor industry conflict minerals procurement practices such as sourcing from the same suppliers used by other semiconductor companies. To date, TSMC is conflict-free for gold, tantalum, tin and tungsten because according to the results of our reasonable inquiry into the country of origin of these minerals as defined under relevant law, TSMC has not used any of these conflict minerals from the Democratic Republic of Congo and/or its surrounding countries. It is TSMC's goal to strive use tantalum, tin, tungsten and gold in our products that are DRC conflict-free. TSMC will continue to renew its supplier survey annually

and require suppliers to improve and expand their disclosure to fulfill regulatory and customer requirements.

### 7.3 TSMC Education and Culture Foundation

The TSMC Education and Culture Foundation, established in 1998 to coordinate the Company's sponsorship as part of its efforts in corporate social responsibility, devotes its resources towards education, promotion of art and culture events, community building, and the employee volunteer program.

In 2013, the TSMC Foundation contributed over NT\$73.5 million to its long-term projects of promoting education, culture, and arts. In 2013, the Foundation infused more resources in science education. In addition to supporting a long-term science educational project, The Foundation for the first time in 2013 sponsored the Center for the Advancement of Science Education at National Taiwan University (CASE) to hold "TSMC Cup – Competition of Scientific Story Telling," which target young people aged 15 to 18 nationwide in order to inspire their interest for science, and to train short talks by incorporating the four major capacities of listening, speaking, reading and writing into this innovative contest.

In continuing to promote arts and Chinese Culture, the TSMC Foundation sponsored the National Symphony Orchestra to produce the stage version of Wagner's Die Walküre for the very first time in Taiwan. Following "The Analects of Confucius" and "The Writings of Chung-tzu," Professor Hsin Yih-yun, invited by the Foundation, launched the broadcasting program "Mo-tzu in Hsin's View" to lead the audience to understand Mo-tzu's philosophy. TSMC's six-year consecutive support of the broadcasting program shows the commitment and endeavors toward the Classical Chinese Philosophy.

Aside from financial sponsorships of culture and educational projects, the TSMC Foundation supports TSMC Volunteer Society, organizing employees to devote themselves to the caring of the underprivileged of the communities.

#### Commitment to Education – Supporting Educational Programs to Target the Needs at Different Age Levels

Talents are essential to the development of the society. As a leader of Taiwan's knowledge-based industry, TSMC regards cultivating talented people for society as a core responsibility. Thus the TSMC Foundation tailors various programs to target a whole range of education needs at different age levels.

At the primary-school level, the TSMC Foundation is concerned about the unbalanced development between urban and rural education. To bridge the urban-rural gap, the "TSMC Aesthetic Tour" and "TSMC Science Tour" takes children from remote townships to visit National

Palace Museum, Taipei Fine Arts Museum, National Taiwan Science Education Center, National Museum of Natural Science and National Science and Technology Museum. Over the last 11 years, more than 87,000 students from remote townships have participated in the tour to cultivate their appreciation of art and experience the charisma of science. The Foundation also continued to support *CommonWealth Magazine's* highly successful "Hope Reading Project". Through the project, the Foundation offers 200 primary schools of remote townships 20,000 books every year. By providing 190,000 good books with children in remote and underprivileged areas of Taiwan since 2004, the Foundation hopes to promote literacy and inspire interest in reading among these children so that they will have the opportunity to open the window of hope. In addition to sponsoring these activities, the TSMC Foundation supports the Taipei Fine Arts Museum's expansion of the "TSMC Children's Art Education Center," due for completion and inauguration in 2014. The center will be an important cradle for cultivating children's art appreciation.

At the high school level, to enhance teenagers' full development to knowledge of science and humanity, the Foundation supported and organized scientific camps, contests, and humanity activities. In 2013, the TSMC Foundation for the first time sponsored the Center for the Advancement of Science Education at National Taiwan University to hold "TSMC Cup – Competition of Scientific Story Telling". Racing through the different stages of the Competition, students will cultivate the capacity of logical thinking, argumentation and presentation skills. Together with the dynamics of teamwork, the Competition provides a complete scientific experience and training, and gained overwhelmingly responses from teachers and students. In 2013, 188 teams across the nation participated. The Foundation also continued to support three science talent camps – Wu Chien-Shiung Science Camp, Wu Ta-Yu Science Camp and Madame Curie Senior High School Chemistry Camps – to provide talented students with the opportunity to hold discussions with world-class scientists with the goal of inspiring students and helping them realize their potential. "Senior High School Academic Train," organized by National Tsing hua University, invited professors from the University to introduce senior high school students to the latest knowledge of technology and common knowledge for daily life and science. The courses will be held in 12 senior high schools located in northern, central, southern, eastern and Kinmen areas. The TSMC Foundation also collaborates with the Wu Chien-Shiung Foundation to work on "Lifting the Ability of High School Physics Experiments," providing professional development for 282 science teachers.

In the humanities, "the TSMC Youth Literature Award" has for 10 years encouraged talented young writers to create new works. AS

being the most important stage for the youth of Taiwan to inspire their interest and talents to literacy, in addition to the writing competition and lectures, the activity also created the special editorial pages of United Daily for the former winners, who were invited to create new works, showing their talents and progress. The sixth "TSMC Youth Calligraphy Contest" held three workshops at three high schools to inspire students to appreciate the beauty and cultural richness of calligraphy. The Foundation arranged the former winners and the calligraphy devotees to visit Taiwan Calligraphy master Professor Chung-Kao Du. Professor Du, who shared his 50-year experience of calligraphic writings with the participants and encouraged them to keep on pursuing the art of calligraphy.

At the college and society level, the TSMC Foundation held the 2nd TSMC Literature Award to encourage under-40-year-old writers to create Chinese novels between 60,000 words and 80,000 words. Winners not only received big cash prizes but also a contract with the book publisher, INK. This competition offers young writers an excellent forum to showcase their talent and opportunity to be published, underscoring TSMC's commitment to supporting literature. The TSMC Foundation continued "TSMC Scholarship" to support and encourage underprivileged students attending National Tsing Hua University and National Central University. Also, the Foundation continued to endow chair professorships to enhance academic research of Taiwan universities.

#### Promotion of Arts and Culture – Sponsoring Taiwan Arts Groups and Promoting the Chinese Classics

The TSMC Education and Culture Foundation has, for years, devoted its efforts to promoting Taiwan Art Groups. In 2013, the TSMC Foundation supported National Symphony Orchestra to produce the stage version of Wagner's Die Walküre for the very first time in Taiwan. Under the leadership of Maestro Shao-Chia Lü, Die Walküre gathered together the prestigious director Hans-Peter Lehmann, who for years has served as assistant director at the Bayreuth Festival Theatre, along with Taiwan art groups and top vocal singers from Taiwan and abroad, all of whom showed marvelous creativity and performance levels. The production indeed set a milestone of Taiwan Opera Performing Art history.

In addition to support Taiwan Art Groups, the TSMC Foundation commits to promote Chinese Traditional Classics in the long term. Through presenting lectures, producing broadcasting programs and publishing audio books, the Foundation relives the Classics and enables audiences to easily understand traditional Chinese philosophy and wisdom. Among these projects, since 2008 the Foundation and IC broadcasting company collaborated to invite Professor Hsin



Yih-yun to produce the Chinese Classics broadcasting program, which are extremely popular and gained huge attention from Chinese audiences all over the world. Following *The Analects by Confucius* and *The Writings of Chuang-tzu*, in 2013, Professor Hsin introduced *Mo-tzu*, whose thought was as important as Confucius' at Chinese Spring and Autumn Period. Through Professor Hsin Yih-yun's rich knowledge and vivid examples, Professor Hsin delivered Mo-tzu's philosophy of promoting diligent and thrifty and comprehensive love to the public.

Noting the importance of preserving historic sites, the Foundation continued to sponsor the Taipei Story House's Literature Salon. Cultural activities such as regular author readings on the site gave the old building a new life and attracted the general public to this cultural heritage site. The Foundation also donated NT\$10,000,000 to the revitalization of Dr. Sun Yun-suan's residence, in memory of Dr. Sun Yun-suan, who was former premier and known for his contribution to the economic development of Taiwan.

#### **Community Building by Arts – Organizing Hsinchu Arts Festival to Cultivate the Public's Art Appreciation**

The foundation has long played the role of "fine art planter" and hopes to spread the seeds of fine art to the community through continuous art activities. At TSMC's site communities, Hsinchu, Taichung and Tainan, the Foundation annually organizes "Hsinchu Arts Festival" to present a broad spectrum of performances for the inhabitants' interests in art. Presented annually for the past 11 years, "Hsinchu Arts Festival" has become a main art event gaining a huge nationwide attention. International artists presented by the Festival include Cho-liang Lin, Midori, Ann-Sophie Mutter, Shlomo Mintz, Yun-di Li, Kun Woo Paik, Garrick Ohlsson, Jean-Yves Thibaudet and Sir James Galway. The Festival also gathered the Chinese theatre masters, including Pai Hsien-yung, Wu Hsing-kuo, Wei Hai-ming, and Li Bao-chun, to present phenomenal performances at the communities.

During 2013, the Foundation again invited the most prestigious artists to join the Festival, such as the winner of 2010 International Chopin Piano Competition, the Russian pianist Yulianna A. Avdeeva, who fascinated the Hsinchu classical music lovers with her great technique and depth of music interpretation. The classical new star, British violinist Charlie Siem, played Sarasate's Zigeunerweisen and Hubay's Carman Fantasy etc. The wonderful concert fascinated the students of National Cheng Kung University at Tainan. For an audience of more than 6,000, the Festival arranged an interactive concert, the Piano Battle, at Taichung Outdoor Arena. The Piano Battle, organized and performed by Paul Cibiss and Andreas Kern,

sees the duo go head-to-head on stage, charming and enchanting the audience with a variety of classical pieces. The foundation, during the three-month Art Festival, arranged in total over 40 activities, from concerts, traditional operas and lectures, to family-oriented activities, attracting more than 25,000 people from local communities.

#### **7.4 TSMC Volunteer Program**

Corporate social responsibility is an integral part of TSMC's culture since its founding. TSMC Foundation launched the first employee volunteer program, Volunteer Docent Program, in 2003 as a channel through which the Company's most valuable asset, high-tech professional employees, give to the society.

TSMC Volunteer Program is dedicated to promoting education and culture, providing aid for the underprivileged, advocating energy saving, and caring for the community. Now, employees and their family members can take part in a variety of programs as follows:

- TSMC Volunteer Docent Program
- TSMC Book Reading Volunteer Program
- TSMC Energy-saving Volunteer Program
- TSMC Community Volunteer Program
- TSMC Ecology Volunteer Program
- TSMC Fab/Division Volunteer Program (2013 new initiative)

##### **TSMC Volunteer Docent Program**

An important way through which a corporation can serve and return to the community in which it operates is to share its expertise. The spread of knowledge furthers people's understanding of their environment and may inspire the future generations and bring forth change in society.

To promote science education and to enhance people's understanding of the IC industry, TSMC made a donation to the National Museum of Natural Science in Taichung in 1997 to set up an exhibition hall – The World of the Integrated Circuits. In 2003 and 2011, TSMC sponsored the renovation of the hall, adding interactive displays that explain semiconductor principles, the development of integrated circuits, and the important role IC industry plays in one's daily life. In 2004, TSMC Foundation started to recruit employees and their family members to serve as volunteer docents at the exhibition hall on weekends and holiday.

As many as 194 people volunteered in 2004. Youth volunteers were added in 2006, allowing employees to invite their children (high school and above) to join the Volunteer Docent Program. In 2007, the program was expanded to recruit new blood from

TSMC-affiliated companies, including Vanguard, VisEra, Xintec, and Global Unichip. The docents' enthusiasm and professionalism were highly praised by visitors; the group has continuously been recognized as the "Outstanding Volunteer Team" by the National Museum of Science.

When "The World of Semiconductor" exhibition opened in 2011, TSMC recruited around 500 volunteers as tour guides for visitors on weekends and holidays. In 2013, the number grew to 935 volunteers, translating to a dedication of 10,752 service hours. As of December 2013, the cumulative service hour totaled to more than 58,152 hours.

##### **TSMC Book Reading Volunteer Program**

TSMC believes the future hope and competitiveness of Taiwan lie in children of the next generation, and education is the key to the development of these children. Hoping to help reduce the disparity of educational resources between rural and urban schools, TSMC Foundation has been sponsoring the "Hope Reading Program" organized by *CommonWealth Magazine* since 2004. Besides donating 20,000 books annually to 200 schools in remote and rural areas, the Foundation recruited employees and their family members to form volunteer teams and read to underprivileged children of remote areas in hope of sparking their interest in reading.

In 2004, 49 volunteers joined the Program and started serving two elementary schools in the remote townships in Hsinchu. Now, more than 100 people travel to the remote schools to read stories to the children on a regular basis. With increased numbers of participants, the program was extended to Tainan in 2006. Currently, volunteers serve in five schools, encouraging children to read and make use of the books donated through the Hope Reading Program.

The selfless service of Book Reading Volunteer Program participants is greatly valued by the schools and the children. This program has become a great model frequently reported by the mass media, which helps to spread the spirit of encouraging reading through reading aloud.

In 2012, TSMC expanded its service scope to eight schools from five. Today, 465 volunteers read books with children in Hsinchu, Taichung and Tainan. They have served for nine consecutive years and will continue to help pave the road leading to a brighter future for the underprivileged children. In 2013, volunteers dedicated 6,678 hours to read books for children. As of December 2013, the cumulative service hour is more than 30,478 hours.

##### **TSMC Energy Saving Volunteer Program**

With global warming and the depletion of limited natural resources and fuel, saving energy has become a critical issue for both individuals and corporations around the world. In 2008, TSMC recruited employees with expertise in energy conservation to start the Energy Saving Volunteer Program, and since, the Company has been providing schools in the Hsinchu and Tainan areas with professional consulting service. The team helps to come up with plans for schools to improve power efficiency and reduce carbon emissions.

Beginning with 25 TSMC employees, the Energy Saving Volunteer Program initially served only neighborhood schools. Two high schools in Hsinchu were chosen, and a team was sent to each school to assist in lowering water, electricity and telecommunication bills, as well as improving environmental safety and air-conditioning. After assessing the facilities, collecting data, and evaluating power efficiency, the teams proposed energy-saving plans and ways to reduce carbon emissions to the schools.

The Energy Saving Volunteers not only endeavor to save energy for the Company and Taiwan but also wish to do what they can to preserve the earth. The program expanded its service to Taichung in 2011 to fulfill its promise: "Where TSMC is, its volunteers will be". In 2013, these volunteers input 1,000 hours in Hsinchu, Taichung, Tainan and Penghu areas.

##### **TSMC Community Volunteer Program**

When the TSMC Community Volunteer Program started recruiting employees, its central focus was to continually deploy their expertise to help those who need them the most.

When Typhoon Morakot struck Southern Taiwan in 2009, TSMC employees, deeply saddened by the suffering it caused, immediately established Typhoon Morakot Project Team and provided assistance and relief measures to the typhoon victims. The experience prompted TSMC employees to ponder what else could be done to help the community and, consequently, Typhoon Morakot Project Team became the Community Volunteer Program in 2010, aiming to reach out to the ones in need.

Both the elderly and children are the joint focus of TSMC Community Volunteers partly because Taiwan is an aging society with more than two million people over the age of 65, among whom one fifth need nursing care. Moreover, with the rapid changes in society, it is critical for children – the future of the country – to build their characters at an early age. It is especially important for children of dysfunctional families to have productive interactions and experience the warmth, care and company of others.

Yih-yun to produce the Chinese Classics broadcasting program, which are extremely popular and gained huge attention from Chinese audiences all over the world. Following *The Analects by Confucius* and *The Writings of Chuang-tzu*, in 2013, Professor Hsin introduced *Mo-tzu*, whose thought was as important as Confucius' at Chinese Spring and Autumn Period. Through Professor Hsin Yih-yun's rich knowledge and vivid examples, Professor Hsin delivered Mo-tzu's philosophy of promoting diligent and thrifty and comprehensive love to the public.

Noting the importance of preserving historic sites, the Foundation continued to sponsor the Taipei Story House's Literature Salon. Cultural activities such as regular author readings on the site gave the old building a new life and attracted the general public to this cultural heritage site. The Foundation also donated NT\$10,000,000 to the revitalization of Dr. Sun Yun-suan's residence, in memory of Dr. Sun Yun-suan, who was former premier and known for his contribution to the economic development of Taiwan.

#### **Community Building by Arts – Organizing Hsinchu Arts Festival to Cultivate the Public's Art Appreciation**

The foundation has long played the role of "fine art planter" and hopes to spread the seeds of fine art to the community through continuous art activities. At TSMC's site communities, Hsinchu, Taichung and Tainan, the Foundation annually organizes "Hsinchu Arts Festival" to present a broad spectrum of performances for the inhabitants' interests in art. Presented annually for the past 11 years, "Hsinchu Arts Festival" has become a main art event gaining a huge nationwide attention. International artists presented by the Festival include Cho-liang Lin, Midori, Ann-Sophie Mutter, Shlomo Mintz, Yun-di Li, Kun Woo Paik, Garrick Ohlsson, Jean-Yves Thibaudet and Sir James Galway. The Festival also gathered the Chinese theatre masters, including Pai Hsien-yung, Wu Hsing-kuo, Wei Hai-ming, and Li Bao-chun, to present phenomenal performances at the communities.

During 2013, the Foundation again invited the most prestigious artists to join the Festival, such as the winner of 2010 International Chopin Piano Competition, the Russian pianist Yulianna A. Avdeeva, who fascinated the Hsinchu classical music lovers with her great technique and depth of music interpretation. The classical new star, British violinist Charlie Siem, played Sarasate's Zigeunerweisen and Hubay's Carman Fantasy etc. The wonderful concert fascinated the students of National Cheng Kung University at Tainan. For an audience of more than 6,000, the Festival arranged an interactive concert, the Piano Battle, at Taichung Outdoor Arena. The Piano Battle, organized and performed by Paul Cibiss and Andreas Kern,

sees the duo go head-to-head on stage, charming and enchanting the audience with a variety of classical pieces. The foundation, during the three-month Art Festival, arranged in total over 40 activities, from concerts, traditional operas and lectures, to family-oriented activities, attracting more than 25,000 people from local communities.

#### **7.4 TSMC Volunteer Program**

Corporate social responsibility is an integral part of TSMC's culture since its founding. TSMC Foundation launched the first employee volunteer program, Volunteer Docent Program, in 2003 as a channel through which the Company's most valuable asset, high-tech professional employees, give to the society.

TSMC Volunteer Program is dedicated to promoting education and culture, providing aid for the underprivileged, advocating energy saving, and caring for the community. Now, employees and their family members can take part in a variety of programs as follows:

- TSMC Volunteer Docent Program
- TSMC Book Reading Volunteer Program
- TSMC Energy-saving Volunteer Program
- TSMC Community Volunteer Program
- TSMC Ecology Volunteer Program
- TSMC Fab/Division Volunteer Program (2013 new initiative)

##### **TSMC Volunteer Docent Program**

An important way through which a corporation can serve and return to the community in which it operates is to share its expertise. The spread of knowledge furthers people's understanding of their environment and may inspire the future generations and bring forth change in society.

To promote science education and to enhance people's understanding of the IC industry, TSMC made a donation to the National Museum of Natural Science in Taichung in 1997 to set up an exhibition hall – The World of the Integrated Circuits. In 2003 and 2011, TSMC sponsored the renovation of the hall, adding interactive displays that explain semiconductor principles, the development of integrated circuits, and the important role IC industry plays in one's daily life. In 2004, TSMC Foundation started to recruit employees and their family members to serve as volunteer docents at the exhibition hall on weekends and holiday.

As many as 194 people volunteered in 2004. Youth volunteers were added in 2006, allowing employees to invite their children (high school and above) to join the Volunteer Docent Program. In 2007, the program was expanded to recruit new blood from

TSMC-affiliated companies, including Vanguard, VisEra, Xintec, and Global Unichip. The docents' enthusiasm and professionalism were highly praised by visitors; the group has continuously been recognized as the "Outstanding Volunteer Team" by the National Museum of Science.

When "The World of Semiconductor" exhibition opened in 2011, TSMC recruited around 500 volunteers as tour guides for visitors on weekends and holidays. In 2013, the number grew to 935 volunteers, translating to a dedication of 10,752 service hours. As of December 2013, the cumulative service hour totaled to more than 58,152 hours.

##### **TSMC Book Reading Volunteer Program**

TSMC believes the future hope and competitiveness of Taiwan lie in children of the next generation, and education is the key to the development of these children. Hoping to help reduce the disparity of educational resources between rural and urban schools, TSMC Foundation has been sponsoring the "Hope Reading Program" organized by *CommonWealth Magazine* since 2004. Besides donating 20,000 books annually to 200 schools in remote and rural areas, the Foundation recruited employees and their family members to form volunteer teams and read to underprivileged children of remote areas in hope of sparking their interest in reading.

In 2004, 49 volunteers joined the Program and started serving two elementary schools in the remote townships in Hsinchu. Now, more than 100 people travel to the remote schools to read stories to the children on a regular basis. With increased numbers of participants, the program was extended to Tainan in 2006. Currently, volunteers serve in five schools, encouraging children to read and make use of the books donated through the Hope Reading Program.

The selfless service of Book Reading Volunteer Program participants is greatly valued by the schools and the children. This program has become a great model frequently reported by the mass media, which helps to spread the spirit of encouraging reading through reading aloud.

In 2012, TSMC expanded its service scope to eight schools from five. Today, 465 volunteers read books with children in Hsinchu, Taichung and Tainan. They have served for nine consecutive years and will continue to help pave the road leading to a brighter future for the underprivileged children. In 2013, volunteers dedicated 6,678 hours to read books for children. As of December 2013, the cumulative service hour is more than 30,478 hours.

##### **TSMC Energy Saving Volunteer Program**

With global warming and the depletion of limited natural resources and fuel, saving energy has become a critical issue for both individuals and corporations around the world. In 2008, TSMC recruited employees with expertise in energy conservation to start the Energy Saving Volunteer Program, and since, the Company has been providing schools in the Hsinchu and Tainan areas with professional consulting service. The team helps to come up with plans for schools to improve power efficiency and reduce carbon emissions.

Beginning with 25 TSMC employees, the Energy Saving Volunteer Program initially served only neighborhood schools. Two high schools in Hsinchu were chosen, and a team was sent to each school to assist in lowering water, electricity and telecommunication bills, as well as improving environmental safety and air-conditioning. After assessing the facilities, collecting data, and evaluating power efficiency, the teams proposed energy-saving plans and ways to reduce carbon emissions to the schools.

The Energy Saving Volunteers not only endeavor to save energy for the Company and Taiwan but also wish to do what they can to preserve the earth. The program expanded its service to Taichung in 2011 to fulfill its promise: "Where TSMC is, its volunteers will be". In 2013, these volunteers input 1,000 hours in Hsinchu, Taichung, Tainan and Penghu areas.

##### **TSMC Community Volunteer Program**

When the TSMC Community Volunteer Program started recruiting employees, its central focus was to continually deploy their expertise to help those who need them the most.

When Typhoon Morakot struck Southern Taiwan in 2009, TSMC employees, deeply saddened by the suffering it caused, immediately established Typhoon Morakot Project Team and provided assistance and relief measures to the typhoon victims. The experience prompted TSMC employees to ponder what else could be done to help the community and, consequently, Typhoon Morakot Project Team became the Community Volunteer Program in 2010, aiming to reach out to the ones in need.

Both the elderly and children are the joint focus of TSMC Community Volunteers partly because Taiwan is an aging society with more than two million people over the age of 65, among whom one fifth need nursing care. Moreover, with the rapid changes in society, it is critical for children – the future of the country – to build their characters at an early age. It is especially important for children of dysfunctional families to have productive interactions and experience the warmth, care and company of others.

The TSMC Community Volunteer Program mainly serves the elderly at Hsinchu Veterans Home and the children at St. Teresa Children Center. At Hsinchu Veterans Home, art workshops allow volunteers and veterans to create art works such as rock-painting. The veterans get to enjoy the beauty of art; volunteers and veterans get to understand each other more through chatting. At St. Teresa Children Center, volunteers conduct one-on-one companionship. During the monthly family day at the Center, volunteers spend a wonderful weekend going on an outing with the children or reading to them in the Center.

Two Holiday Volunteer activities were held in 2013. In July, TSMC Community Volunteers invited the elderly and children they served to "Window on China" theme park and spent a wonderful Saturday together. In December, the volunteers held the second holiday activity for the year at Hsinchu City Zoo. During this event, a roundtable banquet was held for the elderly and children to celebrate an early Chinese New Year. In 2013, there were 349 volunteers. The elderly, the children, and the volunteers are closely linked with one another through regular activities.

#### TSMC Ecology Volunteer Program

In 2012, TSMC launched a new volunteer initiative: the Ecology Volunteer Program. Two groups of employees who are interested in natural ecology donated their time to environmental protection service at ecology parks in Taichung and Tainan. Volunteers were trained as ecology docents to share natural ecology concepts with school children and the public visiting the two parks.

- **Hsinchu Fab 12B ecology park docent:** In 2013, a new venue was added to provide docent service. With 88 employees joining the group, the Company invited more than 120 students and teachers from four elementary schools to visit TSMC's ecology park in Hsinchu.
- **Taichung Fab 15 ecology park docent:** In 2013, 92 employees joined the group, and the Company invited more than 150 students and teachers from five elementary schools to visit TSMC's ecology park in Taichung.
- **Tainan Jacana ecology education park docent:** TSMC Volunteer Program recruited 134 employees and their family members to serve as volunteer docents at the Jacana ecology education park on weekends and holidays.

#### TSMC Fab/Division Volunteer Program

With the enthusiastic support from Senior Managers, TSMC employees are dedicated to give to the society in return. Employees have devoted to various welfare activities on the Fab/Division level for causes such as environment protection, promotion of energy consumption reduction, and caring of the disadvantaged.

#### ● Environmental Protection

The Company is dedicated to protecting the environment of Taiwan in collaboration with charities. For instance, TSMC employees volunteered to maintain the Hsinchu venue of The National Lantern Festival 2013. In addition, invited by TSMC volunteers, students of Jinshan Elementary School participated in the street cleaning activity as one of their graduating events. The activity not only contributed to the community, but also helped plant the seed of environmental protection in the mind of the younger generation.

#### ● Energy Consumption Reduction

With the long-term collaboration between TSMC's fabs in Tainan and Zengwum Dam, the Company organized interactive and interesting field trips for students from the schools near downstream of the watershed to promote the idea of water consumption reduction. Through interactive learning activities, the students realized the importance of water saving.

Despite high competition in the technology industry, the Company never forgets to cherish the environment. With the summoning of Volunteer Club's President, Mrs. Sophie Shu-fen Chang, seminars concerning energy consumption and power reduction were held to share the knowledge and technology of the green buildings and energy saving accomplishments. Through those efforts, the Company hopes to root the green power deeply into the minds of other corporations.

#### ● Caring for the Disadvantaged

Charity bazaars and group-buying were held in fabs from time to time and, in the belief that even a small donation will make a difference, the accumulated profits were donated to charities. Furthermore, when the employees saw people in need, such as solitary elders, destitute children, and economically disadvantaged individuals, they called for enthusiastic support from their fellow employees to repair and maintain the old houses of the ones in need, provided daily supplies and necessities, and offered warm accompany. Employees of the Company are devoted to give a hand to helpless people for them to move toward a brighter future with dignity.

## 7.5 Social Responsibility Implementation Status as Required by the Taiwan Financial Supervisory Commission

Item	Implementation Status	Non-implementation and Its Reason(s)
1. Implementation of Corporate Governance (1) Corporate social responsibility policy and performance evaluation  (2) Dedicated organization for the promotion and execution of corporate social responsibility  (3) Regular training and promotion of corporate ethics among employees and the Board of Directors, and integration with the employee performance appraisal system	(1) Please refer to "7. Corporate Social Responsibility" on pages 92-109 of this Annual Report.  (2) Please refer to "7. Corporate Social Responsibility" on pages 92-109 of this Annual Report.  (3) Please refer to "3.5 Code of Ethics and Business Conduct" on pages 36-39 of this Annual Report.	None
2. Sustainable Environment Development (1) Commitment to improving resources utilization and the use of renewable materials (2) Environmental management system designed to industry characteristics (3) Dedicated environmental management unit or personnel (4) Company strategy for climate change, energy conservation and greenhouse gas reduction	Please refer to "7.2.1 Environmental Protection" on pages 97-99 of this Annual Report.	None
3. Promotion of social welfare (1) Compliance with labor regulations, international recognized human right principles, protection of employee rights and employment fairness, and appropriate management measures and procedures  (2) Safety and health in working environment, and the condition for providing periodical safety and health training to employees  (3) Mechanism of periodical communication with employees, and reasonable notice measures regarding significant operational changes which might cause significant impacts to employees.  (4) Disclosure of consumer rights policy, and official channel for consumer complaints  (5) Collaboration with suppliers  (6) Participation in community development and charities through commercial activities, donations, volunteers or other free professional services	(1) Please refer to "5.5 Employees" on pages 71-74 of this Annual Report.  (2) Please refer to "7.2.3 Safety and Health" on pages 102-104 of this Annual Report.  (3) Please refer to "5.5 Employees" on pages 71-74 of this Annual Report.  (4) Please refer to "5.4 Customer Trust" on pages 69-71 of this Annual Report.  (5) Please refer to "Supply Chain Sustainability" in "7. Corporate Social Responsibility" on page 104 of this Annual Report.  (6) Please refer to "7. Corporate Social Responsibility" on pages 92-109 of this Annual Report.	None
4. Enhancement of Information Disclosure (1) Disclosure of corporate social responsibility related information with significance and reliability. (2) Published corporate responsibility report and disclosure of implementation of corporate social responsibility	TSMC has published "Corporate Responsibility Report" since 2008, which has been verified by third party in compliance with the requirements of Global Reporting Initiative (GRI) G3.1 level A+ and AA1000AS: 2008 standard.	None
5. If the company has established its corporate social responsibility code of practice according to "Listed Companies Corporate Social Responsibility Code of Practice," please describe the operational status and differences.  TSMC follows the ten principles of corporate social responsibility set by the Chairman, Dr. Morris Chang. For our corporate social responsibility operational status, please refer to "7. Corporate Social Responsibility" on pages 92-109 of this Annual Report and our corporate social responsibility related information in our website: <a href="http://www.tsmc.com/english/csr/index.htm">http://www.tsmc.com/english/csr/index.htm</a>		
6. Other important information to facilitate better understanding of the company's implementation of corporate social responsibility (e.g., environmental protection, community participation, social contribution, social services, social welfare, consumers' rights, human rights and safety and health):  Please refer to TSMC's website for our corporate social responsibility implementation status: <a href="http://www.tsmc.com/english/csr/index.htm">http://www.tsmc.com/english/csr/index.htm</a>		
7. Other information regarding products or "Corporate Responsibility Report" which are verified by certification bodies:  (1) TSMC obtained Integrated Circuit carbon footprint and Type 3 Environmental Product Label verification, which comply with PAS2050 and ISO14025 standards. (2) TSMC Corporate Responsibility Report is compliant with the requirements of Global Reporting Initiative (GRI) G3.1 level A+ and AA1000AS:2008 standard.		

The TSMC Community Volunteer Program mainly serves the elderly at Hsinchu Veterans Home and the children at St. Teresa Children Center. At Hsinchu Veterans Home, art workshops allow volunteers and veterans to create art works such as rock-painting. The veterans get to enjoy the beauty of art; volunteers and veterans get to understand each other more through chatting. At St. Teresa Children Center, volunteers conduct one-on-one companionship. During the monthly family day at the Center, volunteers spend a wonderful weekend going on an outing with the children or reading to them in the Center.

Two Holiday Volunteer activities were held in 2013. In July, TSMC Community Volunteers invited the elderly and children they served to "Window on China" theme park and spent a wonderful Saturday together. In December, the volunteers held the second holiday activity for the year at Hsinchu City Zoo. During this event, a roundtable banquet was held for the elderly and children to celebrate an early Chinese New Year. In 2013, there were 349 volunteers. The elderly, the children, and the volunteers are closely linked with one another through regular activities.

#### TSMC Ecology Volunteer Program

In 2012, TSMC launched a new volunteer initiative: the Ecology Volunteer Program. Two groups of employees who are interested in natural ecology donated their time to environmental protection service at ecology parks in Taichung and Tainan. Volunteers were trained as ecology docents to share natural ecology concepts with school children and the public visiting the two parks.

- **Hsinchu Fab 12B ecology park docent:** In 2013, a new venue was added to provide docent service. With 88 employees joining the group, the Company invited more than 120 students and teachers from four elementary schools to visit TSMC's ecology park in Hsinchu.
- **Taichung Fab 15 ecology park docent:** In 2013, 92 employees joined the group, and the Company invited more than 150 students and teachers from five elementary schools to visit TSMC's ecology park in Taichung.
- **Tainan Jacana ecology education park docent:** TSMC Volunteer Program recruited 134 employees and their family members to serve as volunteer docents at the Jacana ecology education park on weekends and holidays.

#### TSMC Fab/Division Volunteer Program

With the enthusiastic support from Senior Managers, TSMC employees are dedicated to give to the society in return. Employees have devoted to various welfare activities on the Fab/Division level for causes such as environment protection, promotion of energy consumption reduction, and caring of the disadvantaged.

#### ● Environmental Protection

The Company is dedicated to protecting the environment of Taiwan in collaboration with charities. For instance, TSMC employees volunteered to maintain the Hsinchu venue of The National Lantern Festival 2013. In addition, invited by TSMC volunteers, students of Jinshan Elementary School participated in the street cleaning activity as one of their graduating events. The activity not only contributed to the community, but also helped plant the seed of environmental protection in the mind of the younger generation.

#### ● Energy Consumption Reduction

With the long-term collaboration between TSMC's fabs in Tainan and Zengwum Dam, the Company organized interactive and interesting field trips for students from the schools near downstream of the watershed to promote the idea of water consumption reduction. Through interactive learning activities, the students realized the importance of water saving.

Despite high competition in the technology industry, the Company never forgets to cherish the environment. With the summoning of Volunteer Club's President, Mrs. Sophie Shu-fen Chang, seminars concerning energy consumption and power reduction were held to share the knowledge and technology of the green buildings and energy saving accomplishments. Through those efforts, the Company hopes to root the green power deeply into the minds of other corporations.

#### ● Caring for the Disadvantaged

Charity bazaars and group-buying were held in fabs from time to time and, in the belief that even a small donation will make a difference, the accumulated profits were donated to charities. Furthermore, when the employees saw people in need, such as solitary elders, destitute children, and economically disadvantaged individuals, they called for enthusiastic support from their fellow employees to repair and maintain the old houses of the ones in need, provided daily supplies and necessities, and offered warm accompany. Employees of the Company are devoted to give a hand to helpless people for them to move toward a brighter future with dignity.

## 7.5 Social Responsibility Implementation Status as Required by the Taiwan Financial Supervisory Commission

Item	Implementation Status	Non-implementation and Its Reason(s)
1. Implementation of Corporate Governance (1) Corporate social responsibility policy and performance evaluation  (2) Dedicated organization for the promotion and execution of corporate social responsibility  (3) Regular training and promotion of corporate ethics among employees and the Board of Directors, and integration with the employee performance appraisal system	(1) Please refer to "7. Corporate Social Responsibility" on pages 92-109 of this Annual Report.  (2) Please refer to "7. Corporate Social Responsibility" on pages 92-109 of this Annual Report.  (3) Please refer to "3.5 Code of Ethics and Business Conduct" on pages 36-39 of this Annual Report.	None
2. Sustainable Environment Development (1) Commitment to improving resources utilization and the use of renewable materials (2) Environmental management system designed to industry characteristics (3) Dedicated environmental management unit or personnel (4) Company strategy for climate change, energy conservation and greenhouse gas reduction	Please refer to "7.2.1 Environmental Protection" on pages 97-99 of this Annual Report.	None
3. Promotion of social welfare (1) Compliance with labor regulations, international recognized human right principles, protection of employee rights and employment fairness, and appropriate management measures and procedures  (2) Safety and health in working environment, and the condition for providing periodical safety and health training to employees  (3) Mechanism of periodical communication with employees, and reasonable notice measures regarding significant operational changes which might cause significant impacts to employees.  (4) Disclosure of consumer rights policy, and official channel for consumer complaints  (5) Collaboration with suppliers  (6) Participation in community development and charities through commercial activities, donations, volunteers or other free professional services	(1) Please refer to "5.5 Employees" on pages 71-74 of this Annual Report.  (2) Please refer to "7.2.3 Safety and Health" on pages 102-104 of this Annual Report.  (3) Please refer to "5.5 Employees" on pages 71-74 of this Annual Report.  (4) Please refer to "5.4 Customer Trust" on pages 69-71 of this Annual Report.  (5) Please refer to "Supply Chain Sustainability" in "7. Corporate Social Responsibility" on page 104 of this Annual Report.  (6) Please refer to "7. Corporate Social Responsibility" on pages 92-109 of this Annual Report.	None
4. Enhancement of Information Disclosure (1) Disclosure of corporate social responsibility related information with significance and reliability. (2) Published corporate responsibility report and disclosure of implementation of corporate social responsibility	TSMC has published "Corporate Responsibility Report" since 2008, which has been verified by third party in compliance with the requirements of Global Reporting Initiative (GRI) G3.1 level A+ and AA1000AS: 2008 standard.	None
5. If the company has established its corporate social responsibility code of practice according to "Listed Companies Corporate Social Responsibility Code of Practice," please describe the operational status and differences.  TSMC follows the ten principles of corporate social responsibility set by the Chairman, Dr. Morris Chang. For our corporate social responsibility operational status, please refer to "7. Corporate Social Responsibility" on pages 92-109 of this Annual Report and our corporate social responsibility related information in our website: <a href="http://www.tsmc.com/english/csr/index.htm">http://www.tsmc.com/english/csr/index.htm</a>		
6. Other important information to facilitate better understanding of the company's implementation of corporate social responsibility (e.g., environmental protection, community participation, social contribution, social services, social welfare, consumers' rights, human rights and safety and health):  Please refer to TSMC's website for our corporate social responsibility implementation status: <a href="http://www.tsmc.com/english/csr/index.htm">http://www.tsmc.com/english/csr/index.htm</a>		
7. Other information regarding products or "Corporate Responsibility Report" which are verified by certification bodies:  (1) TSMC obtained Integrated Circuit carbon footprint and Type 3 Environmental Product Label verification, which comply with PAS2050 and ISO14025 standards. (2) TSMC Corporate Responsibility Report is compliant with the requirements of Global Reporting Initiative (GRI) G3.1 level A+ and AA1000AS:2008 standard.		