



Summary

2012 Corporate Social Responsibility Report



Introduction

Wafer works Technology Co., Ltd. (hereinafter referred to as Wafer works Technology) was founded in 1997. Members of the founding team are from Silicon Valley of the United States and domestic semiconductor industry and are deeply rooted in semiconductor industry. Wafer works Technology has now become one of the top ten semiconductor silicon wafer material suppliers worldwide. We uphold the concept of sustainable development of the company and issued the first Corporate Social Responsibility Report in 2012. In this article, relevant information as business strategies, risk management, environmental management system are in full disclosure to the public and investment partners who are concerned about the development of Wafer works Technology.

Scope

This report covers the performance reflected in corporate social responsibility of Wafer works Technology Co., Ltd. that participates in the production of silicon wafers in Taiwan and the Science-Based Industrial Park Plant of Wafer works Technology Co., Ltd. from January, 2012 to December, 2012.

Disclosure Basis

The disclose information and statistics in the report are both group data with the time to AD. The said financial figures are shown in NT dollars and approved by Ernst & Young PLL.

Contact Information

If you have any questions or suggestions, please contact us by phone, or you can click the button “Contact Us” on the right of the Company Home page.

Wafer works Technology Co., Ltd.

Environment, health and Safety

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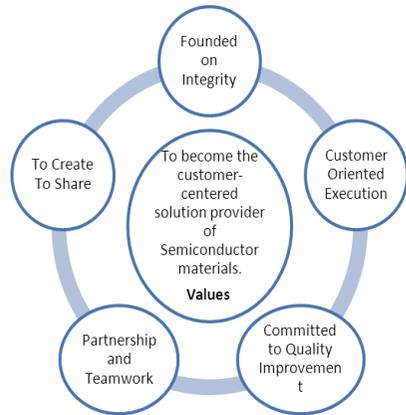
Website : www.waferworks.com

Ch1 Responsibly and Challenge

A world class supplier of semiconductor silicon wafers

After nearly 20 years of hard work, Wafer works Technology Co., Ltd has been ranked the world’s seventh largest semiconductor silicon wafer manufacturer. In 2007, it was even awarded one of the 2007 Asia “Best Under a Billion” Company by Forbes Asia.

Corporate Vision and Business Values



Accelerate the production of large-size sapphire substrate and develop silicon substrate LED application technology

In addition to continuing to enhance the cost competitiveness of 2-inch products, Wafer works Technology Co., Ltd of The Company’s also accelerates the production process of 4-6 inch flat sapphire substrates and patterned substrate (PSS). Meanwhile, based on the multiple needs of the lighting market on luminating efficiency,

electrical conductivity, thermal conductivity, thermal stability, price and etc, Wafer works Technology fully applies the leading advantage on silicon substrate technology and cost and actively cooperates with customers to overcome technical obstacles, hoping to widen the gap with competitors by the double driving force of large-size sapphire substrate mass-production and silicon substrate application in LED.

Operational Risk Management

Based on the latest risk management trends, the Company has strengthened enterprise risk management, including risk detection, evaluation, reporting and handling in recent years and they handled cautiously and stringently. The Company’s risk management is divided into three levels (mechanism): the organizer or contractor are the “first mechanism” to be responsible for initial risk identification and evaluation as well as management consideration design and prevention; the “second mechanism” is the management meetings chaired by the general manager to be responsible for feasibility assessment and a variety of risk assessment; the “third mechanism” is the review of legal and audit units and deliberation by directors and supervisors. The reason why the Company has no CRO is to have all employees responsible for the full comprehensive risk management and launch overall prevention rather than to be controlled by one person to implement risk management.

Stakeholder-related communication and key issues

For internal and external stakeholders as well as their concerning issues, Wafer works Technology Co., Ltd. collected various types of stakeholders' point of views including employees, customers, investors, contractors and suppliers with a survey that has response rate of 89.3%. And Company executives decide the issues of concern with the greatest impact on the company in business continuity point of view.

The Top 10 key issues are

- Management Performance
- Sustainable Development Strategy
- Compliance with laws and regulations
- Risk Management
- Innovation Management
- Environmental Management
- Occupational Safety and Health
- Customer Service
- Corporate Governance
- Supply Chain Management

Ch2 Friendly Environment

Based on the philosophy of business continuity and the insistence of fulfilling the responsibility to protect the environment, resource property and neighboring community environment as well as health, Wafer works Technology Co., Ltd. implements effective risk management of all encountering emergencies, natural disasters and environmental impact to gain a full range of response plans and procedures. As for environmental management, operational controls of Wafer works Technology meet all environmental regulations and standards. The Yangmei and Longtan Plant of Wafer works Technology are also qualified in environmental management system (ISO14001) verification, which allows for more systematic environmental management control.

Air Pollution Prevention

Longtan Plant in 2012

Type of air pollutants	Emissions (metric tons / year)
Volatile Organic Compounds (VOC)	0.085
Particulate Pollutants	0.148

Ammonia	0.006
Hydrofluoric Acid	0.0025
Nitrate	0.0014
Hydrochloric Acid	0.0069

Yangmei Plant in 2012

Type of air pollutants	Emissions (metric tons / year)
Volatile Organic Compounds (VOC)	0.154

Water and Water Pollution Control

Water recycling effectiveness of **Yangmei Plant**

29.25 metric tons / year

Pure water system undergoes RO concentrate, UF concentrate recycling, nitrogen-sealed water recycling and backwash procedure reduction and pure water system improvement reaches 456 tons / day. And water management in the source and recycle for the preceding cleaning reaches a total of 251 tons / day. Wafer works Technology is equipped with perfect wastewater treatment facilities and the treated effluent used as the water for air pollution control scrubbers has reaches a total of 105.6 tons / day.

Water recycling effectiveness of **Longtan Plant**

48.67 metric tons / year

Pure water system undergoes RO concentrate and UF concentrate recycling, recycle and reuse of the regenerated Rinse water (180CMD) by pure water system resin(2B3T and MB). The pure water systems is improved and reaches a total of 468 tons / day. Back-end process washing machine undergoing process water recycling can be used for front-end cleaning and reaches a total of 820 tons / day. Other water recycling systems, such as rain, irrigation water, and etc reaches a total of 164 tons / day.

Waste Management

Wafer works Technology established a sound management system on industrial waste and general life waste reduction and recycling to effectively recycle general industrial waste and resource waste through management system. **In 2012, the resource recycling of Yangmei Plant was 40.8 % while it was 36.6% in Longtan Plant.**

We deal the waste through its resourcization pipeline in the spirit of resourcization. Quartz crucible produced from growth production in 2012 was first recycled and reused by the commissioned reuse company of Industrial Development Bureau with the recycling amount of totaled **19.415 tons / year** for the both Plants.

Examination of Greenhouse Gas

- The main emission sources of Yangmei Plant greenhouse gases is **Category 2, purchased electricity**, accounting for 83.55% of all greenhouse gases, followed by 16.45% of **Category 1**, including gases used in CVD (nitrous oxide and octafluoropropane); fuel used in boilers (natural gas, diesel); diesel used in generators and transportation equipments; gasoline and refrigerants used in official cars; carbon dioxide filling used in fire-fighting equipments; refrigerant used in chillers, refrigerators and drinking fountains.
- The main emission sources of Longtan Plant greenhouse gases is **Category 2, purchased electricity**, accounting for 93.61% of all greenhouse gases, followed by 6.39% of **Category 1**, including gases used in CVD (nitrous oxide and octafluoropropane); fuel used in boilers (natural gas, diesel); diesel used in generators and transportation equipment; gasoline and refrigerants used in official cars; carbon dioxide filling and HFC-227ea used in fire-fighting equipment; refrigerant used in chillers, refrigerators and drinking fountains.
- Since 2010, Wafer works Technology has started its own greenhouse gas examination. Through a series of examination, it was known that the main greenhouse gas emissions is from the use of electricity in the manufacturing process according to the

scope of greenhouse gas emissions. Over the past year, we therefore launched the implementation of various energy conservation measures in each utility system. In addition to the hardware improvements proposed by the factory service facility to reduce electricity consumption, all small utilities also received considerable energy savings under the hardware improvement by the administration department.

Energy Consumption and Saving

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Energy Saving Effect of Yangmei Plant 1006.28 MWh / year

Energy Saving Effect of Longtan Plant 51.952 MWh / year

Carbon Footprint

Specification	Eight-inch heavily doped arsenic silicon wafer 	
Examination Period	January 1 st , 2011~ December 31 st , 2011	
Unit	An eight-inch heavily doped arsenic silicon wafer	
Function	Materials of all kinds of electronic products	
Export Ratio	America 25%, Europe 6%, Asia 39%	
Raw Material	Configuration	Composition
Composition Description	Raw Material	Polysilicon chunk, arsenic, Monosilicon crystal
	Packaging	wafer cassette, tape, PE bags, desiccant, labels, aluminum foil bags
	Shipping	EPE cushion, carton
	Packaging	

Safe Workplace

To achieve the goal of zero accidents, the Company developed occupational hazards preventing plan at the end of each year and detailed implementation plans to be actually executed according to the planned processes and content which would be under amendment by safety and health committee every three months. At the end of the

year, annual occupational accident prevention programs would be set out by safety and health committee’s resolutions to gradually reducing the risk of harm in the units and reach the ultimate goal of zero accidents by planned running, audit, review and revision and continuing PDCA means.



Emergency Procedures

We have a full program of disaster response and conduct regular training and drills, hoping to drop the staff and company asset loss as well as social and environmental impacts due to disasters to the minimum by appropriate emergency treatment at the first time of the accident.

➤ Fire Emergency Response Mechanism

Strengthen employee's basic fire-fighting capability, train employees' escape ability by contingency evacuation drills and establish good communication channels with the local fire department and external support.

➤ Chemical Disaster Emergency Response Mechanism

By the establishment of material safety data sheet and harmful and hazardous substances classification system, employees are trained to understand the chemical characteristics and to launch autonomous machine chemical disaster drills by the production unit to enhance the ability to deal with leaks by the establishment of mechanism from leak, containment, alert, evacuation to production resumption.

➤ Typhoon Emergency Response Mechanism

We have developed the following workaround:

- ✓ Notification mechanism established: plant director masters all the response information.
- ✓ Prepare contingency equipment: sandbags, water pumps and

other utensils to prepare contingency.

- ✓ Factory environment inspection and confirming precautions against typhoon after sea warning of a typhoon issued.
- ✓ Patrols during a typhoon.
- ✓ Defect review and improvement.
- Seismic Monitoring Mechanism

In addition to suffering from frequent typhoons, there are also earthquakes occurred in Taiwan. Since the most important manufacturing process of Wafer works Technology is crystal-growing whose biggest threat is shaking caused by the earthquake that may result in the discontinuity of crystal-growth puller during production and causing product loss. Facing earthquake disasters unable to gain warning, the seismic design of buildings in Longtan new plant is up to six on Richter scale with three seismic instruments set to directly transmit back the signal to the central control room to improve earthquake monitoring mechanism and ensure life and property safety.

- Flood drainage design: drainage design of Longtan Plant is set to prevent the flood scale for 50 years as the design basis (including the roof).

Occupational accident investigation

Occupational Injury Description of Yangmei Plant

There was a false alarm incident occurred in 2013 with 1 day of loss

hours. Primarily, it is about a personnel's finger was scalded by the gas skirt of mounter. By the inter-departmental investigation, it was found that the protection of machine electronically controlled heating element is inadequate, leading the following improvement to strengthen the second over-temperature protection device and training and advocacy of the employees.

Occupational Injury Description of Longtan Plant

There was an occupational injury occurred in 2013 that an employee bruised his left foot when transporting materials by a trolley that overturned due to the uneven pavement when passing through the pipeline preset conduit, causing 31 lost working days. The improvement was to refill the uneven pavement with cement and adjust the material placement area to facilitate operation. Meanwhile, Industrial Safety Department also immediately educated all employees with this case and reiterated trolley precautions.

Healthy Workplace Independent Certification

We actively promote the culture of having a healthy workplace and host various healthy workplace activities with the introduction of non-smoke workplace and was successfully awarded health workplace independent certification.

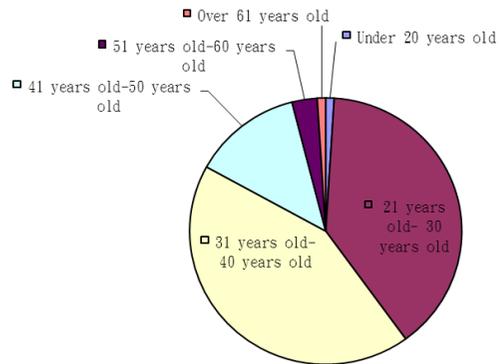
- When influenza season comes, arrange vaccination for employees' prevention and health care.

- Provide domestic diseases related information and take relevant precautionary measures.
- Provide employees with health counseling and simple epidemic prevention items when there is a need of traveling abroad.
- Provide employees with personal health guidance and health promotion measures when there is odd figure occurred in employees' physical body and health inspection results.
- Host professional health talks or related health promotion activities.
- Handle matters related to first aid and emergency treatment.
- Promote non-smoke workplace.

Ch3 Friendly Workplace

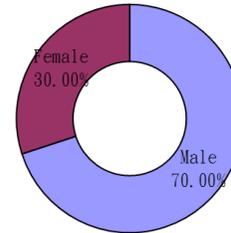
Employment Status

By Age



31 years old-40 years old 43% 21 years old- 30 years old 39%
 41 years old-50 years old 13% 51 years old-60 years old 3%
 Over 61 years old 1% Under 20 years old 1%

By Gender



31 years old-40 years old 43% 21 years old- 30 years old 39%
 41 years old-50 years old 13% 51 years old-60 years old 3%
 Over 61 years old 1% Under 20 years old 1%

Male, Female

2012 parental leave number: Currently there are four employees of Wafer works Technology are under parental leave.

Number of parental leave	Number of parental leave
Male	1
Female	7
Total	8

Staff Practitioners Ethics

We completely follow and implement Electronic Industry Code of Conduct (EICC)

The content of Wafer works Technology’s practitioner ethics norms is mainly as follows:

1. Integrity: with probity as the highest ethical standards to faithfully implement all tasks the company delivered.
2. Respect for the individual and customers: respect and strictly protect personal and customer privacy and try to be fair to customers.
3. Avoidance of conflict of interest: prior to involving in related activities with potential interest conflicts of the Company, one is required to disclose details to the chairman and the general manager to obtain approval and submit a report to the audit department.
4. Gifts and business hospitality; all employees and their families are not allowed to accept gifts or hospitality from customers or suppliers (except for weddings and funerals) or give kickbacks or other improper interests.
5. Disclosure of full, adequate, correct, timely and understandable information.
6. Report, protection and immunity: when any violation of government regulation, business ethics or fraud found, one should report with named e-mail to the appropriate personnel.

Ch4 Partnership

Customer Service and Satisfaction

Service Satisfaction Implementation Principles

With the ranked top 30 customers in sales amount as the main questionnaire object, they are issued questionnaires by a sales representative to fill out or interviewed by telephone in order to achieve efficient questionnaires retrieve and have survey results under statistical analysis. Customer satisfaction will be reviewed during the monthly quality meetings with the relevant responsible units assigned for the proposing, confirmation and execution of the improvement and reply to the customers.

Customer Satisfaction Management Process Table



Customer Satisfaction Survey Results of Year 2012 and 2011

Customer Privacy

Honesty is one of Wafer works Technology's business philosophies and we sign NDA confidentiality agreement with customers before the commencement of commercial dealings to ensure that the data of both parties will not be disclosed.

Green Procurement

Wafer works Technology positively put in manpower and resources for investigation and confirmation of raw material suppliers as the internal management and control of hazardous substances information as well as consults and demands in response to relevant regulations and requirements. Even though we can control the risk of harmful substances through vendor surveys, manual control has been unable to meet the overall demand for green management with the constantly updated regulations. Thus, Wafer works Technology has completed the establishment of vendor document management system in October, 2013 to search for the latest and most immediate supplier information with the integrated system. By the E-system exchange platform, system aging management can be improved.

We incorporate environmental principles into supplier management mechanism to have manufacturers comply with environmental requirements specification with raw and packaging materials suppliers

used. All suppliers must ensure and guarantee that the products contain **【no environmental management banned substances】** and provide the following information:

-  Testing and reporting of product environmental management substances
-  Collection of relevant information of toxic chemicals and banned substances (material safety data sheets)
-  Environmentally hazardous substance survey
-  Commitment not to use hazardous substances

Conflict Minerals (Metals) Procurement Policy

Since EICC has pointed out that some metal ores has triggered international controversy, as citizens of the world, Wafer works Technology declared and promised not to accept the use of metals from conflicting mine and also require suppliers to promise not to use such metallic materials from conflicting mine in products.

Ch5 Community Involvement

Over the past year, Wafer works Technology has participated in social welfare activities with the description as follows:

- Response to “International Coastal Cleanup Day” ecological activity hosted by the Science Park on September 15th, 2012
To enhance employees’ environmental awareness and inspire their ecological and security concepts, we participated in International Coastal Cleanup Day organized by Science Park to allow all employees to think again about the link between man and nature by beach cleaning and ecology guided tours at Nanliao Sport Park.
- Provide gifts to sponsor community events for 2012 Mid-Autumn Festival (volunteer police, volunteer firefighters, neighborhood patrol).
- 2012 Wafer works Technology anniversary celebration and sports day with charity bazaar
The organizers of the annual anniversary celebration launched the charity events to have employees set charity stands voluntarily with booth costs funded by the Company. Employees dedicated effort on the sports day and donated all proceeds to charities.
- 2012 Year-End Social Relief

Employees raised goods to donate to local private orphanages. Caring Team of Plant Director room was responsible for hosting this social relief, so that all employees have the opportunity to devote love and care, and bring more warmth to groups in need of help.