

# 2018



GlobalWafers Co., Ltd.

CSR REPORT



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## About this Report

### Theme of Report

GlobalWafers Co., Ltd. (hereinafter referred to as "GlobalWafers") is a professional silicon wafer supplier. Its products are applied in integrated circuit device and power electronic device. To respond to global climate change and development trend for corporate social responsibility, GlobalWafers voluntarily compiles corporate social responsibility report. With long-term in-depth cultivation and interaction with local society and through agreement with stakeholders, this report discloses related information of GlobalWafers' critical issues in the fields of corporate governance, economy, environment and society, effectiveness in improvement execution as well as the company's future vision and goal for sustainable development.

### Editing and Finalization of Report:

GlobalWafers compiles information and edit this report in accordance with the following process

·Planning, Compilation

Major members of CSR core team (including General Manager's Office and Department of Security & Sanitation Management) are responsible for overall plan, material compilation, communication & integration as well as editing & modification of this report.

·Editing Process, Review and Finalization

Respective members of corporate sustainable development committee collect material and write this report, which will be submitted to the Chairman of the Board (commissioner for corporate sustainable development committee) for review, finalization and publication after report statistics are verified and confirmed accurate by management of respective departments.

### Compliance Standards for Report

Content structure for this report mainly takes reference from the "Sustainability Report Guidelines" G4 version published by the Global Reporting Initiative ("GRI") and disclosures are made in accordance with core options. Additionally, this report also complies with Rules Governing the Preparation and Filing of Corporate Social Responsibility Reports by TWSE Listed Companies during its compilation. With respect to critical issues concerned by stakeholders, GlobalWafers analyzes results based on substantiality and discloses and responds in related chapters.

### Report boundaries and reporting period

This report is GlobalWafers' first published corporate social responsibility report which encompasses period and scope as follows :

Date of Publication: June, 2018.

Period Encompassed: From January 1<sup>st</sup>, 2017 to December 31<sup>st</sup>, 2017.

Scope Encompassed :

This is the first publication of this report. Due to GlobalWafers merged with Topsil Semiconductor Materials A/S(hereinafter referred to as "Topsil") and SunEdison Semiconductor Limited (hereinafterreferred to as "SEMI") in 2016, andincomplete collection of current status materials for some business locations, performance statistics for some business locations encompassed in the critical consideration perspective are not disclosed in this year's report. We shall establish data collection mechanism starting this year. It is expected that performance statistics disclosed in 3 years going forward will include all operation sites for critical consideration perspective. Explanations of encompassed scope for respective performances are illustrated as follows.

Economic Performance :

This encompasses GlobalWafers' all operation and production sites which include GlobalWafers headquarters, Taisil Electronic Materials Corp., GlobalWafers Japan Co. Ltd., MEMC Japan Ltd., MEMC Korea Company, KunShan Sino Silicon Technology Co., Ltd., MEMC Electronic Materials, Sdn Bhd., GlobiTech Incorporated, SunEdison Semiconductor, LLC, MEMC Electronic Materials, SpA, Topsil GlobalWafers A/S, Topsil Semiconductors sp. z o.o and SunEdison Semiconductor Limited. Financial statistics have been reviewed and certified by KPMG International Taiwan in accordance with International Financial Reporting Standards ("IFRS"), and NT\$ is utilized for calculation unit.

Environmental Performance :

With the exception of Topsil Semiconductors sp. z o.o, which is excluded because detail statistics cannot be disclosed, other operation product sites have all been included in the disclosure scope for environmental performance. Statistics and compilation are conducted by respective responsible departments. However, given the fact that some offshore sites cannot not provide statistics information, disclosure scope will therefore be noted accordingly in statistic materials of report contents.

Social Performance :

In addition to employee's statistics and analysis which encompass all operation production sites, encompassed scope for other performances are consistent with the one for environmental performance. Statistics and compilation are conducted by respective responsible departments.

Going forward, GlobalWafers will regularly publish corporate social responsibility report each year, and provide e-file on Stakeholder Zone of GlobalWafers' website for downloading and reading.

### Report Assurance

To enhance this report's consistency with GRI G4 as well as to improve GlobalWafers' transparency and credibility in sustainable operation information, GlobalWafers' Corporate Sustainable Development Committee made a resolution on verification executed by third party independent verification institute. This report has been verified and confirmed by DNV GL Business Assurance Co., Ltd. that it is consistent with GRI G4 core compliance options as well as moderate level assurance requirements of DNV GL VeriSustain's verification guidelines. Please refer to appendix for details of verification statement.

### Contact Window

Should you have any comments or suggestions regarding this report, please free to contact us in one of the following ways :

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Official Website: <http://www.sas-globalwafers.com/pages/gw/tw/index.aspx>



## Summary of Sustainable Performance

### Economic

#### Corporate Governance Key Indicators

Assessment Ratings for Listed Company' s Information Disclosure & Corporate Governance

- > 2017 The 4th Corporate Governance Assessment – Top 20% in OTC Team
- > 2016 The 3rd Corporate Governance Assessment – Top 20% in OTC Team

### Key Economic Indicators

#### Operating Income

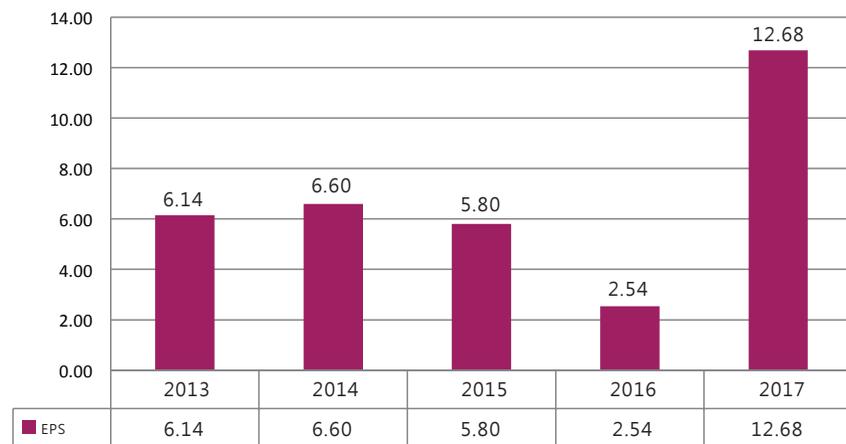
##### Consolidated Income

Unit: in NT\$ Hundred Millions



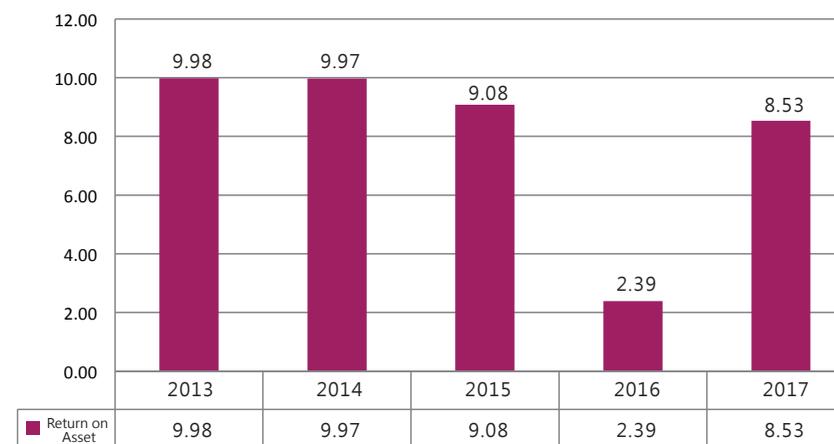
## EPS

Unit: NT\$



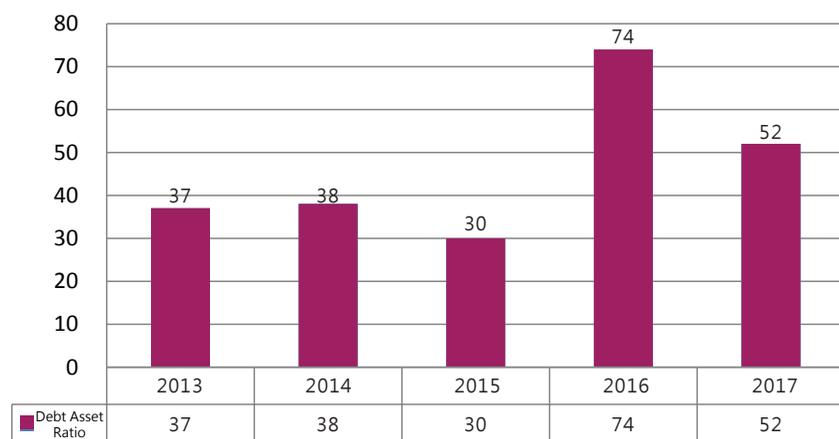
## Return on Asset

Unit : %



## Debt Asset Ratio

Unit: %



## Return on Equity

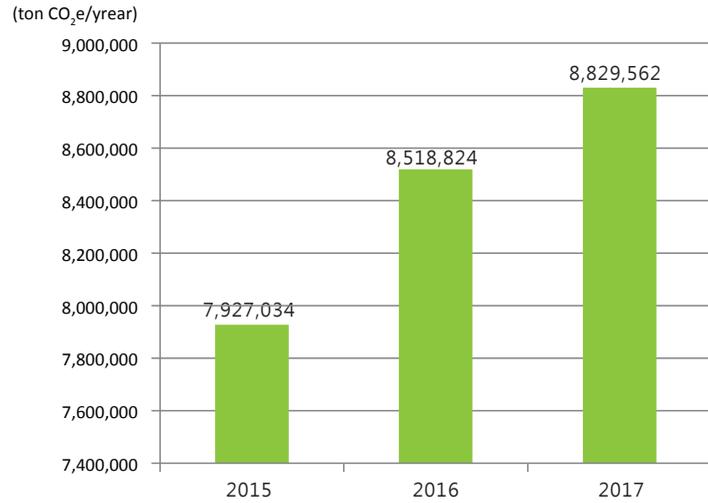
Unit : %



# Environmental

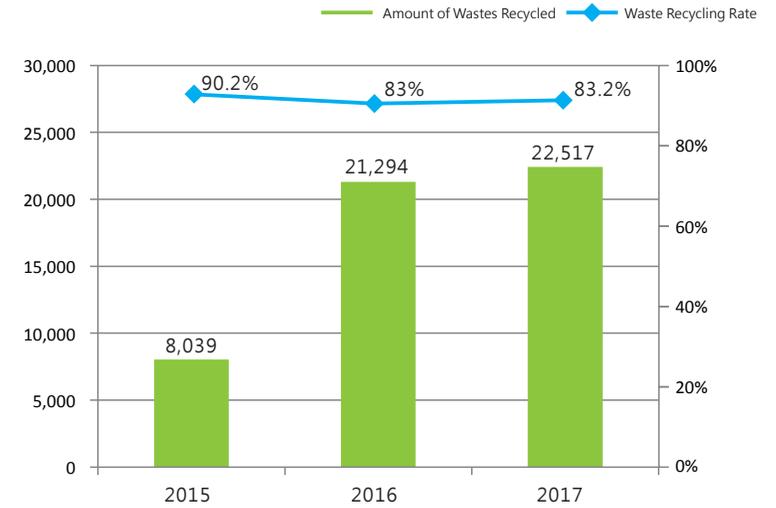
## Key Environmental Indicators

### Emission of Carbon Dioxide Equivalent



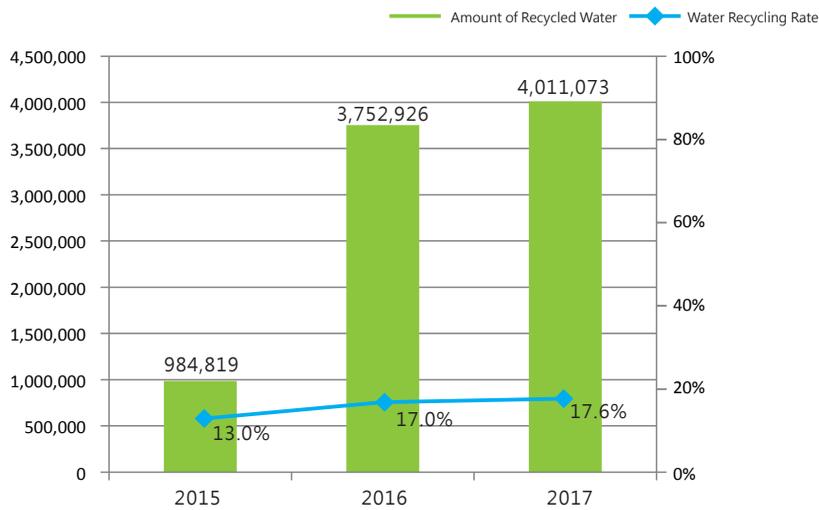
### Waste Recycling & Reusing

Unit: Tons



### Water Resource Recycling

Unit: Tons

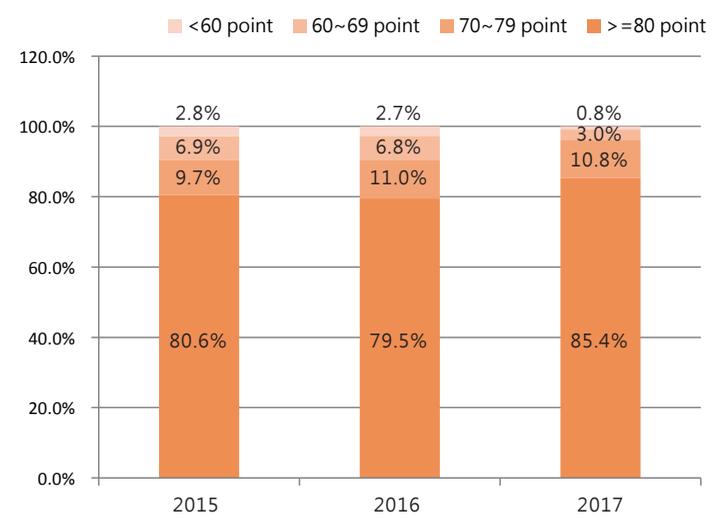


# Social

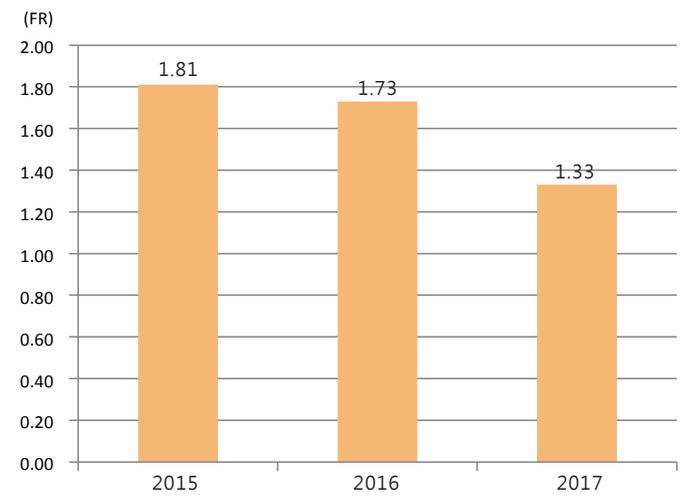
## Key Social Indicators

Degree of Customer Satisfaction

Unit : %

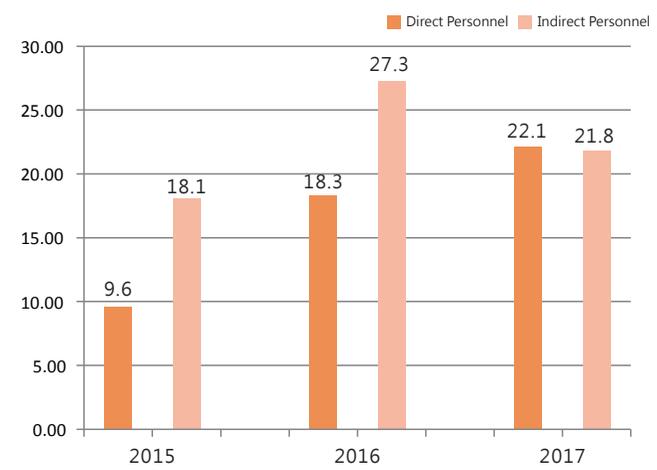


Disability Injury Frequency



Average Education & Training Hours per Person

Unit: hour





## Words from Management

GlobalWafers previously was the semiconductor department of the Sino-American Silicon Products Incorporation. It was separated from the Group and became independent in 2011. Since its founding, GlobalWafers always insists on operation concepts of "integrity," "moral" and "trust." The company utilizes the Group's advanced leading technology to facilitate development energy for new manufacturing process and next generation products. Through vertical integration of the Group's resources, operation performance is improved dramatically to create even more values for investor, customer and employee. Meanwhile, to echo worldwide Sustainable Development Goals (SDGs), GlobalWafers complied a third party international standard verified corporate social responsibility report which fully discloses GlobalWafers' various concrete actions and effectiveness on fulfilling corporate social responsibility in 2017, and which presents its determination to march towards sustainable operation goal.

In 2017, global demands for semiconductor exceeds supply and prices for large size wafers have increased each quarter. With strong market demand and successful development of synergy from SunEdison Semiconductor team, GlobalWafers enjoyed excellent operation and delivered preeminent performance for 2017.

- (1) Total revenue reached NT\$ 46.213 billion with annual growth of 151%, a creation of all-time high records.
- (2) Consolidated operating net profit is NT\$7.414 billion which increased dramatically by 4 times over the one for previous year.
- (3) Earnings per share is NT\$12.68 which increased dramatically over NT\$2.54 for last year.
- (4) Shareholder' s equity is NT\$34.054 billion which increased by 1 time over the one for the previous year.
- (5) Consolidated debt ratio has lowered from 74% to 52%.
- (6) Total market value has increased from NT\$42.5 billion in 2016 to NT\$173.8 billion in the end of 2017.
- (7) Number of patent certificates received has reached to 97 certificates.
- (8) Excellent performance of "Top 20% Enterprises for OTC Team – Listed and OTC Company Governance Assessment."
- (9) Receiving of Excellent Collaboration Supplier Award from Shanghai Hua Hong Semiconductor Limited (HHGrace).
- (10) Receiving of the annual best preprocessing material supplier award from ON Semiconductor.
- (11) Receiving of annual most iconic merge award from Taiwan M&A and Private Equity Council because of merge with SunEdison Semiconductor.

Under R&D team's concerted effort, GlobalWafers continues to develop new technology and new materials. Additionally, through merge and resource integration, technology levels are enhanced and stepping into the field of semiconductor high added-value large size silicon wafer is implemented smoothly. Numerous critical indicators have been achieved

in 2017 in the fields of manufacturing process development, new product technology development and customer certification assessment: independent development of crystal growth automatic system, manufacturing process enhancement, quality improvement and lowering of costs. The company has also successfully developed new generation wide bandgap high power semiconductor materials of GaN and SiC which can be combined with auto car and fast charge system in order to achieve energy saving effect. Going forward, GlobalWafers shall still march towards the goal of surpassing Moore's Law, and continue to be dedicated to enhancing power device key material effectiveness, reducing wafer defects dramatically, further enhancing wafer flatness and especially developing large size SiC materials. With 5G technology's never-stopping development, the company shall continue to invest in the development of GaN RF device key technology to respond to needs from internet of things and the 5th generation communication market. On the other hand, for the purpose of enhancing production efficiency and reducing environmental pollution, the company shall speed up, without reservation, slicing process which turns Slurry Wire into Diamond Wire. The company expands energy saving and carbon reduction effectiveness through introduction of new manufacturing process, and therefore makes contribution to the earth's environmental protection. With respect to intellectual property management system, GlobalWafers has always been aggressively promoting patent arrangements for various critical technology fields. The number of patent applications in 2017 is 206, with 97 applications receiving certificates accordingly. Currently, accumulated global patent applications has reached 1,149 applications, with as high as 819 applications approved.

In addition to dedication to enhancing manufacturing process capability, GlobalWafers also keeps environmental protection and energy saving in mind all the time. Under promotion from government policy, GlobalWafers aggressively promotes "Circular Economy" concept proposed by U.S. economist Kenneth Boulding, and works hard to lower dependence on traditional linear economy and reduce generation of wastes in order to achieve sustainable development for earth. "Circular Economy" is an excellent solution to the earth's sustainability. It is also an opportunity for enterprise transformation. Furthermore, numerous experts and scholars consider that innovation is the core of circular economy, and an industry will only possess development potential when it is already equipped with conditions to develop circular economy. Going forward, it is necessary to continue to enhance our own technology advantages. In this time of urgent sustainable and environmental issues, we shall continue to develop green design and exert our efforts based on the attitude to pursue low energy consumption and zero wastes. 2017 is a busy and yet fruitful year. GlobalWafers has completed introduction and verification of ISO 50001 energy management system, promotion of clean production assessment plan, promotion of water footprint inspection and verification and promotion of organizational carbon inspection and verification. We're also engaged in promoting various energy saving projects under collaboration with BenQ Energy and industry/academic collaboration with Tsing Hua University. For 2018, we shall continue to introduce green building improvement and application and introduce MFCA material flow cost analysis concept under expectations to achieve dual benefits of maximized resource utilization and minimized environmental impact, and to realize circular economy concept accordingly.

During its pursuit of growth in operation performance, GlobalWafers emphasizes more on employee value. The company provides employees with quality work environment as well as comprehensive compensation system and diversified occupational training. It establishes open communication channel and fair promotion system, sets up broad and humane occupational stage in order to create, at full thrust, a harmonious and happy workplace. As for social caring, the company encourages employees to exert their love affection, continues to care for disadvantaged groups, participates aggressively in blood-donation activities, fulfills dreams for remote regions, sponsors various social charity activities of disadvantaged children and charity groups, and realizes corporate civil concept of "What comes from the society goes to society."

Looking into 2018, global demands for 12" and 8" silicon wafer market continue to be strong. Since its merger with Topsil and SunEdison Semiconductor in 2016, GlobalWafers has become the third largest wafer supplier in the world. Currently, the company has comprehensive product portfolio and high-tech talents with strong R&D energy. Going forward, the company shall aggressively embark on removing bottleneck and march towards high efficient crystal growth technology, large size advanced manufacturing process, development for heavy-doped crystal growth and power semiconductor epitaxy technology. The company shall provide more advanced and energy-saving semiconductor materials under the expectation to obtain global leading position in the field of wafer manufacturing, create again performance peak and feedback to customer, shareholder and related stakeholder accordingly for the purpose of realizing the goal of sustainable development.



Chairman & CEO, GlobalWafers

徐秀蘭



## Company Profile

### Introduction of Company

GlobalWafers Co., Ltd. (hereinafter referred to as "GlobalWafers") was established on October 18th, 2011. With headquarters located in Hsinchu, Taiwan, the company manufactures 3"~12" silicon wafers. Its products are widely used in logic, memory, energy management, automobile, information technology industry and micromechanical system ("MEMS"). It is the world's third largest semiconductor silicon wafer manufacturer and the biggest non-Japan semiconductor silicon wafer manufacturer, with over 17% of global market share. GlobalWafers previously was the semiconductor department of the Sino-American Silicon Products Incorporation. It was separated from the Group and became independent in 2011.

GlobalWafers successfully merged with Denmark Topsil Semiconductor Materials A/S (hereinafter referred to as "Topsil") and SunEdison Semiconductor Limited (hereinafter referred to as "SunEdison") in 2016 and became the world's third largest wafer supplier, with product fields successfully expanding from CZ into large size wafer, polished silicon wafer, insulated silicon wafer and FZ semiconductor wafer. It also combines GlobalWafers' top operation model and market competitiveness with SunEdison's global operation sites and product development capability and establishes more comprehensive product lines. It has a total of 16 operation and production sites spreading across 10 countries in Asia, Europe and U.S. GlobalWafers has a preeminent comprehensive product portfolio. It shall speed up enhancement on development energy for new technology and new products, and continue to focus on serving customers in order to create more values for customer, shareholder and employee.

# Product Portfolio



|                                   | Wafer Diameter (Inches) |    |    |     | End-applications  |   |  |  |  |
|-----------------------------------|-------------------------|----|----|-----|---|---|--|--|--|
|                                   | <6"                     | 6" | 8" | 12" |   |   |  |  |  |
| Annealed Wafer                    |                         |    | ✓  | ✓   | <br>Memory               | <br>LCD Driver           | <br>Analog/Logic IC   |  |  |
| EPI Wafer (Epitaxial)             | ✓                       | ✓  | ✓  | ✓   | <br>Power Device         | <br>Automobile           | <br>MPU/MCU           | <br>CMOS Image Sensor |  |
| Polished Wafer                    | ✓                       | ✓  | ✓  | ✓   | <br>Communication        | <br>Power Device         | <br>Analog/Logic IC   | <br>Memory            |  |
| Diffused Wafer                    | ✓                       | ✓  |    |     | <br>Automobile           | <br>Electricity          | <br>Aerospace         |  |  |
| Non-polished Wafer                | ✓                       | ✓  |    |     | <br>Discrete Device      |   |  |  |  |
| FZ Wafer (Float Zone)             | ✓                       | ✓  | ✓  |     | <br>Medical Equipment   | <br>Wind Turbine        | <br>High Speed Rail  | <br>Automobile       |  |
| SOI Wafer (Silicon on Insulator)  | ✓                       | ✓  | ✓  | ✓   | <br>High Voltage Power | <br>MEMS Sensor        | <br>CMOS            | <br>RF Device       | <br>Photonics |
| SiC Wafer (Silicon Carbide)       | ✓                       | ✓  |    |     | <br>Automobile         | <br>High Voltage Power | <br>High Speed Rail | <br>Wind Turbine    |  |
| GaN/Si, GaN/SiC (Gallium Nitride) | ✓                       | ✓  | ✓  |     | <br>Solar Inverter     | <br>Power Supplies     | <br>RF Power        |  |  |

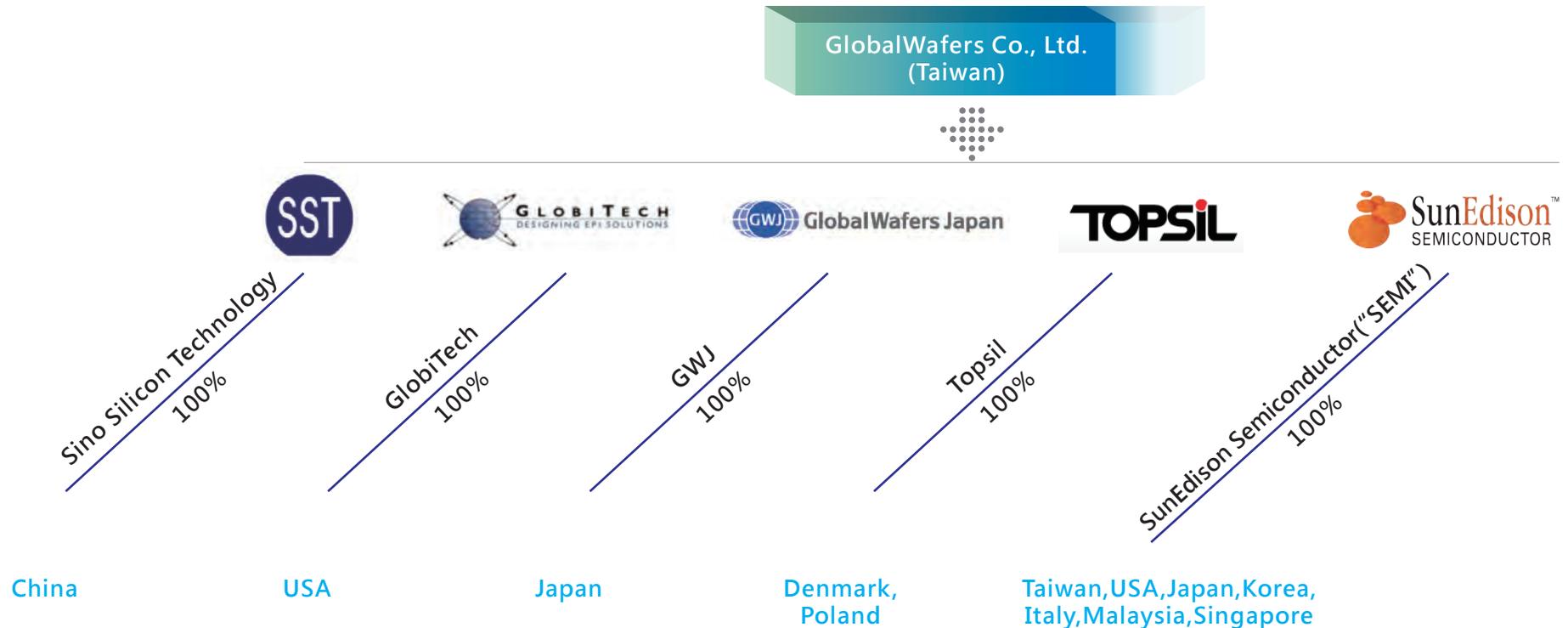
GlobalWafers utilizes industry strategic alliance and resource integrated benefits from external investments to enhance its operation performance, and aggressively marches towards a more stable and stronger competitive position. The company expands its business territory based on its group operation model which maximizes shareholder's equity, and aggressively increases its global market share in order to obtain global leading position in the field of wafer manufacturing.

## GlobalWafers Basic Information

|   |   |  |   |
|---|---|--|---|
| <b>Company Full Name</b><br>GlobalWafers Co., Ltd.                 | <b>Headquarters</b><br>No. 8. Industrial East Road 2, Science-Based Industrial Park, Hsinchu  | <b>Chairman &amp; CEO</b><br>Hsu, Hsiu-Lan    | <b>General Manager</b><br>Mark Lynn England  |
| <b>Date of Establishment</b><br>October 18 <sup>th</sup> , 2011    | <b>Capital Amount</b><br>NT\$4.373 billion    | <b>Countries of Operations</b><br>Taiwan, China, Japan, South Korea, Malaysia, U.S., Italy, Poland, Denmark, Singapore  |   |
| <b>Main Products &amp; Technologies</b><br>3" ~ 12" Silicon Wafer  | <b>Number of Employees</b><br>Taiwan: 1,584 Employees<br>Offshore: 5,321 Employees            | Number of employees are based on statistics dated December 31 <sup>st</sup> , 2017.  |   |

## Operation & Production Sites

GlobalWafers established its headquarters in Hsinchu, Taiwan. Its global footprints include countries of Taiwan, China, Japan, South Korea, Malaysia, U.S., Italy, Poland, Denmark and Singapore. Currently, its products are mainly sold in regions of Asia, Europe and America. GlobalWafers has always been dedicated to enhancing efficiency for power device key materials. Specifically, the company work without reservation to develop SiC wafer technology hoping to make contribution to environmental protection through improvement on energy saving and carbon reduction.





#### 1 Taiwan

GlobalWafers Headquarters  
Taisil Electronic Materials Corp.



#### 2 Mainland China

KunShan Sino Silicon  
Technology Co., Ltd.



#### 3 Japan

GlobalWafers Japan Co. Ltd.  
MEMC Japan Ltd.



#### 4 South Korea

MEMC Korea Company



#### 5 Malaysia

MEMC Electronic Materials,  
Sdn Bhd.



#### 6 U.S.

GlobiTech Incorporated  
SunEdison Semiconductor, LLC



#### 7 Italy

MEMC Electronic Materials,  
SpA



#### 8 Poland

Topsil Semiconductors  
sp. z o.o



#### 9 Denmark

Topsil GlobalWafers A/S



#### 10 Singapore

SunEdison Semiconductor  
Limited

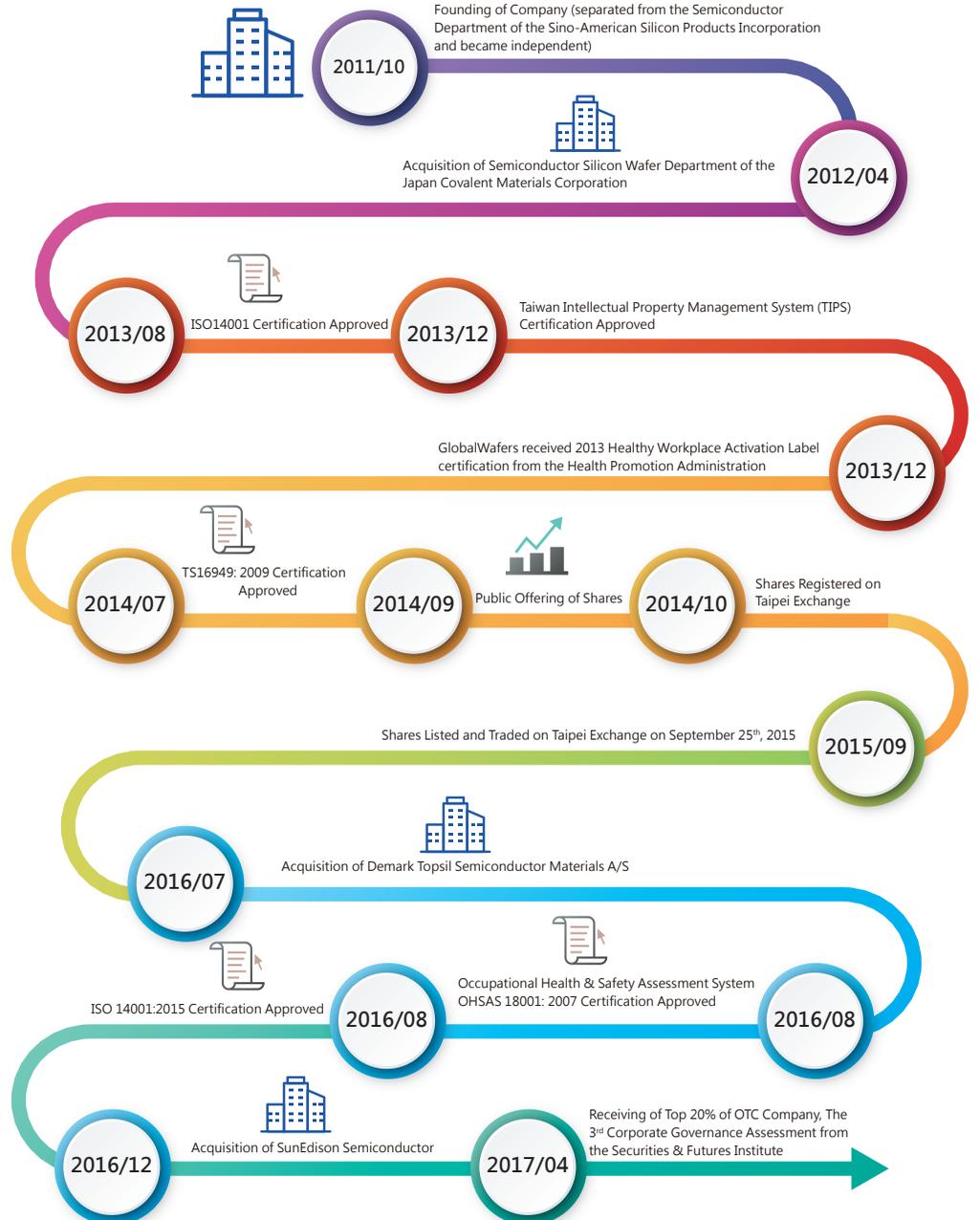
Note : 1.SunEdison Semiconductor Limited has been renamed to GlobalWafers Singapore Pte. Ltd. in Mar 2018.  
2.SunEdison Semiconductor LLC has been renamed to MEMC LLC in Mar 2018.

## Participation in External Association

| Association/Organization   | Participant | Member | Member   |
|--|-------------|--------|----------|
| Taiwan Semiconductor Industry Association (TSIA)                 |             | ●      |          |
| SEMI   |             | ●      |          |
| SEMI SMG   | ●           | ●      | Chairman |
| Japan Society of Newer Metals                                    | ●           | ●      | Chairman |
| Federation of Malaysian Manufacturers (FMM)                      |             | ●      |          |
| Malaysian International Chamber of Commerce and Industry (MICCI) |             | ●      |          |
| Local Industrial Association                                     |             | ●      |          |
| The Korea Chamber of Commerce & Industry                         |             | ●      |          |
| Korea Environmental Preservation Association                     |             | ●      |          |
| Korea Industrial Safety Association                              |             | ●      |          |
| Korea Chemicals Management Association                           |             | ●      |          |
| Korea Fire Safety Association                                    |             | ●      |          |
| Certified Hazardous Materials Manager CHMM                       |             | ●      |          |
| High Power Device application and Research Alliance              |             | ●      |          |
| Chinese Professional Management Association                      |             | ●      |          |
| Hsinchu County Industrial Association                            |             | ●      |          |
| Allied Association for Science Park Industries                   |             | ●      |          |
| Institute of Internal Auditors (IIA)-Taiwan Chapter              |             | ●      |          |
| Computer Audit Association                                       |             | ●      |          |

## Company Chronicle of Events

### Development History



# Award Records

2011/12



Receiving of the Chinese Professional Management Association's 29th "National Manager Excellence Award – Excellent Taiwanese Enterprise General Manager" award.

2012/09



Parent company Sino-American Silicon Products Incorporation's merger with Japan Covalent Material has received the 2012 Most Iconic Merger Jin-Shin Award from Taiwan M&A and Private Equity Council.

2013/12



Receiving of Badge of Accredited Healthy Workplace.

2016/06



Receiving of Energy Saving Manufacturer Award from the Bureau of Energy, Ministry of Economic Affairs.

2017



Receiving of Excellent Collaboration Supplier Award from Shanghai Hua Hong Semiconductor Limited (HHGrace).



Receiving of the Annual Best Supplier Award from ON Semiconductor Preprocessing Materials.



Deputy General Manager Lee, Chong-Wei received Preeminence Performance Appreciation Certificate from SEMI Association.



Acquisition of SunEdison Semiconductor has received the Annual Most Iconic M&As Award and the Best Multinational Acquisition Award from the Taiwan M&A and Private Equity Council.



# 1

## Stakeholder Engagement and Analysis

- 1.1 Identification of Stakeholders
- 1.2 Communication with and Response to Stakeholders
- 1.3 Verification and Analysis of Material Issues



## 1.1 Identification of Stakeholders

Identification of and communication with stakeholders are the core fundamentals for corporate social responsibility. Under compliance with the company's operation characteristics and through cross department meeting discussions, GlobalWafers identifies its stakeholders which include employee, customer, shareholder (investor), supplier (contractor), government institute, media and so on.



## 1.2 Communication with and Response to Stakeholders

GlobalWafers has already established various types of communication channels for daily businesses to maintain interaction with stakeholders. Meanwhile, external communication mailbox and customer service hotlines have been established on official website in order to understand opinions coming from major stakeholders of investor, customer, media, and so on who are related to our operation activities.

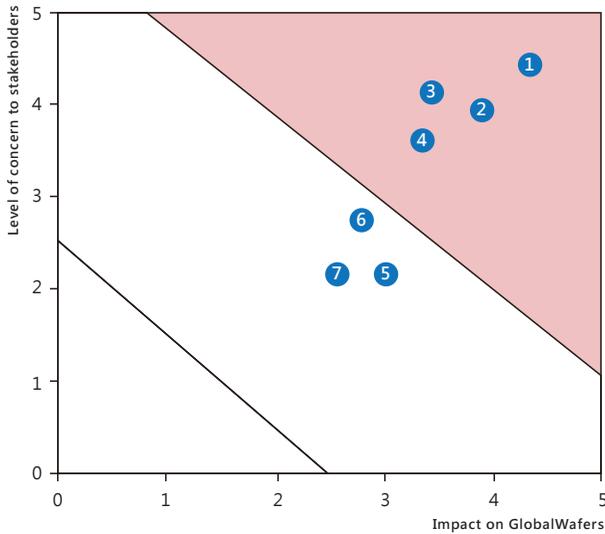
| Major Stakeholders  | Meaning to GlobalWafers  | Communication Channel  | Communication Frequency   | Concerned Issue  |
|---|--|--|---|--|
| <br>Customer                 | Major Source of Company Revenue  | Business Meeting   | Irregular   | ·Product Price<br>·Customer Service<br>·Product Quality<br>·Product Hazardous<br>·Material Management<br>·Business Continuity Plan   |
|   |  | Annual Customer Satisfaction Survey  | Once Yearly   |  |
|   |  | Customer Audit   | Irregular   |  |
|   |  | Report or Complaint via Telephone or E-mail Box  | Irregular   |  |
| <br>Employee                 | Employees are the company's most valuable assets. Both parties can only grow in a synchronized manner when employees are taken cares of in a good way                          | Internal Website and E-mail  | Irregular   | ·Occupation Safety<br>·Human Rights<br>·Emergency Response<br>·Employment Opportunity<br>·Equal Pay Among Genders  |
|   |  | Company Bulletin   | Irregular   |  |
|   |  | Labor Management Meeting (Taiwan Region)   | Four Times Yearly   |  |
|   |  | Various Reporting Mailboxes or Hotlines  | Irregular   |  |
|   |  | Performance Review Interview   | Once Yearly   |  |
|   |  | Various Organization Meetings  | Irregular   |  |
| <br>Shareholder / Investor | All shareholders are the company's investors. All information to be disclosed shall be processed under the principle of equality   | Shareholders' Meeting, Institutional Investor Conference, Domestic Investment Institute Seminars and Face-to-Face Communication Meetings | A total of 15 Institutional Investor Conferences were held in 2017. | ·Sound Finance<br>·Moral Integrity<br>·Risk & Crisis Management<br>·Financial Performance<br>·Operation Strategy & Financial Goal<br>·Regulation Compliance<br>·Business Continuity Plan   |
|   |  | Company Annual Report  | Once Yearly   |  |
|   |  | Company Official Website, Press Release and Announcement of Message in the Market Observation Post System                                | Irregular   |  |
|   |  | Collection of Message & Response via Telephone & E-mail  | Irregular   |  |
| <br>Supplier / Contractor  | Their relationship with the company is a partnership relationship. Philosophy must be ensured to be the same in order to provide services matching the company's requirements. | Business Meeting   | Irregular   | ·Moral Integrity<br>·Operation Strategy & Financial Goal<br>·Source Reduction  |
|   |  | On-Site Audit  | Irregular   |  |
|   |  | Collection of Message & Response via Telephone & E-mail  | Irregular   |  |
| <br>Government Institute   | Good communication relationship needs to be maintained in order to present the company's determination for regulation compliance   | Sending & Receiving Official Letters, Meetings (Public Hearing or Illustration Meeting)  | Irregular   | ·Water Resource Management<br>·Water Pollution Prevention<br>·Management of Chemicals<br>·Waste Management<br>·Pollution Prevention<br>·Source Reduction<br>·Regulation Compliance (Labor, Economy, Labor Safety, Environmental Protection, Products)<br>·Greenhouse Gas Reduction |
|   |  | Communication via Organization or Association  | Irregular   |  |
| <br>Media                  | Establish media communication channel in order to provide accurate, fair and objective industry and enterprise related information from time to time                           | Press Release<br>The company accepts interview by media reporter and provides industry information from time to time                     | Average 2~3 Press Releases per Quarter                              | ·Greenhouse Gas Reduction<br>·Financial Performance<br>·Regulation Compliance  |

## 1.3 Verification and Analysis of Material Issues

GlobalWafers is open to diversified comments and takes references from the Sustainability Reporting Guidelines, G4 of the Global Reporting Initiative (GRI). In accordance with principles of the defined report contents, for stakeholder tolerance: GlobalWafers has already verified stakeholders and explained how to respond to their reasonable expectation and interests. For sustainability context: This discloses how GlobalWafers makes improvement or reduces destruction to local, regional and global economy, environment, society circumstances, development and trend. As for materiality: This reflects GlobalWafers' obvious impact to economy, environment and society as well as its assessments and strategies which have substantially influenced stakeholders. With respect to integrity: Material themes and parameters included in the report are sufficient to reflect GlobalWafers' obvious impact to economy, environment and society, and this enables stakeholders to evaluate GlobalWafers' performance during the period for this report.

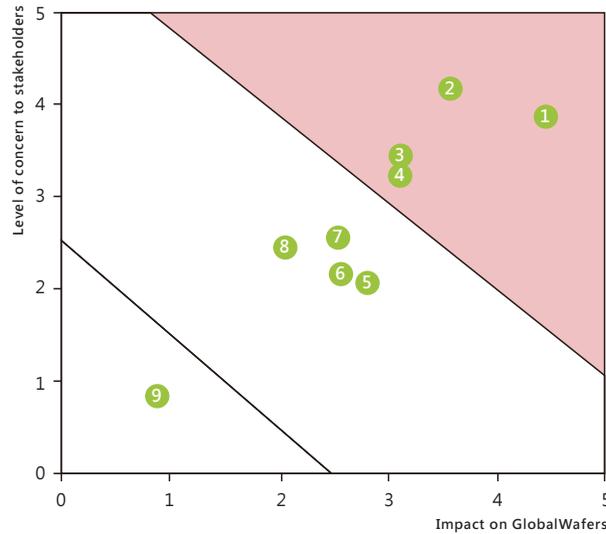
With respect to principles for defining report quality, accuracy: report information is comprehensive, accurate and detailed and this enables stakeholders to evaluate GlobalWafers' performance. Balance: report information reflects GlobalWafers' positive and negative performances and this allows all parties to reach a reasonable assessment over GlobalWafers' overall performance. Clarity: GlobalWafers' measure of presenting information allows easy understanding and access for stakeholders who utilize such information. Comparability: GlobalWafers utilizes consistent standards to screen, organize and report information. Measures utilized to present information allows stakeholders to analyze GlobalWafers' long term performance as well as to conduct comparison analysis with other organizations. Reliability: Information and schedule utilized by GlobalWafers to compile report are collected, recorded, organized, analyzed and disclosed in measures which can be reviewed and which can establish information quality and materiality. Timeliness: GlobalWafers makes report regularly and provides timely information for stakeholders to make decisions accordingly.

With respect to GlobalWafers' verification of material issues, issues concerned by employee, client, shareholder (investor), supplier (contractor), government institute and media are collected through interaction experience and communication records conducted by respective subsidiaries' general manager's office, marketing department, purchasing department, administration department and related external units with stakeholders. Additionally, through certain corporate sustainable development committee members and internal meetings, commissioners verify importance of various concerned issues under two perspectives of "Degree of Stakeholder's Concern" and "Impact to GlobalWafers." A materiality matrix graph with three perspectives of economy, environment and society is drawn accordingly, and issues with high degree of concern and high impact from respective perspective are listed as material issues. We will disclose management guidelines in this report. As for other issues not reaching material impact, they will be disclosed in a summarized manner, or they won't be disclosed in this report.



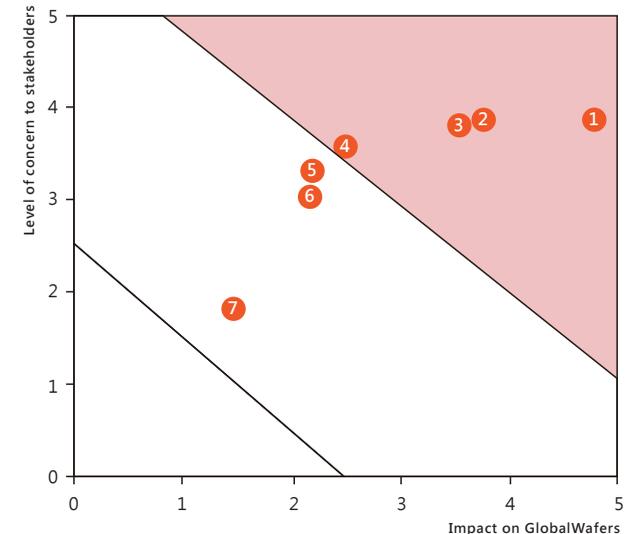
**Economic**

1. Compliance
2. Financial Performance
3. Operation Strategy & Financial Goal
4. Sound Finance
5. Risk & Crisis Management
6. Business Continuity Plan (BCP)
7. Moral Integrity



**Environmental**

1. Source Reduction
2. Pollution Prevention
3. Greenhouse Gas Reduction
4. Waste Management
5. Product hazardous substance management
6. Water Pollution Prevention
7. Air Pollution Prevention
8. Water Resource Management
9. Management of Chemicals



**Social**

1. Occupation Safety and Emergency Response
2. Product Quality
3. Customer Service
4. Human Rights
5. Equal Opportunity, Equal Remuneration for Women and Men
6. Employment Opportunity
7. Product Price



Material Aspects and Boundaries

| Material Issues                   | Aspect  | GRI G4   | Internal boundaries |                   |                   | External boundaries |   |
|-----------------------------------|---|--|---------------------|-------------------|-------------------|---------------------|---|
|                                   |   |  | GlobalWafers        | TAISIL ELECTRONIC | Overseas branches | Suppliers           |   |
| <p>Economic</p>                   | Compliance  | Social Regulation Compliance                     | SO8                 | V                 | V                 | V                   |   |
|                                   |   | Product Liability Regulation Compliance          | PR9                 | V                 | V                 | V                   |   |
|                                   |   | Environmental Regulation Compliance              | EN29                | V                 | V                 | V                   |   |
|                                   | Financial Performance (Including Operation Strategy & Financial Goal) | Economic Performance                             | EC1                 | V                 | V                 | V                   |   |
|                                   | Sound Finance   | --   | --                  | V                 | V                 | V                   |   |
| <p>Environmental</p>              | Source Reduction  | Materials  | EN2                 | V                 | V                 | V                   |   |
|                                   |   | Energy   | EN6                 | V                 | V                 | V                   |   |
|                                   |   | Water  | EN8 · EN10          | V                 | V                 | V                   |   |
|                                   | Pollution Prevention  | Products and Services                            | EN27                | V                 | V                 | V                   |   |
|                                   | Greenhouse Gas Reduction  | Emissions  | EN15 · EN16         | V                 | V                 | V                   |   |
|                                   |   |  | EN21                | V                 | V                 | V                   |   |
| Waste Management                  | Effluents and Waste   | EN23~EN25  | V                   | V                 | V                 |                     |   |
| <p>Social</p>                     | Occupation Safety and Emergency Response                              | Occupational Health and Safety                   | LA5 · LA7           | V                 | V                 | V                   |   |
|                                   |   |  | LA6                 | V                 | V                 | V                   | V |
|                                   | Product Quality   | --   | --                  | V                 | V                 | V                   |   |
|                                   | Customer Service  | Product and Service Labeling                     | PR5                 | V                 | V                 | V                   |   |
|                                   | Human Rights  | Non-discrimination                               | HR3                 | V                 | V                 | V                   |   |
|                                   |   | Freedom of Association and Collective Bargaining | HR4                 | V                 | V                 | V                   |   |
|                                   |   | Child Labor                                      | HR5                 | V                 | V                 | V                   |   |
|                                   |   | Forced or Compulsory Labor                       | HR6                 | V                 | V                 | V                   |   |
| Human Rights Grievance Mechanisms |   | HR12   | V                   | V                 | V                 |                     |   |

Note:

1. This is the first publication of this report. Due to incomplete collection of current information for some operation locations, performances for some operation locations encompassed in the material consideration have failed to be disclosed in the report for this year. We shall start to establish data collection mechanism this year. It is expected that performance statistics disclosed in the future 3 years include all operation locations encompassed in the material consideration.

2. Internal Boundary:

- Taiwan: GlobalWafers Co., Ltd. Headquarters, TAISIL ELECTRONIC MATERIALS CORP.
- Mainland China: Kunshan Sino Silicon Technology Co., Ltd.
- Japan: GlobalWafers Japan Co. Ltd., MEMC Japan Ltd.
- South Korea: MEMC Korea Company
- Malaysia: MEMC Electronic Materials, Sdn Bhd.
- U.S.A.: GlobiTech Incorporated, SunEdison Semiconductor, LLC
- Italy: MEMC Electronic Materials, SpA
- Poland: Topsil Semiconductors sp. z o.o
- Denmark: Topsil GlobalWafers A/S
- Singapore: SunEdison Semiconductor Limited



# 2

## Governance & Operation

- 2.1 Sustainable Organization
- 2.2 Corporate Governance
- 2.3 Operation Performance
- 2.4 Risk Management



# Material Issues

Regulation Compliance, Operation Strategy & Financial Goal, Financial Integrity, Financial Performance



# Meaning to GlobalWafers

With its concepts of "sincerity," "professionalism," "team" and "innovation," GlobalWafers emphasizes the principle of sincerity and activates individual's innovation power with the considerate, focused, aggressive and professional spirit. The company's unique culture is presented through team consensus as well as continuous innovation of technology and management. Corporate social responsibility is implemented and the company's unique values are created aggressively in order to obtain trusts from investor, client and employee for the purpose of marching towards the goal of sustainable operation.



# Management Mechanism



## Policy

- Sustainable Growth.
- Concentrate resources to enhance operation performance of newly integrated business entity and minimize costs in order to obtain maximum profits.
- With existing stable and excellent operation performance as basis and through measures of strategic alliance or mergers or acquisition, the company's operation scale has been expanded in a stable and healthy manner.



## Commitment

The Group's high-end leading technology is utilized to develop chips matching next generation product utilization. Development shall move towards large size advanced manufacturing process, heavily-doped crystal growth and power semiconductor epitaxy technology, as well as the world's largest silicon wafer supplier with the most complete products.



## Goal

- Speedy integration of technology resources from newly merged enterprises; Deepened multi-national technology integration platform; Comprehensive enhancement of quality and customer satisfaction.
- Major theme of internal operation quality adjustment; Optimization of respective business operation quality and efficiency; Continued enhancement of operation performance.
- Continued optimization of respective production site's production efficiency; Production capacity maximization under existing equipment basis; Satisfaction of customer order needs to the most possible extent.



- Resource-strengthened operation performance for newly integrated business entity; Optimization of multi-territory integration on production technology, procurement, production capacity and marketing for 16 operation production sites across 10 countries in the world; Minimization of costs.
- Continued optimization of production efficiency for respective production sites; Maximization of production capacity under existing equipment basis; Enhancement of production adjustment flexibility to obtain competitiveness of the highest economies of scale.
- Aggressive development of niche type applied advance manufacturing process; Speedy enhancement of development energy for new technology and new products; Strengthened development on patents.



- Combination of all technologies, resources and various possibilities within the group, including elimination of bottlenecks and maximization of production capacity for respective factories, deepening of multi-national technology integration platform as well as full-scale improvement of quality and customer satisfaction for the purpose of meeting future market strong demands.
- Development shall move towards large size advanced manufacturing process, heavily-doped crystal growth and power semi-conductor epitaxy technology, as well as the world's largest silicon wafer supplier with the most complete products.
- Establishment of excellent corporate governance mechanism to obtain the goal of operation sustainable growth.





## System

### External System

Compliance with Company Act, Securities and Exchange Act, Business Mergers and Acquisitions Act, Guidelines for On-Line Filing of Public Information by Public Companies, Fair Trade Act and Labor Standards Act.

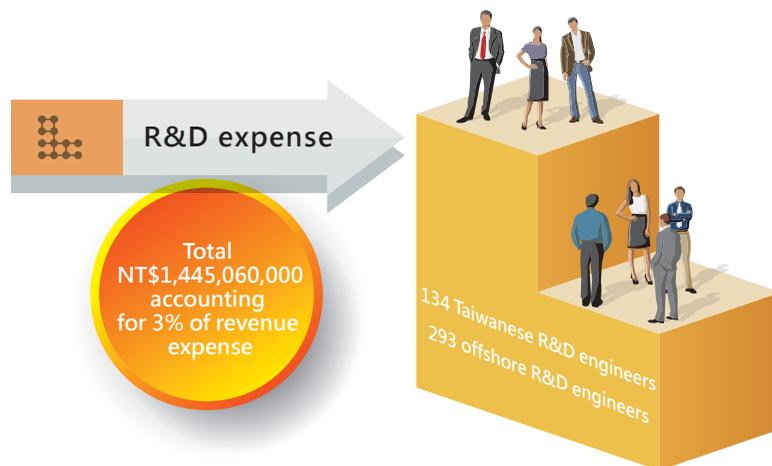
### Internal System

Establishment of internal control system, Articles of Incorporation, Processing Procedures for Asset Acquisition or Disposal, Endorsement and Guarantee Management Guidelines, Operation Procedures for Capital Loan to Others, Processing Procedures for Engagement in Derivative Product Transaction, Guidelines for Corporate Governance Practice, Principles for Corporate Social Responsibility Practice, Operation Integrity Guidelines, Risk Management Guidelines, Moral Behavior Principles, Reporting Illegal and Immoral or Dishonest Behavior Cases Processing Guidelines, Exercising of Rights and Participation in Resolution Guidelines for Legal Person Shareholders with Control Capability, Operation Procedures for Internal Material Information, Management Procedures for Insider Trading Prevention, Operation Rules for Reporting Public Information, Debt Commitment and Contingent Matter Management Rules, Transaction Operation Procedures for Specific Company of Group Enterprise and Stakeholders, Operation Guidelines for Financial Business Supervision and Management Among Affiliated Enterprises, Long/Short Term Investment Management Guidelines.



## Resource

- A total of NT\$1,445,060 thousand dollars were invested in R&D expense in 2017, accounting for 3% of revenue expense.
- The company has a strong professional R&D team which has as many as 134 Taiwanese R&D engineers and 293 offshore engineers.



## Concrete Action

- Annual operation plan is launched with respective departments' drafting of Key Performance Indicator (KPI) for the purpose of enhancing the company's internal operation management and control.
- Operation meetings and marketing meetings are held regularly to review goal achievement status as well as to propose responding improvement strategy.
- The company established improvement proposal encouragement system and is dedicated to manufacturing process research and product quality improvement.
- After reviewing risk factors they may face, respective departments established appropriate assessment methods. Risk assessment includes risk analysis and assessment.
- The company implements legal mechanism and internal audit and realizes its determination for sustainable development.

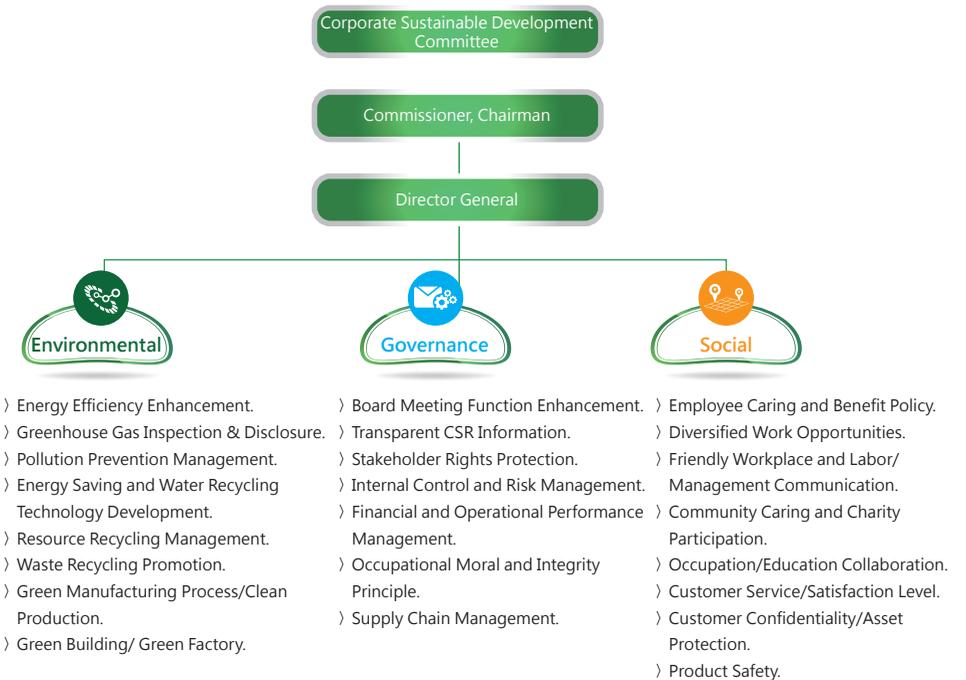
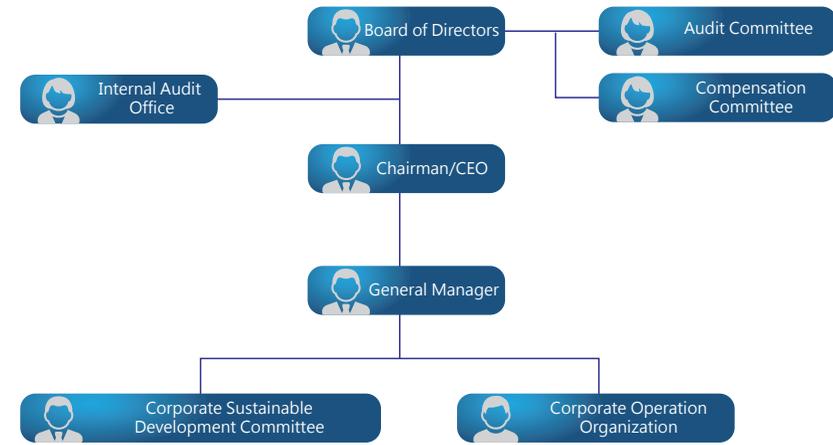
## 2017 Key Achievement

- 1 Consolidated revenue reaches NT\$46.213 billion dollars with an annual growth rate of 151% which is a history high again.
- 2 Consolidated operation net profit is NT\$7.414 billion dollars, a dramatic 4 times plus growth compared with the one for previous year.
- 3 Earnings per share is NT\$12.68 dollars, a dramatic growth over NT\$2.54 dollars for the previous year.
- 4 Shareholder' s equity is NT\$34.054 billion dollars, a growth of more than one time over the one for the previous year.
- 5 Consolidated debt ratio dropped from 74% to 52%.
- 6 Total market value at the end of 2017 has increased to NT\$173.8 billion dollars from NT\$42.5 billion dollars in 2016.
- 7 A total of 97 patent certificates were obtained globally.
- 8 Excellent performance of "Top 20% Over-The-Counter Enterprises – Listed and Over-The-Counter Company Governance Assessment."
- 9 Honorary receiving of the Excellent Collaboration Supplier Award from Shanghai Huahong Grace Semiconductor Manufacturing Corporation (HHGrace).
- 10 Honorary receiving of the best supplier award for ON Semiconductor pre-processing material.
- 11 Merger with SunEdison Semiconductor has received annual most iconic mergers and acquisitions award and the best multi-national mergers and acquisitions award from the Taiwan M&A and Private Equity Council.

## 2.1 Sustainable Organization

For the purpose of enhancing and implementing sustainable governance, GlobalWafers Corporate Sustainable Development Committee was established in 2017. Chairman of the Board assumes the post of Commissioner and leads the company's operation organization and corporate sustainable development committee in planning for direction and goal for the whole company's corporate social responsibility and sustainable development. One director general is established to be responsible for the committee's related administration matters. Internal audit is established to be responsible for supervision. Meanwhile, Audit Committee and Compensation Committee are established to enhance the Board Meeting's duties and capabilities while strengthening corporate governance.

GlobalWafers declares the highest governance level's determination to promote corporate sustainable development to its stakeholders through "Corporate Social Responsibility Policy" and "Guidelines for Corporate Social Responsibility Practices" which are approved by the Board of Directors' Meeting. Through its own influence, the company hopes to expand the industry's sense of participation and all parties can work together for a sustainable society. With respect to implementation, to fulfill promotion for ESG (three perspectives of Environmental, Social and Governance) activities, three teams of environment, governance and society have been established under the Corporate Sustainable Development Committee. These teams are composed of respective professional commissioners and heads of respective units. They are responsible for drafting strategy and management guidelines as well as conducting cross-department integration and promotion implementation on related issues. For their various corresponding stakeholders, each of these teams understands, through different communication and negotiation channels, their stakeholder's concerned matters and expectations on GlobalWafers in the perspectives of corporate governance, environment and society. Through discussions and resolutions from the Corporate Sustainable Development Committee, going forward the commissioner is expected to review committee's performance and goal achievement status before reporting in the Board of Directors' Meeting.

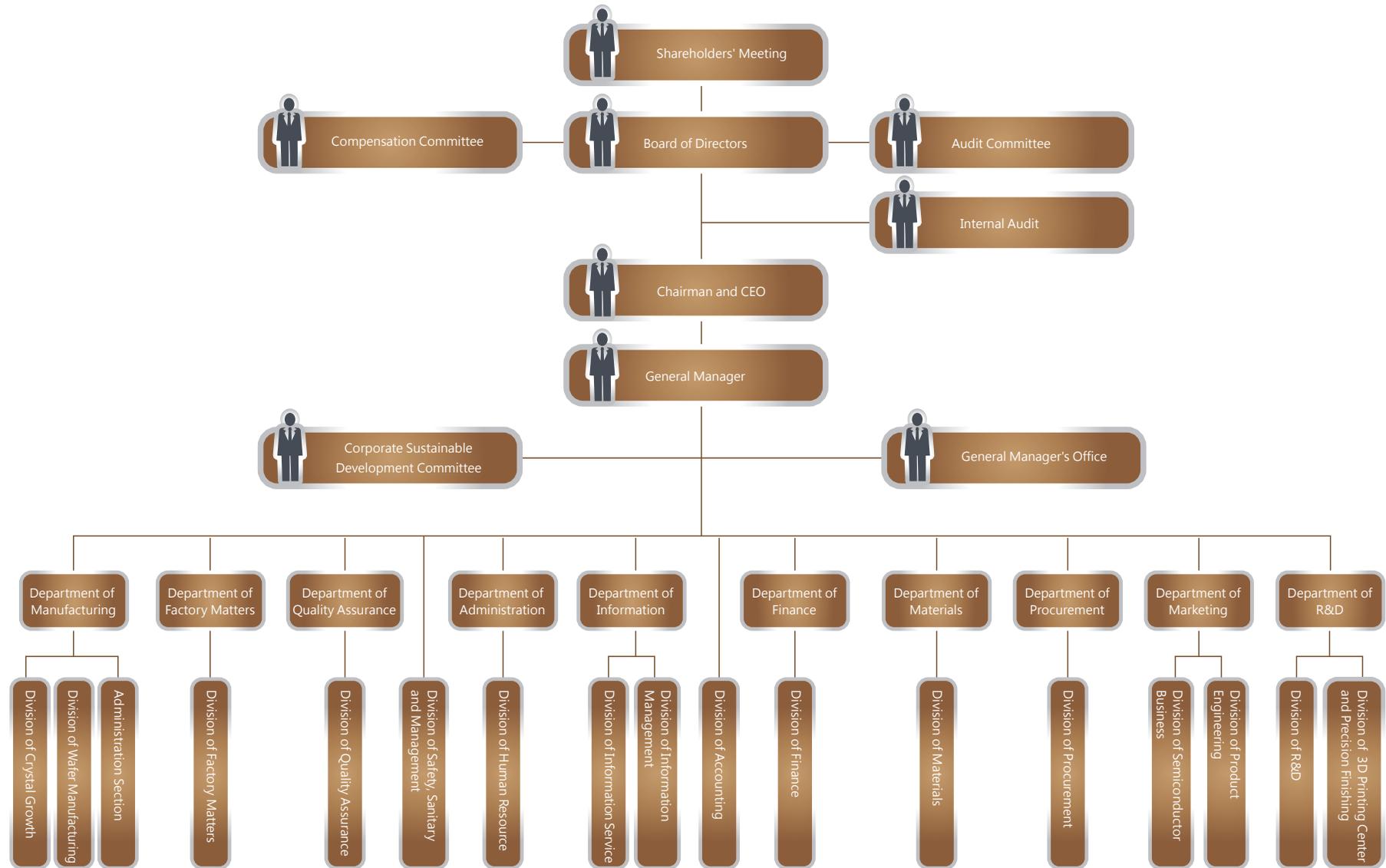


## 2.2 Corporate Governance

With the "integrity" corporate culture, GlogalWafers fully realizes its operation concepts of integrity and honesty, fairness and transparency and social responsibility. Through various moral guidelines and policies, good corporate governance system is established to fulfill the goal of sustainable operation.

### 2.2.1 Governance Structure

GlobalWafers Organization Chart



## Senior Operation Management



GlobalWafers insists on integrity principle and emphasizes on shareholder's equity. It also believes an efficient Board of Directors' Meeting is the basis for a good corporate governance. GlobalWafers establishes an efficient corporate governance structure. The Board of Directors' Meeting authorizes the establishment of Audit Committee and Compensation Committee to assist the Board of Directors' Meeting in performing its supervision duty. Organization charters for respective committees have been approved by the Board of Directors' Meeting which has been reported of their activities and resolutions on a regular basis. GlobalWafers' Audit Committee and Compensation Committee are completely composed of independent directors.

GlobalWafers establishes a comprehensive corporate governance structure and continues to improve through internal control and internal audit in order to fully realize corporate governance. Going forward, GlobalWafers shall still insist on integrity principle and continue to exhibit its corporate governance blueprint, improve company quality in order to enhance operation performance and fulfill corporate social responsibility while marching aggressively towards a benchmark enterprise.

## Summary of Corporate Governance Organization



Three of the seven directors are independent directors.

Audit Committee and Compensation Committee are both composed of independent directors.

Organization charters for respective committees are disclosed on the company's website.

The Board of Directors' Meeting conducts annual self-assessment and discloses assessment results on the company's website.

## Board of Directors

For the purpose of establishing a good corporate governance system for corporate governance, solidifying supervision functions and enhancing management functionality, members of Board of Directors' Meeting are composed by 7 seats of knowledgeable and experienced directors who are equipped with expertise in the fields of professional technology, operation management, finance and strategy management. Members of Board of Directors' Meeting have a term of 3 years and they may seek for re-election. Meeting has been held at least once quarterly. A 6-hour learning session each year is provided for directors in order to enhance company director's professional knowledge and legal literacy. Duties for the Board of Directors' Meeting are to supervise and encourage the company's compliance with laws, provide management team strategy instruction, assess management team's operation performance, facilitate the company's achievement of operation goals as well as to enhance operation performance.

GlobalWafers Board of Directors' Meeting held a total of 9 meetings in 2017 with an average attendance rate of 94%. Academic/backgrounds experiences as well as attendances for Board of Directors' Meeting related members and organization are illustrated in the following table:

## Major Academic/Background Experience and Attendance for Board of Directors' Meeting Members in 2017

| Job Title            | Name   | Gender | Major Academic/Background Experience  | Times of Actual Attendance | Times of Proxy Attendance | Actual Attendance Rate (%) | Note |
|----------------------|--|--------|---|----------------------------|---------------------------|----------------------------|------|
| Chairman             | Hsu, Xiu-Lan   | Female | MA, Computer Science, University of Illinois/Executive VP, Sino-American Silicon Product Inc.   | 9                          | 0                         | 100%                       |      |
| Director             | Representative of Sino-American Silicon Product Inc.:<br>Lu, Ming-Guang  | Male   | Entrepreneur Study Programs, Graduate School of Business Administration, Chengchi University/GM, Lite-On Semiconductor Corp./GM, Vishay Lite-On Power Semiconductor Corp./VGM,  | 7                          | 2                         | 78%                        |      |
| Director             | Representative of Sino-American Silicon Product Inc.:<br>Yao, Dang-Liang | Male   | Master, Graduate School of Business Administration, Tamkang University/ Associate GM, Department of Manufacturing, Vishay Lite-On Power Semiconductor Corp. / GM, Sino-American Silicon Product Inc.  | 8                          | 1                         | 89%                        |      |
| Director             | Chen, Kuo-Zhou   | Male   | Nan Ying Vocation High School/Chairman /Director, COTA Commercial Bank  | 9                          | 0                         | 100%                       |      |
| Independent Director | Chang, Jun-Yen   | Male   | Ph.D, Institute of Electronics, Chiao Tung University/Chief Director, Microelectronics and Information Research Center, Chiao Tung University/Principal, Chiao Tung University/Founder and Director for National Millimeter Device Laboratories/ Senior Researcher, Bell Labs, U.S./Visiting Professor, Stuttgart U., Germany | 8                          | 1                         | 89%                        |      |
| Independent Director | Cheng, Ji-Xiong  | Male   | Department of Business Administration, Chinese Culture University/Deputy Section Manager, Yulon Motors Co., Ltd./Audit Director, /Manager, Department of Cost, Yueki Industrial Co., Ltd. /Manager, Department of Administration, RICA AUTO PARTS CO.,LTD./Chief Financial Officer, Wafer Works Corporation                   | 9                          | 0                         | 100%                       |      |
| Independent Director | Chen, Ming-Zhang   | Male   | Ph.D, Business/Ph.D Study Program, Business Administration, Chengchi University/Dean, Graduate School, Department of Business administration, Chung Hsin University/GM, China Productivity Center/Director, Department of Economic Affairs, Mainland Affair Council   | 9                          | 0                         | 100%                       |      |

Note:

Please refer to GlobalWafers 2017 Annual Report for information on director's compensation, director's assumption of duties in GlobalWafers and other companies as well as Board of Directors' Meeting resolution matters.



### Compensation Committee

To realize corporate governance and to solidify the company's salary compensation system for director (including independent director) and manager, GlobalWafers has already established Compensation Committee on December 12th, 2014. This committee was composed by 3 independent directors and meetings shall be held at least 2 times each year. A total of 3 meetings were held in 2017, with an average attendance rate of 100%.

The Compensation Committee aims at assisting the Board of Directors' Meeting in its implementation and review of the company's overall compensation and benefit policy, system, standard and structure. It also assesses director and manager's target achievement performance, conducts regular review over salary compensation committee organization charter and proposes amendment suggestion for the Board of Directors' Meeting to discuss accordingly.

As required by the Compensation Committee's organization charter, compensation commissioner is entitled to retain lawyer, accountant or other consultant to assist his/her assessment duty.

Please refer to GlobalWafers website for Compensation Committee organization charter.

#### 2017 Compensation Committee Independent Director Attendance Status

| Job Title    | Name             | Times of Actual Attendance | Times of Proxy Attendance | Actual Attendance Rate (%) | Note |
|--------------|------------------|----------------------------|---------------------------|----------------------------|------|
| Convener     | Cheng, Ji-Xiong  | 3                          | 0                         | 100%                       |      |
| Commissioner | Chang, Jun-Yen   | 3                          | 0                         | 100%                       |      |
| Commissioner | Chen, Ming-Zhang | 3                          | 0                         | 100%                       |      |



### Audit Committee

For the purpose of enhancing internal supervision mechanism for corporate governance, GlobalWafers established Audit Committee on March 19<sup>th</sup>, 2015. This committee is composed of 3 independent directors. At least 1 meeting shall be held quarterly. A total of 9 meetings were held in 2017 and the average attendance rate is 96%.

Audit Committee's main goal is to assist the Board of Directors' Meeting in performing the following matters:

- Appropriate presentation of the company's financial reports.
- Selection (Discharge) of certified accountant and their capability qualification, independency and performance.
- Effective implementation of the company's internal control.
- The company's compliance with related laws and rules.
- Control over the company's existing or potential risks.

As required by Audit Committee's organization charter, audit commissioner is entitled to conduct any appropriate review and investigation within his/her scope of duty, and establishes direct contact channel with GlobalWafers internal audit staff, certified accountant and related personnel. The committee is also entitled to retain lawyer, accountant or other consultant to assist in its performing of duties.

Please refer to GlobalWafers website for Audit Committee organization charter.

Please refer to GlobalWafers 2017 annual report for Audit Committee resolution matters.

#### 2017 Audit Committee Independent Director Attendance Status

| Job Title            | Name             | Times of Actual Attendance | Times of Proxy Attendance | Actual Attendance Rate (%) | Note |
|----------------------|------------------|----------------------------|---------------------------|----------------------------|------|
| Independent Director | Cheng, Ji-Xiong  | 9                          | 0                         | 100%                       |      |
| Independent Director | Chang, Jun-Yen   | 8                          | 1                         | 89%                        |      |
| Independent Director | Chen, Ming-Zhang | 9                          | 0                         | 100%                       |      |

## 2.2.2 Ethics and Integrity

To fulfill integrity operation, GlobalWafers establishes related company internal integrity rules for the staffs as a whole to comply accordingly.

### Core Value & Occupational Moral

GlobalWafers' most important core value is "integrity & honest." For the purpose of establishing an honest operation environment, GlobalWafers has already established related guidelines and communication mechanism for all directors, managers and staffs to comply accordingly. Through GlobalWafers' management mechanism and effective control, honesty risks will be reduced to the minimum extent, creation of values for customers will be fulfilled and beneficial visions for shareholders and stakeholders will also be created accordingly.

GlobalWafers Board of Directors' Meeting has already approved related critical internal rules of "Ethical Corporate Management Best Practice Principles," "Moral Behavior Guidelines" and "Risk Management Rules" which have already been announced on the company's website and internal website for staff's reference from time to time. Through education training and promotion of honesty operation policy, employees are able to fully understand these rules, comply with them truthfully and fulfill these requirements during their daily work in order to enhance behavior quality and occupational moral for all staffs.

GlobalWafers insists on anti-corruption and aggressively prevents dishonest behavior. In addition to entering "Intellectual Property Rights & Confidentiality Agreement" with employees, it also specifically stipulates in the "Ethical Corporate Management Best Practice Principles" that during the process of employees' engagement of business behavior, they shall not directly or indirectly provide, commit, request or receive any improper interest, or, conduct any dishonest behavior which violates honesty, becomes illegal or violates commissioned obligation for the purpose of gaining or maintaining interest.



### Report Channel & Reporter Protection

To ensure fulfillment of honest operation, GlobalWafers has already established "Process Guidelines for Reporting Illegal & Dishonest Behavior Cases" which specifically stipulates punishment and report system for violation of Ethical Corporate Management Best Practice Principles. It also established and published employee opinion mailbox, e-mail box and report hotline in the company's internal website to encourage GlobalWafers internal and external persons to report dishonest or inappropriate behavior. Reporter's identity and report contents will be kept in strict confidentiality. Human Resource unit is responsible for verification and handling. Cases of violating Ethical Corporate Management Best Practice Principles will be disciplined depending on the severity of violation. The General Manager Office is responsible for promoting honesty operation policy, establishing prevention projects and supervising its implementation, and reporting execution status to the Board of Directors' Meeting each year on a regular basis. There was no report case or any corruption case for 2017.

### Avoidance of Conflict of Interest

GlobalWafer prescribes specifically in the "Guidelines for Honesty Operation Process and Behavior" that if a director, manager or other stakeholder attending the Board of Directors' Meeting encounters conflict of interest between proposal submitted to the Board of Directors' Meeting and himself/herself or the legal person represented, he/she shall then explain critical contents of conflict of interest in such Board of Directors' Meeting. Meanwhile, he/she shall not be engaged in discussion or voting in the event that the company's interest may be damaged, and shall recuse himself/herself during discussion and voting, and shall not exercise voting rights on behalf of other director. Directors shall exercise self-discipline among themselves and shall not support each other in an inappropriate manner. In the event that a GlobalWafers staff detects conflict of interest between the performing of company business and himself/herself or the legal person represented, or he/she, spouse, parents, children or interested persons may obtain inappropriate benefits from this, he/she shall then report related matters to both direct management and GlobalWafers responsible units. The direct management hereto shall then provide appropriate instructions accordingly.

- 
  - The company establishes "Process Guidelines for Reporting Illegal & Dishonest Behavior Cases."
  - The company specifically establishes disciplinary action and report system for violation of integrity operation rules, and sets up and announces employee opinion mailbox, email box and report hotline in the company's internal website.
- 
  - The company sets up and announces employee opinion mailbox, email box and report hotline in the company's internal website to encourage GlobalWafers internal and external personnel to report dishonest or inappropriate behavior.
  - Reporter identity and report contents will be kept in strict confidentiality. Human resource unit is responsible for verification and handling. Disciplinary action will be imposed depending on severity of cases in the event of violation of integrity operation guidelines.
- 
  - General Manager Office is responsible for promoting honesty operation policy, establishing prevention projects and supervising its implementation, and reporting execution status to the Board of Directors' Meeting each year on a regular basis.
  - There was no any corruption case for 2017.

## 2.2.3 Implementation of Internal Audit

### Main Purpose for Establishment

The main purpose is to examine and assess comprehensiveness, rationality and effectiveness of company internal control system. It is responsible for promoting, auditing and reporting on internal control system.

### Implementation Key Points

- 1 Internal Control System: This assists manager is designing appropriate internal control mechanism and conducting "internal control system self-assessment operation" for the purpose of fulfilling respective departments' self-supervision mechanism.
- 2 Annual Audit Plan: Through risk assessment plan annual audit program, various operation process generated in response to the company's business activities are examined and audit is implemented accordingly with recommendation proposed in order to ensure effectiveness for internal control.
- 3 Audit Project Inspection: With respect to suggestions on potential risks (including cheating and corruption) raised by senior management of respective departments, audit project is implemented and recommendations are proposed accordingly in order to enhance internal control soundness.
- 4 Communication of Audit Findings: Based on audit findings, communication will be conducted with audited departments for improvement strategy. Tracking on follow-up improvement situation will be conducted in order to fulfill operation execution.
- 5 Audit Operation Report: Audit result will be reported in the Audit Committee and the Board of Directors' Meeting in which the company's internal weakness will be communicated and instructions will be obtained accordingly for the purpose of enhancing supervision effectiveness while strengthening corporate governance.
- 6 Subsidiary Audit Operations: Annual audit key points for subsidiary audit unit will be established, and respective subsidiaries' audit reports will be reviewed and audit results will be tracked accordingly.
- 7 Audit Experience Learning: Audit experience or cases occurred within the group will be shared and reviewed accordingly, and local management mechanism will be improved accordingly in order to obtain risk prevention effectiveness.

Since GlobalWafers' listing on the Over-The-Counter market on September 25<sup>th</sup>, 2015 and in addition to its receiving of audits conducted by counselling securities firms and accounts as well as competent authority's supervision, inspection results from internal control system risk assessment conducted by Risk Management Committee and audits conducted by the internal audit office have not discovered any material irregularity or corruption events.

Please refer to internal audit organization and operation on GlobalWafers official website for related contents on internal audit.

## 2.2.4 Regulation Compliance

To ensure fulfillment of honesty operation, GlobalWafers not only stipulates related policies and requirements in accordance with laws and regulations, and its offshore subsidiaries also comply truthfully with related laws and regulations of respective nations. The Board of Directors' Meeting acts a model in supervising operation team and requests, without reservation, all employees to comply with accordingly through continuous education training and promotion.

| Year | Times of Fine | Fine Amount (NT\$) | Fined Factory                     | Violation Matter   | Rectification Measures   |
|------|---------------|--------------------|-----------------------------------|--|--|
| 2015 | 1             | 100,000            | GlobalWafers Headquarters         | Diesel sulfur content in generator diesel storage tank exceeds amount prescribed by laws (Violation of Air Pollution Control Act).   | Replace polluted oil products. Third party certification laboratory is commissioned to conduct sample testing during purchasing of oil products to ensure oil product quality. |
| 2016 | 1             | 30,000             | GlobalWafers Headquarters         | Number of foreigners retained has exceeded employment percentage (Violation of Employment Service Act).  | Excessive foreigners retained are discharged.  |
| 2017 | 1             | 20,000             | TAISIL ELECTRONIC MATERIALS CORP. | Laborers worked for 7 consecutive days (Violation of Labor Standards Act).   | Systematic reminding function has been established to prevent laborers from working for 7 consecutive days.  |
|      | 1             | 100,000            | TAISIL ELECTRONIC MATERIALS CORP. | The company failed to submit inspection result from discharge tube evaporative organism inspection operation to environment protection competent authority within 30 days after inspection (Violation of Air Pollution Control Act). | Inspection vendor's operation time has been established and integrated into procurement agreement to ensure on-time completion of material submission.                         |

GlobalWafers established respective related policies or guidelines in response to different fields of regulation compliance:

### Regulation Compliance



## Key Items for 2017 Regulation Compliance



### Securities Laws

#### Rigorous Management Mechanism

GlobalWafers is listed on the Gre Tai Securities Market in Taiwan and therefore shall comply with Securities & Exchange Act and related laws, policies and regulations of the Republic of China.

General Manager Office establishes good communication channel with related competent authorities and pays attention to status of regulations. It is also responsible for checking the latest regulation announcement information and tracking development of regulation changes, which will be verified and notified to related business departments for responding accordingly.

With respect to issues raised by related business departments, legal department conducts further study over related regulations as well as communication with competent authority, and provides accurate responding directions after verification.



### Product & Service Laws

Collect regulatory requirements from place of receipt, place of delivery as well as country designated by client to ensure product purchased, process and service comply with legal requirements from the nation where product, process and service are located.

Source of raw material complies with local corresponding legal requirements such as RoHS, REACH and TSCA.

There are no circumstances of our products being banned to be sold in specific markets.



### Labor & Human Rights Laws

#### Compliance with Labor & Human Rights Related Laws & Regulations

Establishment of various work systems and management requirements matching or even exceeding labor laws; Building of good labor terms and communication mechanism; Cultivation of labor/management relationship which maintains good interaction with staffs.

The company emphasizes staff's compensation and benefits, cultivates talents aggressively and complies with labor laws to protect employee rights and benefits. With respect to important policy change, compensation and benefits as well as leave system which influence employee's rights and benefits, employees will be advised through labor/management meeting, e-newspaper or human resource announcement prior to implementation in order to protect labor's rights and benefits.

A 0.5 or 1 hour of related human rights education training will be implemented to new employees. Related requirements and report window for prevention of work place violence or sexual harassment have been established to provide employees with smooth report channel and communication platform.



### Material Management

Establishment of employee retainment and trade secret confidentiality & intellectual property ownership agreements, moral behavior guidelines, intellectual property dispute processing procedures and confidentiality agreement.

#### Management Mechanism

Poster and slogan promoting importance of intellectual property and trade secret, employee education training and confidentiality agreement based on employee's business contents.



### Corporate Governance/ Subsidiary Management

Establishment of moral behavior guidelines and Reporting illegal and immoral or dishonest behavior cases processing guidelines.

#### Management Mechanism

In addition to completion of education promotion to existing employees, the company also integrates related contents into orientation training for new employees to ensure all employees comply with definite behavioral guidelines during their execution of duties.



### Environmental Protection Laws, Occupational Safety & Sanitary Laws

Establishment of verification and management procedures for environmental protection, energy management and occupational safety and sanitary related laws.

#### Management Mechanism

Monthly review of consistency from the latest modified related laws of environmental protection, occupational safety and sanitary and energy management; Periodical assessment of consistency for matters required by applicable laws.

### Regulation Compliance Lesson and Promotion

Through regularly launched regulation enhancement training lessons, the company not only allows employees to understand important laws and regulations, it also further strengthened employee's firm commitment to compliance with occupational ethics requirements. Through promotion posters posted throughout factories, or regulation compliance policy guidance provided on internal website, or regulation promotion activities for the following theme lessons, the company has strengthened employee's understanding for regulation compliance.

#### Lessons Launched in 2017



#### Occupational Ethics

- Integrity Operation & Moral Behavior Guidelines.
- Promotion of Non-Competition Compensation Terms.
- Business Behavior Guidelines for Employee and Director.



#### Information Protection

- Promotion of Personal Information Protection.
- Intellectual Property Concept/ Company Confidentiality Management Guidelines.
- Trade Secret Protection.



#### Occupational Safety & Sanitary, Environmental Protection

- General Education on Safety, Sanitary and Chemical Item Hazards.
- Promotion of Power Energy Lock-Off/ Labelling.
- Hazardous Substance Control.
- Personal Protection Gear Utilization and Occupational Disaster Case Promotion.
- Prevention of Ergonomic Engineering Hazards.
- Promotion of Prevention on Workplace Violence Infringement and Sexual Harassment.
- Waste Material Recycling.

Annual growth rate 151%



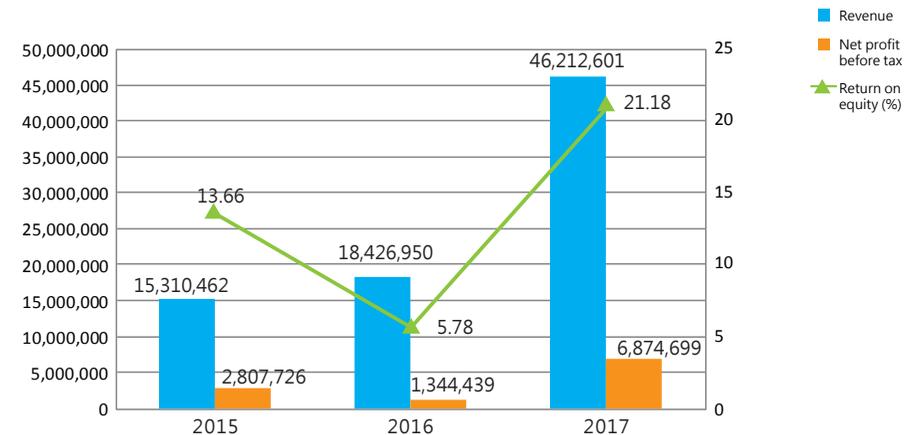
## 2.3 Operation Performance

2017 is an extraordinary year for GlobalWafers. We've merged with semiconductor business of Denmark Topsil Semiconductor Materials A/S Company (hereinafter referred to as "TOPSIL") and U.S. SunEdison Semiconductor Ltd (hereinafter referred to as "SEMI") in 2016. After experiencing group organization restructuring and enhanced operation management, our schedules in financial structure improvement and operation enhancement have both exceeded expectation. Additionally, demands for global semiconductor silicon wafer market is strong and prices continue to go up. GlobalWafers' profits increase dramatically and its overall operation performance is much better than those of vendors in this industry. Consolidated operating income for GlobalWafers in 2017 reached NT\$46.213 billion with an annual growth rate of 151%. Its operating net profit is NT\$7.414 billion. After tax net profit to parent company is NT\$5.2 billion, with after tax earnings per share of NT\$12.68 and cash dividend per share of NT\$10.

Please refer to GlobalWafers' 2017 Consolidated Financial Statement for details of the company's operating performance and financial materials.

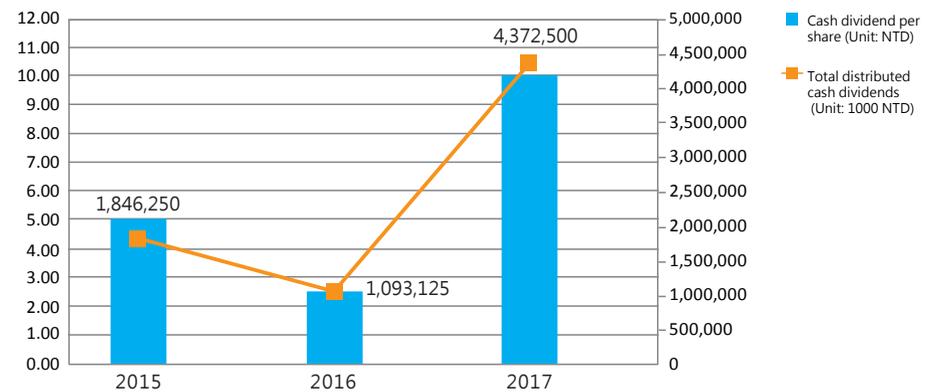
### Financial Performance (Consolidated)

Unit: NT\$ thousands



### Cash Dividend

Unit: NT\$ thousands



### 2017 Economic Value Analysis

Unit: NT\$ thousands

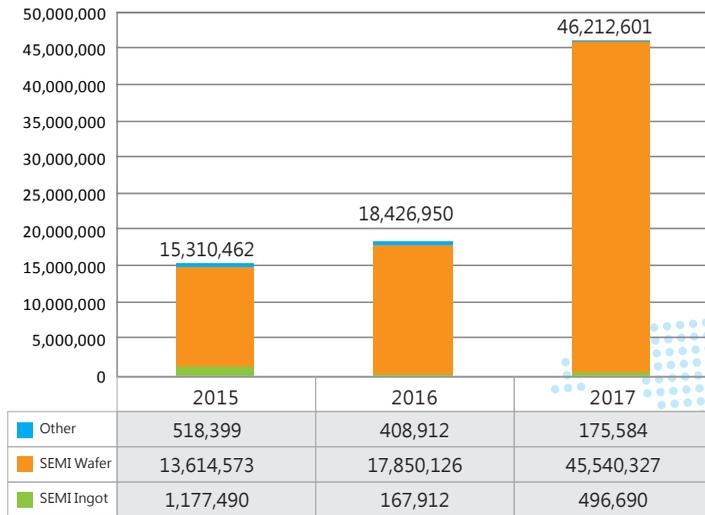
|                                  |                                    |            |
|----------------------------------|------------------------------------|------------|
| Direct Economic Values Generated | Report Year - Income               | 46,212,601 |
|                                  | Operating Cost                     | 34,404,835 |
| Economic Values Distributed      | Employee Salary & Benefits         | 10,854,333 |
|                                  | Amount Paid to Capital Contributor | 4,372,500  |
|                                  | Amount Paid to Government          | 157,970    |
|                                  | Community Resources                | 119        |

Product Sales

Main reason for growth in 2016 revenue is because mergence with Topsil in July and SEMI in December. For revenue increase in 2017, the main reasons are that, after mergence with Topsil and SEMI, the group has experienced organization restructuring and enhanced operation management, and GlobalWafers' schedules in financial structure improvement and operation enhancement have both exceeded expectation. Additionally, demands for global semiconductor silicon wafer market is strong and prices continue to go up. All these have contributed to GlobalWafers' dramatic profit increase compared with the ones for previous years.

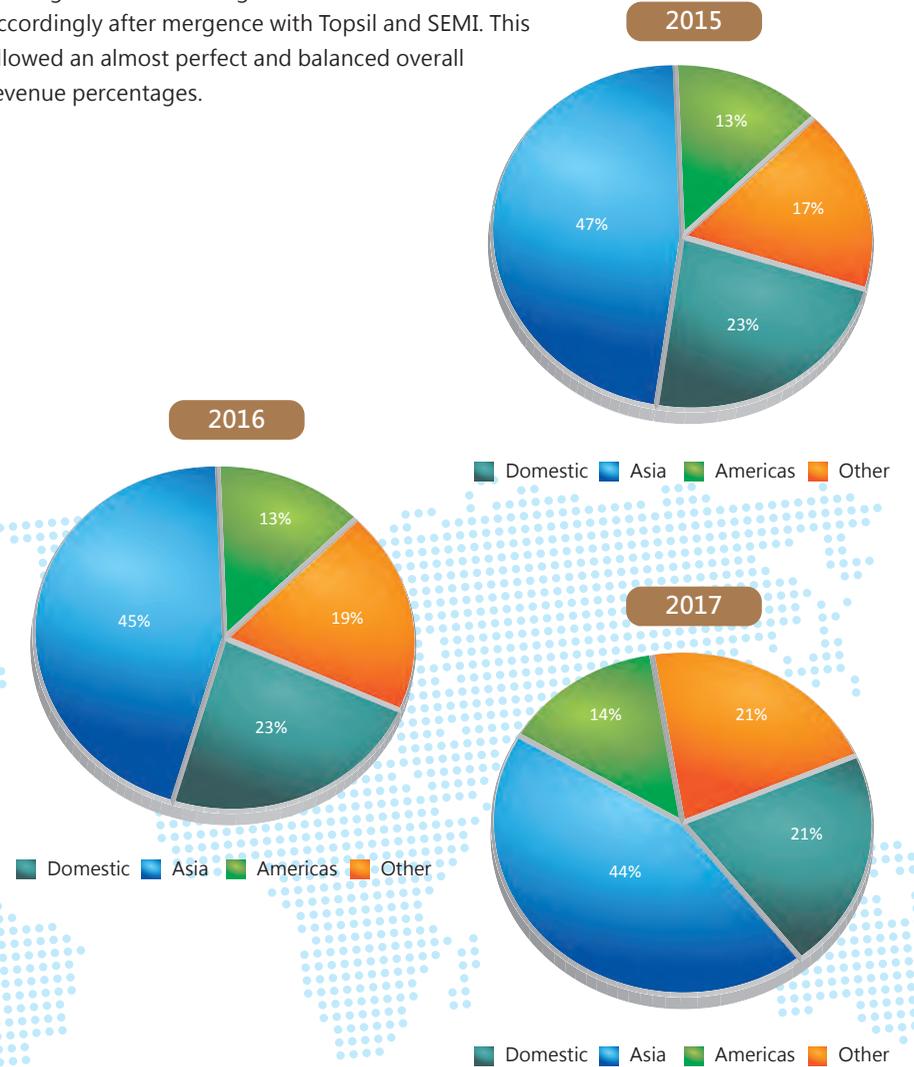
Revenue

Unit: NT\$ thousands



Sales Territory Percentages

Percentages for Europe and US clients increased in 2016 because of mergence with Topsil and SEMI, a European and a US company respectively. Changes in 2017 sales were because existing client order and global sales network were obtained accordingly after mergence with Topsil and SEMI. This allowed an almost perfect and balanced overall revenue percentages.



### Overall Economic Environment and Industry Trend

With the recovery of global economy, demand in semiconductor industry is strong because new products have generated dramatic growth compared with the one for the previous year. However, there is no large scale production expansion in the supply end. Respective wafer manufacturers have increased, one by one, their product average prices under the circumstances of demand exceeding supply. GlobalWafers also exploited its excellent control capability and decreased operating expense percentage from 15% in 2016 to 10% in 2017. Meanwhile, TOPSIL and SEMI have also smoothly developed their synergy after the mergence. Through coordinated division of duty from global locations and a sales network spreading throughout the world, GlobalWafers successfully exploits the opportunity of market upward trend and delivers excellent operation performance.

Through two mergers in 2016, the company successfully utilizes its top operation model in combining TOPSIL and SEMI's innovative technology and global network and creates favorable conditions of economies of scale and global division of work. The company not only has comprehensive product portfolio, it also stretches its market further into Europe and South Korea. This results in an almost perfect and balanced sales distribution for respective regions. In 2017, the company focuses on adjusting its internal operation quality. Through redistribution of group resources and enhancement of respective business entities' operation efficiency, synergy from mergence has already developed in a speedy manner. Together with the upward trend for semiconductor market and silicon wafer's increased average price, GlobalWafers' operation scale has expanded dramatically and has become one of the world's top three semiconductor wafer manufacturers. It shall continue to dedicate itself to developing technology and cost advantages, becoming long-term collaboration partner for all semiconductor clients and providing comprehensive and quality wafer solutions.



World's Top 3

## 2.4 Risk Management

To respond to a fast-changing operation environment and ensure the company's stable operation and sustainable development, GlobalWafers established risk management policy and Risk Management Guidelines in 2015 and specifically listed out three major goals for risk management system :

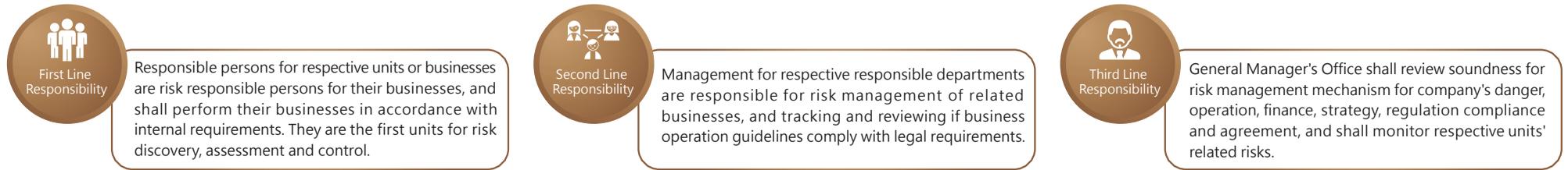


GlobalWafers' risk management process includes risk identification, risk assessment, risk monitor, risk report and disclosure, risk response. The company's risk management strategy is realized through effective implementation of this risk management process.



GlobalWafers establishes risk management assessment measures which serve as the basis for risk management. With respect to risks which can be quantified, we adopt more rigorous statistical analysis and technology to conduct analysis management. Management quantification process is conducted via progressive measure adopted. As for risks difficult to be quantified, measurement is then conducted through qualification method. Risk occurrence possibility and its level of impact are expressed through description in words. Information of related business and operation risk management are also disclosed in the company's annual report and company website.

GlobalWafers' implementation of risk management is operated based on risk management 3-tier division of work structure



GlobalWafers has established effective risk management mechanism to assess and supervise its risk assumption capability, current status for risk assumed, determination of risk responding strategy as well as compliance with risk management process. ESG risk and opportunities identified by us are illustrated as follows :

|   | Identified Risks  | Strategies to Turn Risks into Opportunities  |
|---|---|--|
| <br>Economic       | Various Risks for Operation and Investments   | <ul style="list-style-type: none"> <li>Aggressive establishment of up/middle/downstream fully integrated supply chain to expand operation scale, and mitigation of operational risks through diversified operation strategies.</li> <li>Development of crystal growth automatic system to enhance manufacturing process stability, improve quality and lower costs.</li> <li>Continued in-depth development of advanced technology and dedication to enhance efficiency for power component key materials in order to increase competitiveness over competitors.</li> <li>Investment in developing key technology for GaN RF components in response to needs from internet of things and 5th generation mobile communication market.</li> </ul>  |
|   | Corporate Governance Risks  | Fulfillment of corporate governance policy, establishment of related governance requirements, stipulation of disciplinary action and complain system and realization of corporate social responsibility to demonstrate GlobalWafers' commitment and determination to pursue sustained operation.   |
| <br>Environmental | Climate Change Risks  | <p><b>Management is conducted following two major perspectives of "mitigation" and "adjustment."</b></p> <p><b>Mitigation</b></p> <ul style="list-style-type: none"> <li>Promotion of ISO50001 energy management system to monitor major energy using equipment and plan for energy action improvement project.</li> <li>Promotion of green product and green manufacturing to reduce energy consumption.</li> <li>Promotion of water saving measures.</li> </ul> <p><b>Adjustment</b></p> <ul style="list-style-type: none"> <li>Enhancing the company's durability to respond to extreme weather (drought, flood and snow disaster).</li> <li>Implementation of energy management and enhancement of energy utilization efficiency in response to energy cost increases (e.g., electricity fee increase, carbon tax, energy tax).</li> </ul> |
|   | Environmental Protection Risks  | <ul style="list-style-type: none"> <li>Installation of pollution discharge monitoring system and dedication to lowering pollution amount.</li> <li>Strengthening risk control over waste resource and recycling and maximized utilization of recycled materials.</li> </ul>  |
| <br>Social       | Challenge to Maintain Relationship with and Communicate with Internal / External Stakeholders | Enhancement of stakeholder section on the company's website and establishment of communication channel with stakeholders in order to understand and respond to all issues concerned by stakeholders.   |
|   | Occupational Safety and Sanitary Risks  | <ul style="list-style-type: none"> <li>Conducting risk identification and risk assessment, implementation of risk-lowering measures, establishment of related management procedures and operation guidelines and conduct emergency response drill regularly.</li> <li>The company regularly conducts safety and sanitary education training to prevent occupational disaster and protect labor safety and hygiene.</li> </ul>  |
|   | Labor Health Risks  | <ul style="list-style-type: none"> <li>For operations posing special risks to health, special physical examination is provided when employees are retained or when operations are changed. Special physical examination is also conducted yearly and monitoring over labor's operation environment is also implemented.</li> <li>To enhance employee's sense of health, the company promotes employee health management and health promotion activities on an irregular basis to share major disease message or health information for the purpose of allowing employees to understand comprehensive health information.</li> </ul>  |
|   | Labor/Management Relationship Risk  | <ul style="list-style-type: none"> <li><b>Labor/Management Communication:</b> The company emphasizes employee's rights. Prior to changes of critical policy, affected employees will be notified through labor/management meeting, e-newspaper or human resource announcement for the purpose of protecting employee's rights.</li> <li><b>New Employee Interview:</b> Through caring interview, we can understand, in a more direct manner, employee's work condition in the company. This will shorten new employee's adaption period and reduce occurrence of related labor risks.</li> <li><b>Employee Complaint Channel:</b> Employee opinion responsible staff process window is established in order to immediately process issues raised by employee and reduce labor/management conflict.</li> </ul>                                  |



# 3

## Innovation & Service

- 3.1 Innovative Management
- 3.2 Product Quality
- 3.3 Customer Service
- 3.4 Industry Supply Chain & Management



## Material aspects

Product Quality, Customer Service



## Meaning to GlobalWafers

With its sustainable operation concept, GlobalWafers not only maintains operation performance of stable growth, it also utilizes customer satisfaction as its focus for continuous effort. With customer's needs as the starting points, it expects to develop innovation services consistent with GlobalWafers' corporate ethics. Just as GlobalWafer's quality policy, GlobalWafers commits to continuous improvement for the purpose of providing better product quality, manufacturing technology and production. The goal is to provide customers with zero-defect products and services.

## Management Mechanism

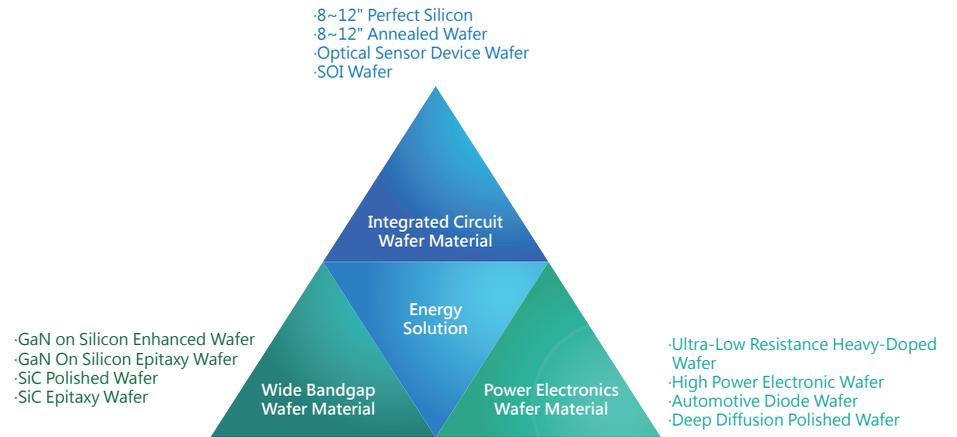
The company continues to promote quality management system. With its TS/IATF 16949 spirit and product quality controlled by comprehensive and sound customer oriented process, product-manufacturing services matching customer's quality needs are provided accordingly. In the meantime, the company thinks in customer's position and emphasizes its customer-orientation and professional technology back-up hoping to provide services matching or even exceeding customer's expectation.

## 2017 Key achievements



## 3.1 Innovative Management

GlobalWafers is a professional silicon wafer supplier. Its products are used in integrated circuit device and power electronic device. Products can be classified into three major products based on product types. The following is an explanation of development directions for these three major products:



### 1.Integrated Circuit Wafer Materials :

Main products are 8~12" perfect silicon, 8~12" annealed wafer, optical sensor device wafer and SOI wafer. Large size wafers are mainly utilized for integrated circuit device manufacturing. This includes 5 major categories of devices of Bipolar Digital, Memory, Micro, Logic and Analog. When manufacturing process continues to micronize and requirements on silicon wafer defects and surface cleanliness and flatness have become more stringent, crystal pulling technology (for example, amount of oxygen density and micro-defects) enhancement and wafer processing technology breakthrough during silicon wafer manufacturing process have therefore become more important. When wire width for integrated circuit manufacturing process has become smaller each day, quality requirement on silicon wafer has also become more stringent. In the field of integrated circuit wafer material, GlobalWafers shall continue to develop wafers matching advanced integrated circuit manufacturing process requirements while providing customers with the best services and selections.

## 2. Power Electronic Wafer Material :

Wafers for power electronic device include low resistance heavy-doped wafer, high power electronic wafer, automotive diode wafer and deep diffusion polished wafer. These products are used in the field of silicon-based power semiconductor. During the period from 1994 to 2014, compound annual growth rate (CAGR) for global power transistor is 6.2%. IC Insights 2015 report predicted that under the push from steady growth in automobile, consumer electronics, portable device, industry and wireless communication markets, CAGR for power transistor sales between 2014 and 2019 is expected to be 5.3%. (Source: Power Transistors Seen Stabilizing and Setting Record Sales in 2015) · with global revenue reaching US\$17.1 billion dollars. Global demands for power semiconductor continues to grow. GlobalWafers possesses a leading position in this field and shall continue its in-depth cultivation of development for products and technologies.

## 3. Wide Bandgap Wafer Material :

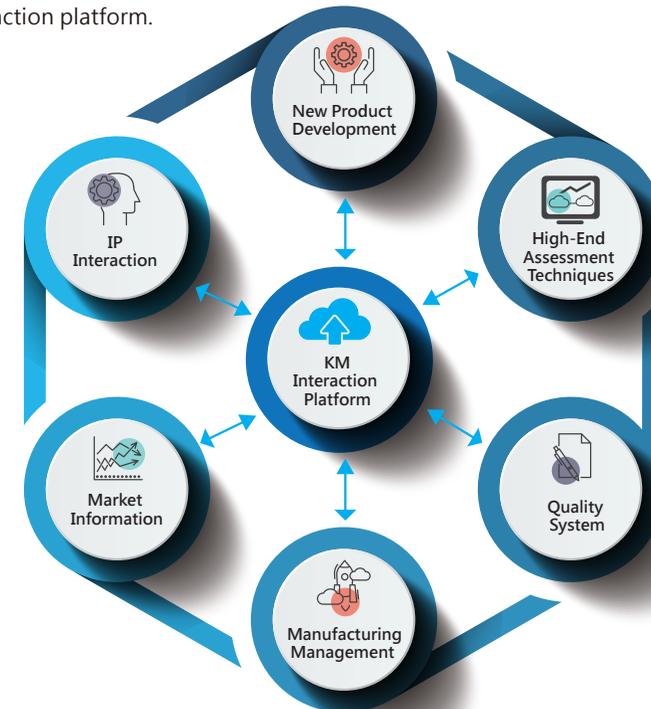
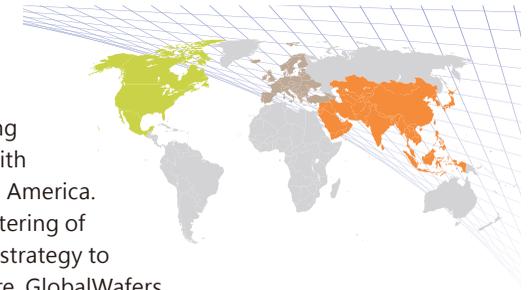
Wide bandgap power device comes with many advantages which include features of high electric breakdown field, high saturated electron drift velocity and superior heat dissipation. These features make wide bandgap device more suitable for applications in high power, high frequency and high temperature environments. Utilization of wide bandgap power device can lower energy consumption during conducting and switching, and system overall operation power consumption can be lowered by half. Additionally, given the features of lowered energy consumption and excellent heat dissipation, volume and weight for system using wide bandgap power device can be reduced dramatically. Currently, new materials of SiC, GaN and Ga<sub>2</sub>O<sub>3</sub> are being regarded as materials for next generation power semiconductor. GlobalWafers invests in the research of developing GaN and SiC wafers. Currently, the company already provides silicon wafer substrate, which is exclusively for GaN on silicon, and GaN on silicon Epitaxy wafer to customers for device design and development. Developments for SiC polished wafer and Epitaxy wafer are being conducted now. For these two new materials with explosive growth, we shall continue to invest in development resources. Going forward, GlobalWafers will be able to provide various wafers for energy application as well as total solution for customers.

## Research Resources

Product development takes time, manpower and resources. It takes numerous parties' resources to provide support for a product to be developed successfully. For small companies with insufficient resources, it is a must-learned lesson on how to utilize small resources to create large benefits.

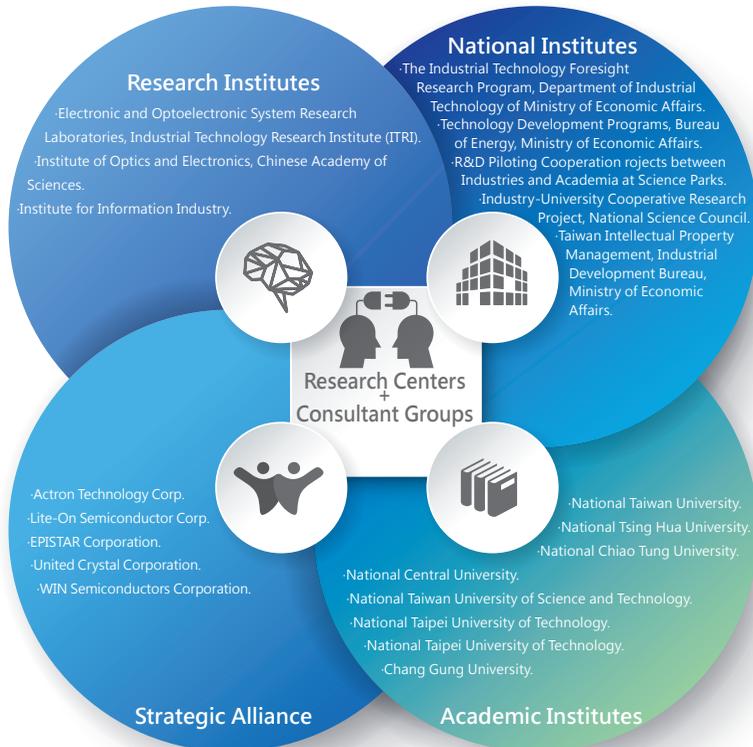
## Internal Resources

GlobalWafers has a total of 16 operation and production sites spreading across 10 countries around the world, with customers scattered in Europe, Asia and America. Faced with globalized competition, mastering of information and resource sharing allow strategy to be more efficient and accurate. Therefore, GlobalWafers establishes inter-factory KM interaction platform which allows information and technologies from respective factories to interact with one another. On this interaction platform, resources and supports can all be obtained for technology issues, market information and product development, manufacturing management, quality management and IP patent related activities faced by respective factories. In the meantime, enhancement for respective factories' capability is facilitated accordingly through internal competition mechanism established by this interaction platform.



### External Resources

Taiwan has excellent academic resources and has accumulated large amount of profound knowledge through basic research and science application. Introduction of academic unit's research energy through academic/industrial collaboration can supplement company's technology gap during product development process. In the meantime, Taiwan has a complete ICT industry chain. Through up/down stream integrated operation, products are ensured of their capability to realize mass production during product development stage. Furthermore, to facilitate industry upgrade and practical application of academic research, government units provides extremely huge research funds each year in subsidizing industry and academic research units' product and new technology development collaboration. Since 2015, Taiwan government has started to promote counseling program for industry upgrade innovation platform, and assists industry to conduct structure transformation with four major development strategies (enhancement of product value, supplement of critical supply chain, development of system and incubation of emerging industry). GlobalWafers headquarters utilizes external resources through industry/academic society collaboration with academic units, commissioned research with research unit, national project implementation via subsidies applied from national units as well as strategic alliance with industry players. External research consultant groups composed of these external resources work together in solving technological issues during product development process and conduct verification on research products.



### Research Strategy & Company Operation

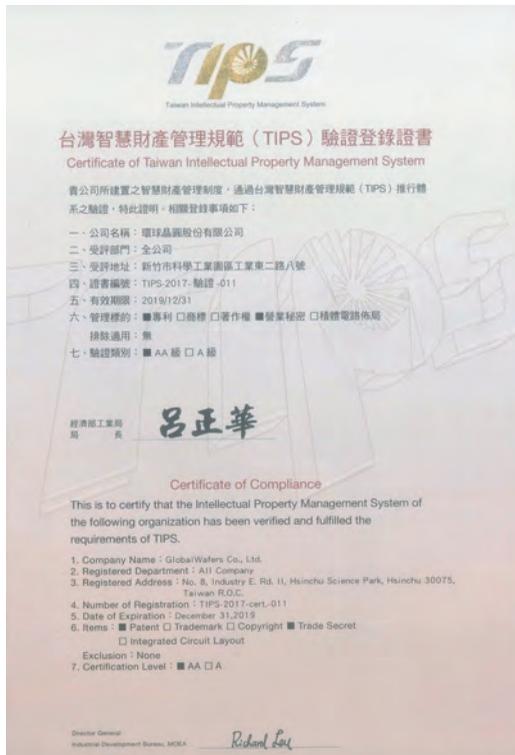
Corporate sustainable operation and continued profits are every enterprise' expectation. However, century-old enterprise may also vanish when faced with global competition and technology evolution and loses it growth motivation for operation. A company will be able to fly with wind and continue to grow and obtain profits if its operation strategy matches with trend development. With respect to research strategy, it is necessary to continue in-depth cultivation on core technology and core competitiveness. With technology trend and market information as the development direction, internal and external resources are integrated for the purpose of reaching maximum benefits via minimum investment. Sound management is exerted to the protection and utilization of intellectual property in order to achieve the company's purpose of sustainable operation.





### Intellectual Property Management Guidelines

GlobalWafers' intellectual property management system was introduced into Taiwan intellectual property management system in 2013, and has passed TIPS (Taiwan Intellectual Property Management System) basic verification, and has continued to pass in-depth verifications in 2014 and 2015 as well as AA verification in 2016. Through the promotion of TIPS, intellectual property goal is established to provide employees with intellectual property rights education and training and to enhance information security requirements. Through strengthened patent arrangement, risk of infringement is lowered and occurrence of confidentiality leakage is prevented for the purpose of protecting the company and customers' rights. In the time of technology competition, intellectual property rights in a competitive tool to develop next generation products. GlobalWafers has aggressively promoted patent arrangement planning in the fields of various critical technologies, and has facilitated developing core technologies belonging to itself. As of 2017, accumulated global patent certificates received reached 819, with 97 certificates received in 2017.



## 3.2 Product Quality

GlobalWafers established quality management system in accordance with requirements from TS/IATF 16949 automotive quality management system as well as documentation and electronization of related operation standards. It has also obtained effectiveness of third party verification unit's certified quality management system, matching customer's needs as well as TS/IATF 16949 management standard requirements. GlobalWafers' quality direction is to provide customers with zero-defect products and services.

To ensure effective implementation of the company's operation strategy direction, the company's "quality policy" contents are published in accordance with the company's annual plan and goal for the purpose of serving as all employees' belief.

### Enhancement of Company Improvement Culture

GlobalWafers respective factories are aggressively engaged in quality management activities for full-scale compliance with continued improvement as well as modified manufacturing process technology in order to enhance product quality. QIT (Quality Improvement Team) has been established in respective factories, and is composed of members from respective departments. QIT members are dedicated to manufacturing process research and product quality improvement. They review items such as innovation, creation of new high, cost effectiveness, lean production, product competitiveness, customer satisfaction, customer complaint cause analysis and improvement review, quality indicator for manufacturing process, and so on. Through continuous refinement and improvement, perfect situation is reached to enhance the company's product image and competitiveness. We aim at zero-defect as our permanent goal, and continue to improve and grow with our customers in order to become customer's first choice.

We participated in Taiwan National Quality Control Circle (QCC) competition in 2017 and received one silver and two bronze medals. We shall continue to improve and refine our manufacturing process technology.





Defect return rate for polished wafer dropped from 2.2% to 1.5%, an improvement rate of 31.8%.



Metal element pollution generated during silicon wafer digestion process has been reduced, with pollution rate reduced by as much as 56%.



Metal (iron) contents in recycled silicon raw material is reduced.



### 3.3 Customer Service

Customers are GlobalWafers' valuable assets. They are also the company's important partners along the way to growth. In addition to maintaining operation performance, enhancing the company's core value and pursuing advanced technology and stable quality, we shall also provide comprehensive customer service and maintain good collaboration relationship with customers hoping that all parties can grow and prosper together, enjoy sustainable operation and achieve social and economical values.

## Customer Satisfaction Satisfaction Level 85.4%

GlobalWafers has become the world's 3rd largest semiconductor wafer manufacturer. Reason for this is from customer's affirmation and support. Therefore, customer service has always been the key to GlobalWafers' tasks. In order to enhance customer relationship, improve service quality and facilitate technology innovation, we conduct customer satisfaction survey each year focusing on top 20 customers and potential customers through measures of questionnaire distribution or telephone interview for the purpose of listening to customer's voice and understanding customer's needs. Issues need to be improved are located through survey result and improvement will be continued in order to achieve the ultimate goal of customer satisfaction.

Contents for our customer satisfaction survey mainly encompass overall impression, business service and product quality. Based on customer's feedback, GlobalWafers business team together with company colleagues will establish improvement plan focused on issues discovered, and further conduct in-depth discussion with customers in order to complete customer satisfaction survey process.

Customer satisfaction survey recover rate reached 94% in 2017 through GlobalWafers respective teams' effort. Overall satisfaction  $\geq 80$  points account for 85.4%. Compared with 80.6% in 2015 and 79.5% in 2016, there is an obvious growth in percentage for overall satisfaction  $\geq 80$  points. This has already reached target ( $\geq 80$  points · 80%) stipulated by the company's management review committee. Additionally, percentage for overall satisfaction  $< 60$  points dropped to 0.8% in 2017, down from 2.8% and 2.7% for 2015 and 2016 respectively. This indicates that we listen to customer's voice and pursue effectiveness of advanced technology and stable quality. We aim at the permanent goals of continuous improvement, customer satisfaction enhancement and growth with customers.

#### Customer Satisfaction



# 3.4 Industry Supply Chain & Management

## Up/Down Stream Supply Chain



### Application of IC end Products

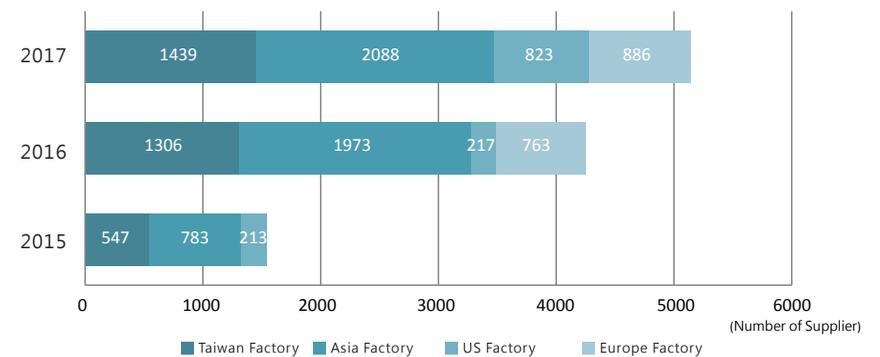


## Supplier Assessment Management

Through appropriate supplier assessment operation, qualified suppliers are carefully defined and selected. Close work relationship and feedback system are also established accordingly to ensure raw material, finished product, half-finished product, fixture and tools, technology service and other labor service purchased all comply with quality, environmental and sanitary requirements. Our qualified suppliers all need to comply with integrity operation principles, and there are no dishonest behavior records for our suppliers. Each year, we will have a supplier assessment team composed of our quality assurance, R&D and other related departments. This team conducts supplier factory audit and document review, and interviews supplier's management and employees to find out issues and rectify accordingly. Related audit records are maintained for inspection.

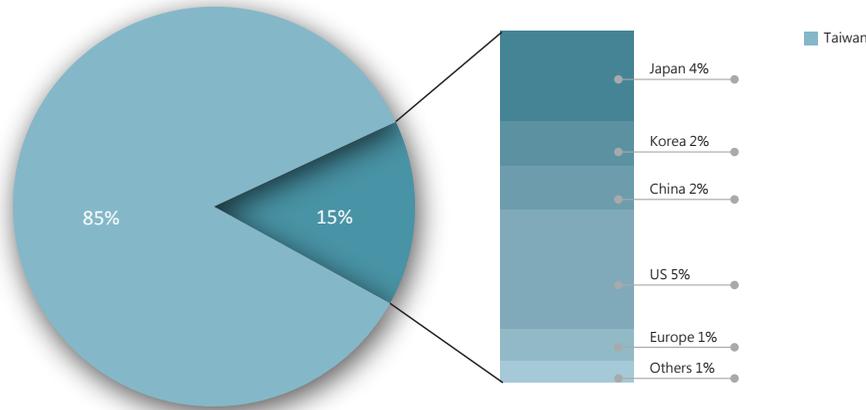
Total number of suppliers for our global respective factories presents a growing trend during the last 3 years. The number of suppliers for 2016 increased dramatically compared with the ones for 2015. This is because we merged with Topsil Semiconductor Materials A/S semiconductor business groups and SunEdison Semiconductor in 2016. In Taiwan factory, number of suppliers for the last 3 years accounts for roughly 30 percent of supplier number for global factories. Change in percentage is not big and this presents a stable condition. As for distribution of locations for suppliers in Taiwan factory in 2017, local procurement accounts for the highest percentage of 85%, with others being 8% for countries neighboring Taiwan (Japan, Korea, China), 5% for US, 1% for Europe and 1% for other countries.

## Number of Suppliers for Respective Factories



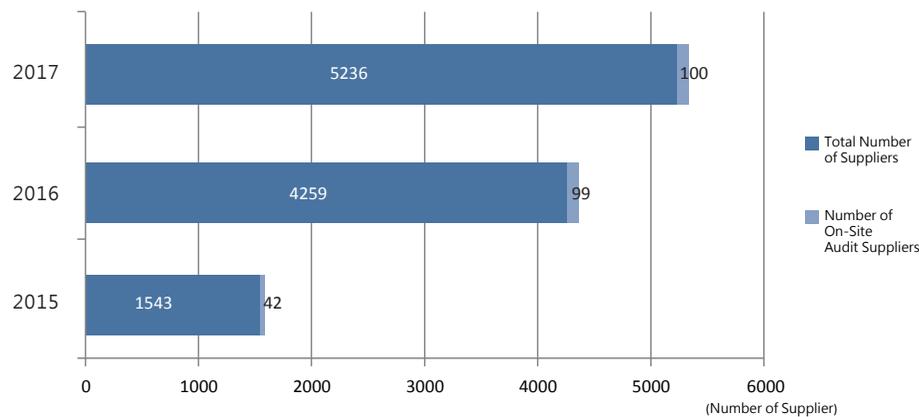
Note:  
 1. Taiwan District: GlobalWafers Headquarters, included in TAISIL ELECTRONIC MATERIALS CORP. since 2016.  
 2. Asia District: GlobalWafers Japan, Kunshan Sino Silicon Technology Co., Ltd., included in MEMC Electronic Materials, Sdn Bhd., MEMC Japan Ltd., MEMC Korea Company since 2016.  
 3. US District: GlobiTech Incorporated, included in SunEdison Semiconductor, LLC since 2016.  
 4. Europe District: included in MEMC Electronic Materials, SpA, Topsil GlobalWafers A/S since 2016.

### Location Distribution for Taiwan Factory Suppliers



With respect to supplier on-site audit, the number of our supplier on-site audit for the last 3 years accounts for 2~3% of the total number for suppliers. Percentages for supplier on-site audit for the last 3 years are close to one another.

### Number of On-Site Audit Suppliers for Global Factories



### Regulation Requirements

GlobalWafers regularly collects regulation requirements from countries of place of receipt, countries of place of delivery as well as countries of destinations designated by customers to ensure product purchased, process and service all comply with regulation requirements applied by countries where subjects are located. Additionally, when customers request regulatory special control over specific product, we will ensure this special control is implemented and maintained, with supplier included.

Some countries or regions will have chemical substance or chemical substance utilization legal restrictions on raw material source or manufacturing. We comply with local corresponding laws such as RoHS and REACH (restriction) in E.U. and Toxic Substances Control Act" (TSCA) in U.S.

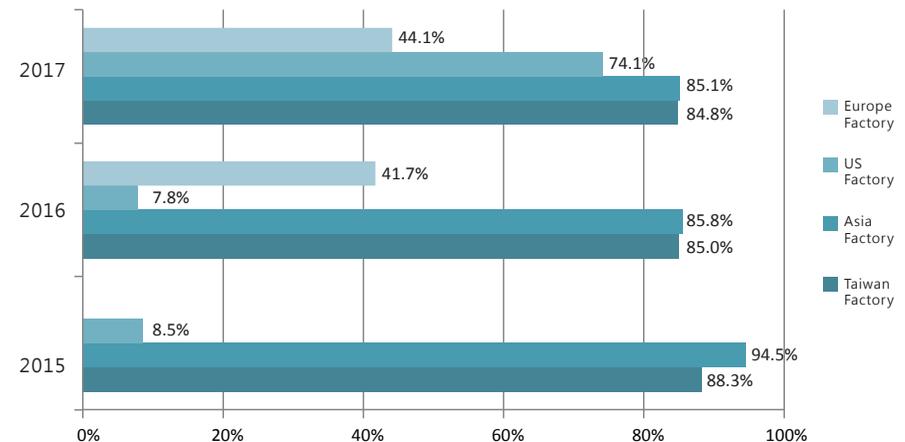
To ensure the company's quality management system continues to comply with requirements from customer and applied regulation, we regularly implement reviews over compliance with related information and regulations, and make a list of the company's stakeholders and issues of their concern. We also continue to work with Conflict Minerals Plan and request suppliers to conduct reasonable due diligence on supply chain to ensure that there are no conflict minerals in materials provided to us by supplier for the purpose of meeting requirements from customers and regulations.

U.K. government passed Modern Slavery Act 2015 in October of 2015. Enterprises with annual revenue reaching GBR 36 million and have operation activities in U.K. territory must comply with this act. Our operation activities in respective countries comply with all local laws which include various laws preventing human trafficking and slavery systems. GlobalWafers will never tolerate any behavior of modern slavery system, and insists all its commercial transactions, business relationship and supply chain activities comply with moral requirements, with honesty being the highest principle.

### Local Procurement

Types for GlobalWafers' procurements are roughly categorized into items of equipment, parts, raw material, factory matter and automatic equipment. Respective factories conduct procurement by themselves. We aim at the goal of realizing supply chain localization. Localized supply chain can increase supply flexibility and reduce unnecessary costs. They can also reduce supply chain carbon emission, promote green industry development and create local employment opportunities. GlobalWafers' major manufacturing bases are in Taiwan and Asia. We consider enhancing local industry development as a critical part for corporate social responsibility. Our local procurement rates in Taiwan and Asia for the last 3 years reached above 84% for the purpose of realizing the concept of facilitating industry's local development.

### Local Procurement for Global Factories



Note: 1. Local Procurement: Factory and supplier are located in the same country.  
2. GlobalWafers did not establish factory in Europe in 2015.



# 4

## Sustainable Environment

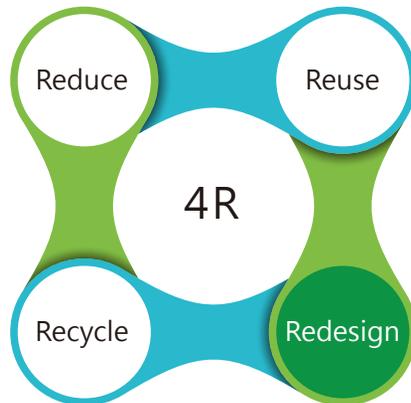
- 4.1 Greenhouse Gas
- 4.2 Waste Management
- 4.3 Source Reduction
- 4.4 Pollution Prevention





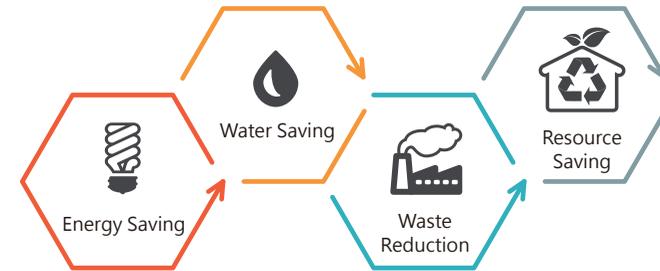
### Meaning to GlobalWafers

Under the policy of "Recycling Economy" which is promoted aggressively by the government, GlobalWafers recognizes that economic and technological development shall also consider importance of environmental protection, and considers that corporates have the responsibility to share impacts to environment. As such, GlobalWafers fulfills facilitation on resource recycling based on its concept of "cycling economy." In addition to 3 Rs (Reduce · Reuse · Recycle), it focuses more on the 4<sup>th</sup> R (Redesign), which ensures pre-planning of recycling effects of reduction, re-utilization and re-exploitation for products/manufacturing process during design stage, while continues to enhance pollution prevention technological capability. Self-control is also required in order to achieve the vision of a sustainable environment.

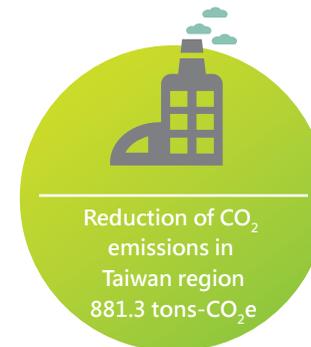


### Management Mechanism

Through the promotion of 2015 ISO 14001 Environment Management System, GlobalWafers introduces the concept of product lifecycle, and starts from improvement for manufacturing process and product design stage in order to truly achieve reduction of source raw materials. With respect to prevention of air pollution and water pollution, the company also works with the promotion of environment management system. Each year, goals for energy saving, water saving, waste reduction and resource saving are established in order to lower energy resource consumption amount while in the meantime achieving effectiveness in reducing greenhouse gas emission. With respect to waste management, traditional cleaning and disposal are transferred into the concept of effective resource management in order to reduce waste generation. Meanwhile, audit management on waste cleaning vendors is enhanced to ensure that waste is disposed in a good manner. For regulation compliance, GlobalWafers insists on legal operations and conducts compliance assessment focused on internal/external environment related issues. Preventive rectification measures will be taken immediately in the event of discovery of regulatory risks, and policy fulfillment will be ensured through comprehensive management and vigilant operation and maintenance.



### 2017 Key Achievements



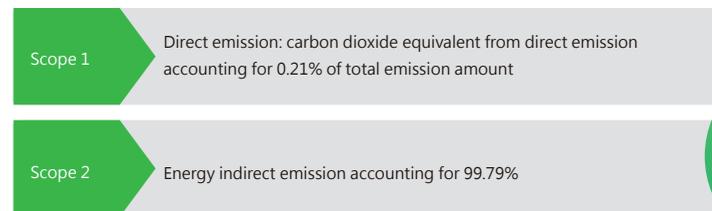
## 4.1 Greenhouse Gas

Faced with global warming and changes in environment in recent years and in response to greenhouse gas reduction work requirements prescribed in the "United Nations Framework Convention on Climate Change" and the "Paris Agreement," or, based on the thinking of being a part of this global village, governments of respective countries have gradually launched concrete action plans to inhibit greenhouse gas emission. In the meantime, international community's measures on greenhouse gas management have gradually expanded downwards from national level negotiation. They even expanded to corporate level through multi-national supply chain requirements and directly influenced corporate's management activities. Low Carbon Economy has now become the main stream for current economy and investment.

With its concern about global climate change, utilization of energy resource and fulfillment of corporate responsibility, GlobalWafers has determined to comply with International Organization for Standardization's ISO 14064-1 standard requirements on greenhouse gas management and promote, in a systematic manner, establishment of respective production unit's greenhouse gas emission and discharge list for the purpose of references for future establishment of effective improvement management project.

The company's operation parameter include three categories of greenhouse gas emission sources which include direct (scope 1, greenhouse gas for fuel utilization and manufacturing process utilization, fugitive emission sources of septic tank and firefighting equipment), energy indirect (scope 2, purchased energy) and other indirect (scope 3) sources. We have disclosed direct (scope 1) and energy indirect (scope 2) in this report.

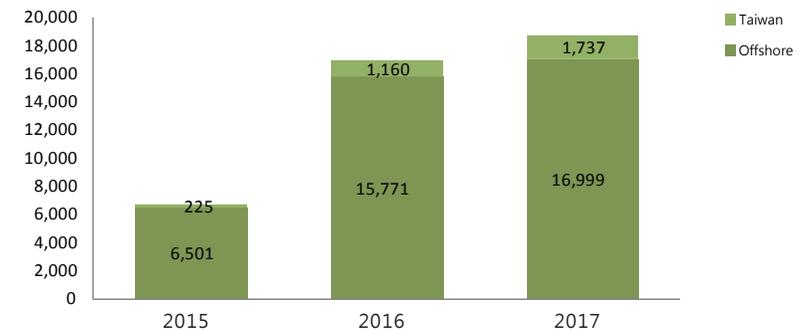
GlobalWafers' greenhouse gas emission total amount for the last 3 years presents an increasing trend on each year. The main reason is because of our acquisitions of semiconductor business division of Topsil Semiconductor Materials A/S and SunEdison Semiconductor in 2016 as well as our continued expansion of production capacity. Our carbon dioxide equivalent emission in 2017, which is roughly 8.83 million tons of carbon dioxide equivalent, increased by 3.6% compared with the one for 2016, with carbon dioxide equivalent from direct emission (scope 1) accounting for 0.21% of total emission amount and energy indirect emission (scope 2) accounting for 99.79%. For Taiwan region, its carbon dioxide equivalent emission accounts for 1.78% of total emission amount.



For Taiwan region, its carbon dioxide equivalent emission accounts for 1.78% of total emission amount

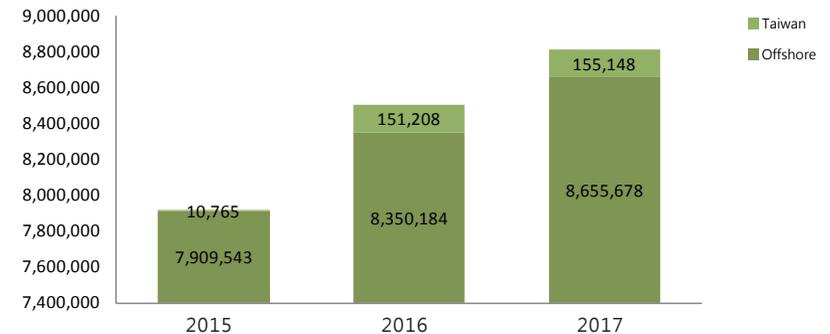
### Scope 1. Greenhouse Gas Emission Amount

Unit: tons



### Scope 2. Greenhouse Gas Emission Amount

Unit: tons

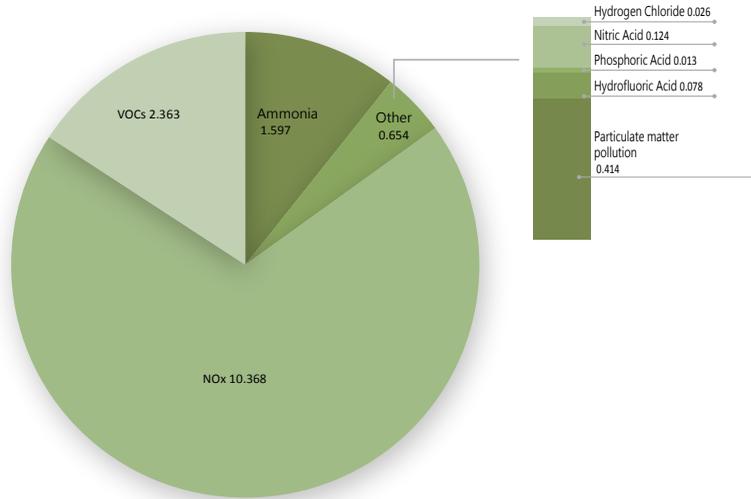


Note:

- 1.Taiwan: GlobalWafers headquarters. Taisil Electronic was included since 2016.
- 2.Offshore: GlobalWafers Japan, KunShan Sino Silicon Technology Co., Ltd., and with MEMC Electronic Materials, SpA, MEMC Korea Company and SunEdison Semiconductor, LLC added since 2016. Other factories are unable to provide data and are therefore not included in the scope of statistics. Factories not being disclosed hereto are GlobiTech Incorporated., MEMC Electronic Materials, Sdn Bhd., MEMC Japan Ltd. and Topsil GlobalWafers A/S.
- 3.Carbon dioxide equivalent emissions are calculated based on emission factors issued by countries where respective factories are located.

### Other Significant Gases

Regular pollution emission materials in Taiwan include Nitrogen Oxide, Acid Waste Gas (Hydrogen Chloride, Nitric Acid, Phosphoric Acid, Hydrofluoric Acid), Ammonia, volatile organic compounds and particulate matter pollution. In 2017, gas emissions amount over 1 ton include Nitrogen Oxide, Ammonia and volatile organic compounds.



- Note:
1. Taiwan: GlobalWafers headquarters, Taisil Electronic
  2. Taisil Electronic has been integrated into GlobalWafers Group since 2016. There are no NOx pollution matters in GlobalWafers headquarters.
  3. Annual emission amount for particulate, mineral acid and inorganic alkaline is assessed based on third party certified laboratory test report statistics. Annual emission amount for volatile organic compounds is assessed based on air pollution fee.
  4. Regular pollution source emission matter is disclosed in accordance with regular pollution source operation permit.

### 4.2 Waste Management

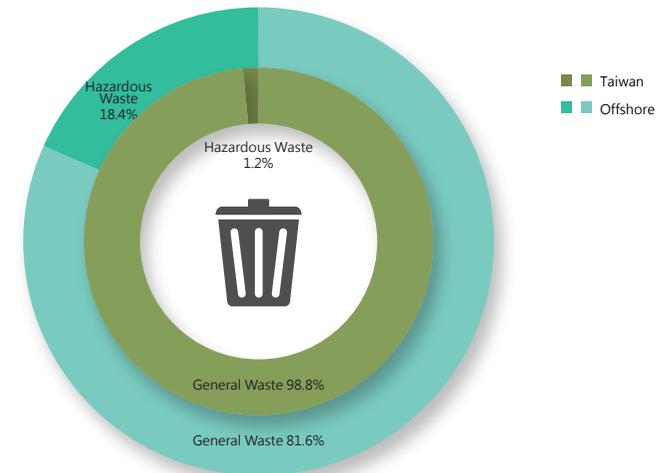
GlobalWafers' waste management emphasizes source reduction, manufacturing process improvement and source reduction in order to reduce waste generated. Meanwhile, recycling, reutilization and re-exploitation are implemented within factories to reduce amount for newly purchased raw materials while lowering amount of wastes generated. Finally, the company implements commissioned clean-up (including incineration, landfill and physical treatment). Currently, all wastes in our respective factories are treated through commissioned clean-up. There are no cases of multi-national (offshore) waste treatment. There is no detection of waste clean-up vendor's major violations for the last 3 years, and there is no occurrence of major leakage incident or offshore hazardous waste treatment in respective factories.

In Taiwan, our wastes generated go through waste clean-up and treatment in accordance with waste clean-up related regulations in order to comply with the most basic requirements from laws and regulations. Prior to commissioned treatment on wastes, collection by categories and storage management are implemented within factories. After appropriate and legal waste clean-up and treatment vendors are selected based on waste characteristics

and agreements are entered accordingly, clean-up vendors are then allowed to proceed with clean-up and report where wastes are shipped in accordance with environmental protection regulations, and wastes are then delivered to waste treatment plant for treatment. For the purpose of effective control over where wastes are shipped and to ensure that wastes have been carefully treated, audits are arranged to be implemented on waste vendors each year based on differences of vendors' nature (clean-up/treatment/re-utilization). As for clean-up institutes, we emphasize on factory access control. For treatment/re-exploitation institutes, audit is conducted on materials of their storage facility, treatment facility, treatment capability, operation of pollution prevention equipment, on-site safety, sanitation and firefighting management as well as company operation condition. Audit results then are categorized into levels for determination if collaboration will be continued or if audit frequency shall be enhanced.

In 2017, waste treatment amount in Taiwan is 5,646 tons, with general industrial waste accounting for 98.8% and hazardous industrial waste accounting for 1.2%. Offshore waste treatment amount is 21,425 tons, with general industrial waste accounting for 81.6% and hazardous industrial waste accounting for 18.4%. Industrial waste treatment amount in Taiwan accounts for 20.9% of the one for global factories. Our waste treatment amount for the last 3 years presents a year-by-year increasing trend. The main reason is because of our acquisition of semiconductor business group of Topsil Semiconductor Materials A/S and SunEdison Semiconductor in 2016 as well as continued expansion of production capacity.

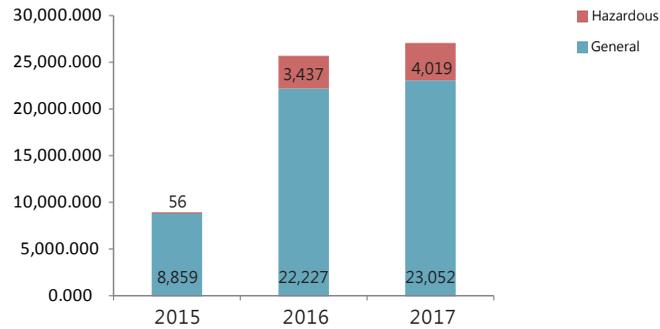
### Industrial Waste Percentages for 2017



- Note:
1. Taiwan: GlobalWafers headquarters, Taisil Electronic
  2. Offshore: GlobiTech Incorporated., GlobalWafers Japan, MEMC Electronic Materials, Sdn Bhd., MEMC Electronic Materials, SpA, MEMC Japan Ltd., MEMC Korea Company, SunEdison Semiconductor, LLC, KunShan Sino Silicon Technology Co. Ltd., Topsil GlobalWafers A/S

### Industrial Waste Treatment Amount for Global Factories

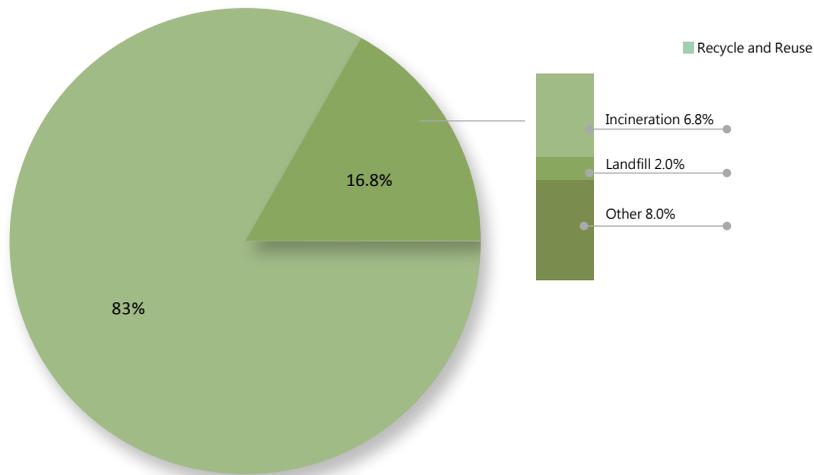
Unit: tons



Note:  
 1.2015 Factories: GlobalWafers Headquarters, GlobiTech Incorporated., GlobalWafers Japan, KunShan Sino Silicon Technology Co. Ltd.  
 2.2016, 2017 Factories: Compared with those of 2015, adding Taisil Electronic, MEMC Electronic Materials, Sdn Bhd., MEMC Electronic Materials, SpA, MEMC Japan Ltd., MEMC Korea Company, SunEdison Semiconductor, LLC and Topsil GlobalWafers A/S.

### Industrial Waste Commissioned Treatment Measures for Global Factories in 2017

Unit: tons



Note: Other treatment measures include physical, chemical and curing treatment.

With respect to commissioned treatment on industrial waste, industrial waste adopting recycle and reuse from our global factories in 2017 accounted for 83.2% of total waste treatment amount. Other treatment measures (physical, chemical and curing treatment) accounts for 8%. Incineration accounts for 6.8% and landfill accounts for 2% respectively. In Taiwan, percentages for respective industrial waste treatments are 80% for resource and re-exploitation, 12.4% for other treatment measures (physical, chemical and curing treatment), 7.5% for incineration and 0.1% for landfill.

### Treatment Amounts for Industrial Waste Respective Treatment Measures in Global Factories

Unit: tons



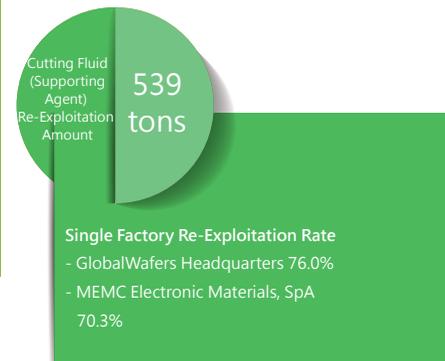
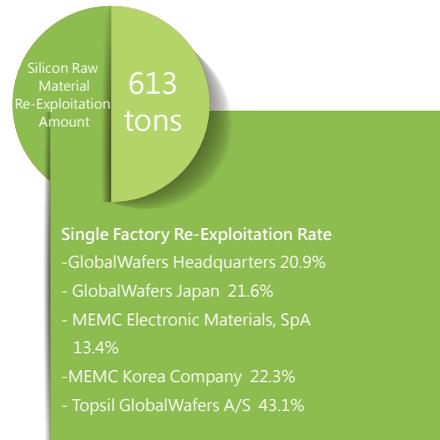
Note: Other treatment measures include physical, chemical and curing treatment.



## 4.3 Source Reduction

### 4.3.1 Raw Material Re-Exploitation

Through the promotion of 2015 ISO 14001 environment management system, GlobalWafers introduces the concept of product lifecycle, and reduces raw material consumption and wastes generated for the purpose of achieving the goal of sustainable operation and environmental protection. Based on different manufacturing processes, our respective factories utilize recycled raw materials to the most possible extent. Recycled raw materials utilized by our respective global factories include silicon raw materials, cutting fluid (supporting agent), product package carton and wafer cassette.



### 4.3.2 Energy Management

As stated in the previous chapter about organization inspection results on our greenhouse gas emission, the main resource for GlobalWafers' greenhouse gas emission is electricity. Therefore, reduction in electricity utilization as enhancement of energy efficiency are GlobalWafers' current top priorities. In Taiwan, through the introduction of ISO 50001 energy management system, we monitor and measure significant energy utilization equipment, establish improvement action plan and conduct regular tracking on performance of improvement measures in order to achieve the goals of continued improvement, energy saving and carbon reduction. We also expect to facilitate corporate innovation power, lower environmental ecology footprints for various products and services and enhance corporate image and competitiveness through our concerns over environmental protection and sustainable issues.

In Taiwan, there are 14 new energy saving measures starting from the 2<sup>nd</sup> half of 2016. This is equivalent to a reduction of 881.3 tons of carbon dioxide emission.

#### Energy Saving Measures in Taiwan

| Category                         | Energy Saving Items   | Energy Saved (Year) | Carbon Emission Equivalent Saved (ton-CO <sub>2</sub> e) | Electricity Bill Saved (NT\$) |
|----------------------------------|---|---------------------|--|-------------------------------|
| <b>GlobalWafers Headquarters</b> |   |                     |  |                               |
| Machine Efficiency Enhancement   | Lowering of Air Compressor Pressure   | 38,531 kWh          | 20.4   | 88,621                        |
|                                  | Old Dryer Replaced by High Efficiency Model   | 4,450 kWh           | 2.4  | 10,235                        |
|                                  | Replacement of Old Crystal Growth Manufacturing Process Pump                                | 31,806 kWh          | 16.8   | 73,154                        |
|                                  | Diesel Water Heater Replaced by Heat Pump Water Heater + Electric Water Heater              | 59,410 L            | 30.9   | 563,759                       |
| Air Condition Energy Saving      | Improvement on Polish Cleanroom Condensate and Air Leakage                                  | 170,922 kWh         | 90.4   | 393,121                       |
|                                  | Improvement on Office Air Condition PE Condensate   | 2,988 kWh           | 1.6  | 6,872                         |
| Machine Improvement              | Enhancement for Cutting Production Capacity   | 9,364 kWh           | 5.0  | 21,537                        |
|                                  | Parameter PPH Enhancement   | 25,448 kWh          | 13.5   | 58,530                        |
|                                  | Diffusion Furnace Energy Saving Improvement Proposal  | 442 kWh             | 0.2  | 1,017                         |
| <b>Taisil Electronic Factory</b> |   |                     |  |                               |
| Machine Efficiency Enhancement   | Heat of Compression Air Dry Added to Replace Existing Heated Desiccant Compressed Air Dryer | 124,416 kWh         | 65.8   | 286,157                       |
| Air Condition Energy Saving      | 1 <sup>st</sup> Phase Cooling Tower Old Plate Replacement and Repair                        | 42,245 kWh          | 22.3   | 97,164                        |
|                                  | UB Water Chiller #1 COP Improvement Project   | 363,920 kWh         | 192.5  | 837,016                       |
| Machine Improvement              | PULLER LPHZ Conversion  | 554,458 kWh         | 293.3  | 1,275,253                     |
| Energy Saving on Lighting        | Traditional Light Tube Replaced by LED High Efficiency Light Tube                           | 238,571 kWh         | 126.2  | 548,713                       |
| Taiwan Total                     | Diesel  | 59,410 L            | 881.3  | 4,261,149                     |
|                                  | Electricity   | 1,607,561 kWh       |  |                               |

Note:

1. Electricity carbon emission factor is 0.529 (kg CO<sub>2</sub>e/kWh) and diesel carbon emission factor is 2.606(kg CO<sub>2</sub>e/L) for calculation.
2. Electricity bill is NT\$2.3/ kWh and diesel is NT\$18.56/L for calculation.

Machine Improvement



·Thermal components for Puller were changed to Low Power Hot Zone (LPHZ Type).  
 ·Energy consumption per hour lowered from 151 kWh to 138 kWh.

PULLER LPHZ Conversion



Heat of Compression Air Dry Added to Replace Existing Heated Desiccant Compressed Air Dryer



Old Dryer Replaced by High Efficiency Model

Machine Efficiency Enhancement



Replacement of Old Crystal Growth Manufacturing Process Pump



Diesel Water Heater Replaced by Heat Pump Water Heater + Electric Water Heater

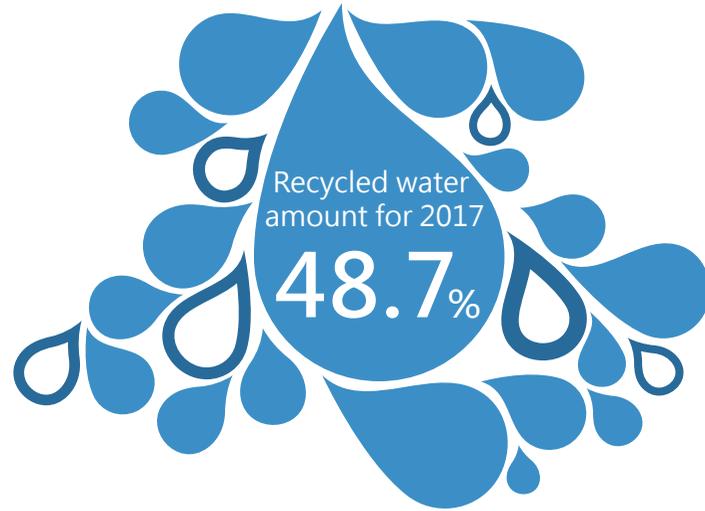
Energy Saving on Lighting



Traditional Light Tube Replaced by LED High Efficiency Light Tube



Traditional Light Tube Replaced by LED High Efficiency Light Tube



### 4.3.3 Water Resource Management

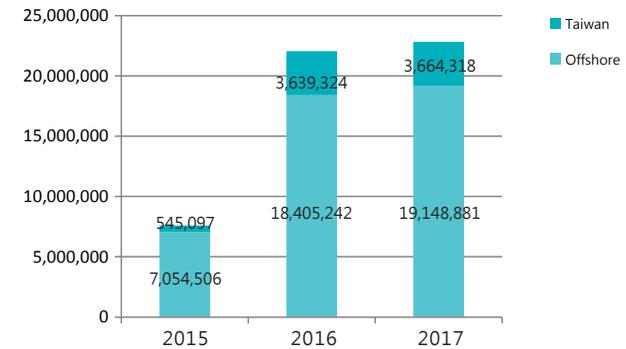
Global climate change problem in recent years has led to the phenomenon of extreme rainfall. This has also made water resource management extremely important. GlobalWafers' water in Taiwan comes from running water supplied by Taiwan Water Corporation. A small part of the water comes from air-conditioner condensate. The company does not use underground water. Therefore, there are problems of underground water overutilization, land subsidence or sabotage to environment ecology. With respect to water resource, water supply sources are Bao San 1st and Bao San 2nd water plants, whose sources of raw water are not categorized into national or international nature protection areas. Waterbody does not come from sensitive area (which is considered by expert as a relative space, special function, rare, threatened and endangered system; or, certain endangered species exist in such water source). As for saving on water resource consumption, GlobalWafers is dedicated to recycle water for re-utilization in order to respond to water shortage risks from global climate change.

GlobalWafers' total water intake amount for the last 3 years presents an increasing trend. The main factor for dramatic increase in total water intake amount in 2016 is because of our acquisition of semiconductor business group of Topsil Semiconductor Materials A/S and SunEdison Semiconductor in 2016 as well as continued expansion of production capacity. Total water intake amount for 2017 is 22,813,199 tons which increase slightly than the one for 2016. As for water resource recycling and reutilization, total recycled water amount for the last 3 years also presents an increase situation. For Taiwan area, recycled water amount for 2017 is 1,953,228 tons, accounting for 48.7% of total recycled water amount.

With respect to water resource recycling rate, average water resource recycling rate for global factories in 2017 is 17.6%, a slight increase compared with 17.0% for 2016. For Taiwan, water resource recycling rate for 2016 and 2017 are 54.1% and 53.3% respectively. This is the major water resource recycling area throughout our global factories.

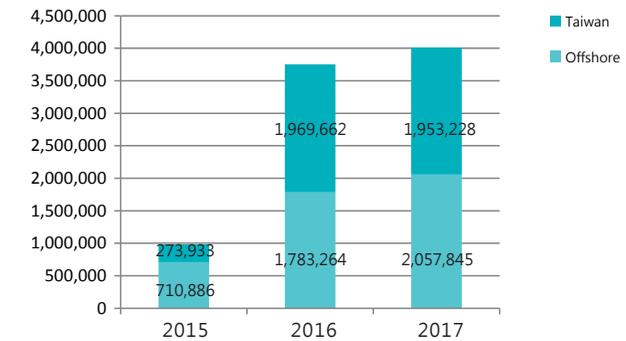
Total Water Intake Amount

Unit: tons



Amount of Total Recycled Water

Unit: tons



Water Resource Recycling Rate

Unit: tons



Note:  
 1. 2015 Factories:  
 Taiwan - GlobalWafers Headquarters  
 Offshore - GlobiTech Incorporated., GlobalWafers Japan, Kunshan Sino Silicon Technology Co., Ltd.  
 2. 2016, 2017 Factories: Compared with those of 2015, adding  
 Taiwan - Taisil Electronic  
 Offshore - MEMC Electronic Materials, Sdn Bhd., MEMC Electronic Materials, SpA, MEMC Japan Ltd., MEMC Korea Company, SunEdison Semiconductor, LLC, Topsil GlobalWafers A/S  
 3. Water Resource Recycling Rate = Volume of recycled process water ÷ Total volume of water withdrawn

With respect to management concept for water saving measures in Taiwan factories, they are mainly categorized into factory matter system and manufacturing system for implementation of item management as well as continued enhancement of efficiency for manufacturing waste water recycling system. We regularly hold internal meetings on water saving discussion and improvement. The company also promotes water consumption saving to ensure water saving becomes the whole company employees' consensus. In recent years, water saving measures promoted and continue to operate are:

**Achievements from Water Saving Measures in Taiwan**

| GlobalWafers Headquarters |  |                                 |
|---------------------------|--|---------------------------------|
| Factory                   | Measure  | Water Saving Amount (tons/year) |
| GlobalWafers              | 1. Water Recycling from Polishing and LTO Manufacturing Processes  | 185,851                         |
|                           | 2. Water Recycling from Surface Grinding   |                                 |
|                           | 3. Water Recycling from Edge Grinding Station  |                                 |
|                           | 4. Press Water Recycling from Frame Filter   |                                 |
|                           | 5. Water Saving Faucet   |                                 |
|                           | 6. Water Recycling Rate Enhancement<br>· Adding Water Recycling System<br>· Utilization of Drainage Hierarchy  |                                 |
|                           | 7. Lower Manufacturing Process Pure Water Consumption Amount   |                                 |
| Taisil Electronic         | 1. Water Recycling Rate Enhancement<br>· Adding Water Recycling System<br>· Grinding waste water recycling system was established in 2015. Average daily running water consumption can be reduced by 150~250 tons, with an annual reduction of 98,383 tons.<br>· EPI waste water recycling system was expanded in 2017. Average daily water consumption can be reduced by 250~350 tons, with an annual reduction of 16,358 tons. | 114,741                         |
|                           | 2. Source Management: Analysis is conducted on daily water consumption in order to review if any irregular water consumption existed.  |                                 |
| <b>Total</b>              |  | <b>300,592</b>                  |



Adding Processing Equipment to Increase Water Circulation Times (Reutilization and Recirculation on Original Water Supplied)



Expansion of EPI Waste Water Recycling System in 2017



Replacement of Water Saving Equipment (Water Saving Device Installed on Sink)



Adding Pure Water Low Consumption System



Adding Grinding Waste Water Recycling System in 2015

## 4.4 Pollution Prevention

We aggressively promote green product and green production, and reduce raw material consumption through manufacturing process and technology enhancement. We not only reduce pollution discharge starting through source reduction, we also lower operation costs, reduce resource consumption and mitigate impact to environment. Meanwhile, we request up/down stream suppliers that their products and components delivered to GlobalWafers shall comply with requirements of related international regulations on not using conflict minerals and prevention of materials hazardous to environment for the purpose of ensuring product's compliance with directives of RoHS, WEEE, REACH, ErP and Batteries.

Research teams and related departments of our respective factories are constantly engaged in innovation, improvement and assessment of feasible technology for friendly environment, verify feasibility through simulations and tests, and introduce technology into production process in order to fulfill responsibilities of sustainable operation and environmental protection. Take GlobalWafers Headquarters in Taiwan for example:



### Raw Material Reduction

Through machine modification, diamond wire saw can be used on existing machines for wafer ingot processing, and introduced into cutting manufacturing process.

→**Single Machine Material Reduction 3.4 tons/month**

\*1 machine was modified in 2017 and test will be conducted in 2018 to increase number of machines to be modified.

Cutting Wire Consumption Optimization on Different products

→**Cutting Wire Each Consumption for Single Product Reduces by 35km**

\*Monthly Cutting About 49 Consumptions

Analysis of content differences between metal and fluoride on used Hydrofluoric Acid is conducted in order to define the optimal Hydrofluoric Acid consumption.

→**Diffusion and separation of Hydrofluoric Acid has caused consumption to reduce by 50%.**

Used round-edge grinding wheel can be used repeatedly through vendor's reprocessing.

→**Newly purchased grinding wheels are reduced by 25pcs/month.**



### Replacement of Hazardous Materials

Impact from different suspending agents' suspension capability and diffusion capability on wafer quality during wafer grinding process are analyzed.

→**Suspending agent without Endocrine Disrupting Chemicals or toxicant is used to replace original suspending agent.**



# 5

## Friendly Workplace

- 5.1 Employee Caring
- 5.2 Occupational Safety and Sanitation
- 5.3 Society Participation



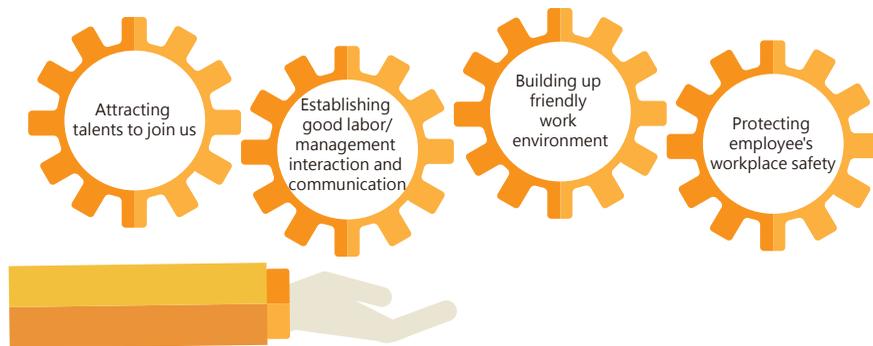
## Material aspects

Human Rights, Safe Environment  
(Emergency Response)



## Meaning to GlobalWafers

GlobalWafers always treats its employees as the company's most critical asset. Through providing market competitive compensation and comprehensive benefit system, the company attracts talents to join it and fulfills its corporate responsibility via creating and providing local residents with employment opportunity. The company listens to employee's opinions and voices, establishes good labor/management interaction and communication, complies with regulations, stipulates various work systems and management requirements consistent with labor regulations, respects employee's labor provision willingness and never forces or mandates provision of labor, builds up friendly work environment to protect employee's workplace safety, emphasizes employee's occupational development and cares about employee's work/life balance.



## Management Mechanism

- > **01** The company regular holds labor/management meeting and provides various communication channels and report mechanism in order to effectively understand employee's voice and handle employee's issues.
- > **02** The company promotes occupational safety and sanitary management system, security education training and safety culture activities, enhances employee's sense of safety, strengthens employee's cultivation and discipline in order to reduce accident rate effectively and protect employee's occupational safety.
- > **03** Emergency response team training and emergency escape evacuation drill are conducted regularly to enhance in-factory disaster rescue skill as well as employee's knowledge and familiarity on work environment and escape routes for the purpose of minimize possible personal injury, property loss and impact to environment incurred from accident.

## 2017 Key Achievements



## 5.1 Employee Caring

### 5.1.1 Human Resources

Talent employment and retention are at the center of core elements for corporate and society's development. Preeminent talents is the basis to fulfill corporate strategic goals and the power for corporate sustainable development. With various challenges of information technology prosperity, talent outflow and talent shortage, we have enhanced efforts on human resource's respective perspectives of "selection, education, utilization, retention and promotion," strengthened talent building and improved personnel quality structure in order to respond to global talent competition.

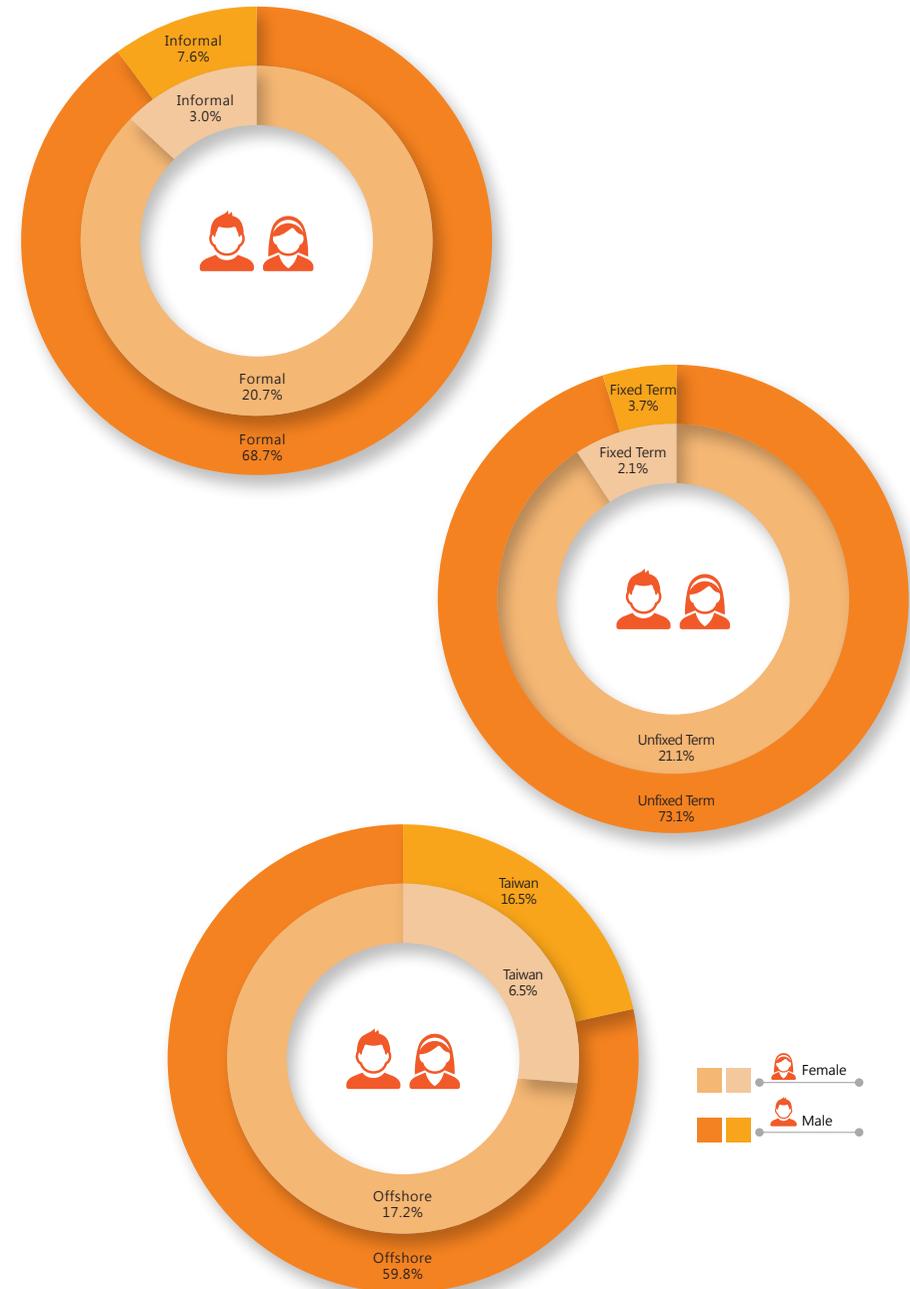
We respect workplace diversity. There are no different types of differential treatments or discrimination under different circumstances. We insist on integrity operational principle and establish various human resource management guidelines. Our talent recruit policy also discloses that talent employment shall go through public recruitment and employee recommendation and talents shall only be employed after qualified interview, and standards for recruitment, interview, duty assignment and compensation offering shall comply with regulations and requirements. Through public and fair talent recruitment channels, we continue to recruit talents who have good communication, coordination and learning ability in respective locations. In Taiwan, we attract diversified talents through government large scale recruitment activities. We also select appropriate persons for cultivation and training through adaptive testing and selection interview for the purpose of participating in the company's growth.

In 2017, our total number of employees is 6,905, with male employees accounting for 76.3%. With respect to official and unofficial employees, official employees account for 89.4%, with male employee accounting for 68.7%. As for employment types, unfixed term (average employee) accounts for 94.2% of official employees, with male employee accounting for 73.1%. For distribution of workplaces, number of employees in Taiwan accounts for 23%.

#### Global Factory Human Power Structures

| Type                  | Team  | 2017  |        |
|-----------------------|---|-------|--------|
|                       |   | Male  | Female |
| Official/Unofficial   | Formal (Average Employee)                                   | 4,742 | 1,433  |
|                       | Informal (Temporary Personnel, Part-time Personnel)         | 526   | 204    |
| Employment Agreement  | Unfixed Term (Average Employee)                             | 4,513 | 1,301  |
|                       | Fixed Term (Contract Personnel, Apprentice, Foreign Worker) | 229   | 132    |
| Location              | Taiwan  | 1,138 | 446    |
|                       | Offshore  | 4,130 | 1,191  |
| Gender-Based Subtotal |   | 5,268 | 1,637  |
| Total                 |   | 6,905 |        |

#### Global Factory Human Power Structures



### 5.1.2 Compensation Benefits

Employee is an enterprise's most important asset and power for growth and success. We are dedicated to providing competitive compensation benefits to attract and retain various talents, and offer feedback to colleagues for their hard work and contribution to the company.

To stimulate employees' potential and allow them to develop their talents and grow together with the company, we not only enhance compensation and benefit measures but we also work harder in providing human resource development system and friendly work environment suitable for employees as a whole. It is expected that employees will be able to feel GlobalWafers' concern and caring for everyone and, as such, employee's centripetal force and sense of recognition towards the company will be enhanced accordingly.

Each year, we make proper adjustments to employee's base salary through compensation investigation, survey of market salary levels, and references from overall economic indicators and consumer price index. The theme is to comply with laws and related regulations and establish operation target that employee retainment starting salary shall be higher than starting salary for national standard. Meanwhile, to maintain equality, standards for setting employee salary are all based on judgements conducted on work related items of duty, years of service and professional capability in order to ensure same pay for same work and avoid discrimination or differential treatments based on gender, age or other conditions.

#### > Connection between Performance and Compensation

We conduct performance review on all employees each year. Focused on employee's commitment to work, duty and responsibility as well as level of contribution, we make salary adjustment under considerations of future development possibility and market salary levels, and offer encouragement cash reward and bonus based on performance results to ensure employee's compensation and development combine with the company's finance and performance, and encourage employees' continuous dedication and innovation on their duties.

#### > Comprehensive Benefit System

Here in Taiwan region, we offer related benefits of labor insurance and health insurance, labor pension and group insurance, employee meal allowance, annual travel subsidy, employee health exam, cash gift for three major festivals and birthday, subsidy for wedding, funeral and celebration events, club activity subsidy and commuting bus.

#### > Pension System

We appropriate pension fund in accordance with laws of respective countries where our operations are located. In Taiwan, we follow "Labor Standards Act" and "Labor Pension Act" in establishing labor retirement guidelines. We have also set up labor pension reserve supervision committee and appropriate sufficient amount of labor pension each month to allow labor to apply for pension when retirement conditions are met for the purpose of protecting employee's rights.

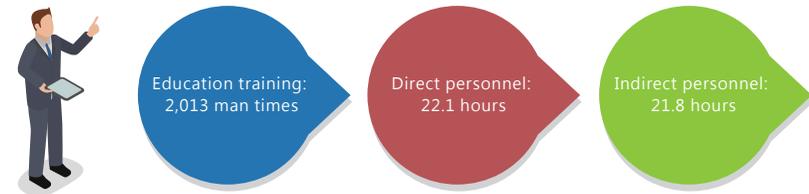
#### > Encouragement to Excellent Employee

The company looks at employee's performance through a positive and aggressive corporate culture, and establishes various encouragement projects such as excellent performance encouragement, proposal encouragement, patent encouragement, and so on. Taiwan region also holds excellent employee campaign each year and labor exemplar will be selected and awarded accordingly for recognition.

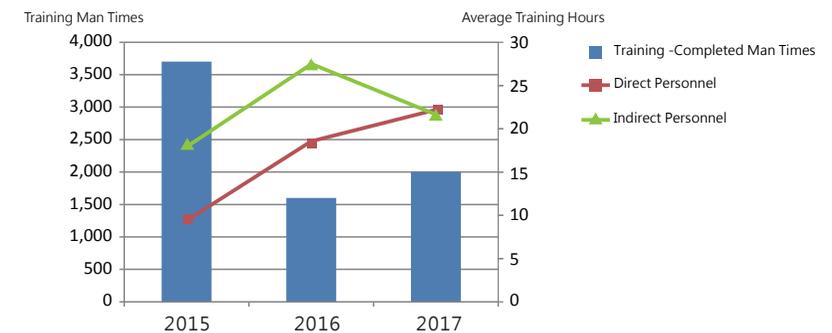
### 5.1.3 Talent Incubation

We establish annual education training program based on our operation strategy and short/mid/long term goals, and consider management talent incubation and technology inheritance as our focus for task performance. We strengthen talent database management function in order to master group talent status and development direction. We allow learning content diversification for education training through the holding of education training lessons. Meanwhile, through industry-academy collaboration project, the company assists employees to master, in real time, global political and economic development, trend dynamics, technology innovative knowledge in order to increase their diversified professional skills. The company also utilizes mechanisms of duty delegation, duty rotation and on-job training to enhance supervisor and staff's management skills and professional capability. We provide diversified professional skill learning resources to enable the company and employees to adapt to swift changes and evolutions in knowledge power and possess real-time knowledge, techniques and capability.

In 2017, employee's average man times for education training from respective factories is 2,013 man times, with average training hours for direct and indirect personnel of 22.1 hours and 21.8 hours respectively. Difference between education training man times for 2015 and that for 2016 is relatively huge. Main reason for this is dramatic change in factories included in statistics from our acquisition of related enterprise groups in 2016. Both average man times and training hours for taking education in 2016 and 2017 are similar to each other. This illustrates our steady education training program and mechanism.



#### Statistics for Employee Education Training



Note:

- 2015 Factories: GlobalWafers Headquarters, GlobiTech Incorporated, GlobalWafers Japan, KunShan Sino Silicon Technology Co., Ltd.
- 2016 and 2017 Factories: Compared with 2015, adding Taisil Electronic Materials Corporation, MEMC Electronic Materials, Sdn Bhd., MEMC Electronic Materials, SpA, MEMC Japan Ltd., MEMC Korea Company and Topsis GlobalWafers A/S.
- Direct Personnel: Operation personnel directly engaged in production related operations, including staffs engaged in technological tasks and team leaders in production sites.
- Indirect Personnel: Personnel not directly engaged in production related tasks, including management, product design staff, accounting staff, procurement staff, engineer and so on.

### 5.1.4 Human Rights

GlobalWafers has always emphasized employee's benefits and complied with related human rights regulations from respective countries. We continue to work hard towards the goal of zero human rights complaints and we're convinced that smooth communication channel and report system will ensure employee's rights and benefits. In the event of the company's internal announcements of critical policy change, compensation and benefits, change in leave system which affect employee's rights, affected employee will be notified prior to implementation via labor/management meeting, e-newspaper, or human resource announcement as required for the purpose of protecting employee's rights.

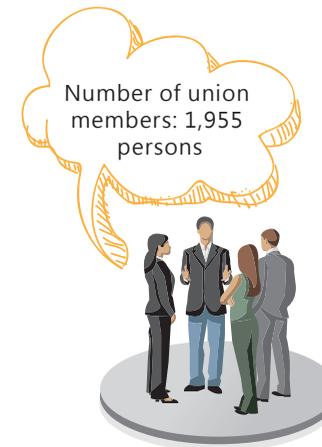
For Taiwan region, channels of labor/management meeting held regularly, employee opinion mailbox, occupation safety and sanity committee, old system retirement serve meeting and benefit committee allow employees to freely express their views and comments. Through opinion exchange and discussions from the meetings, employees' opinions can be fully expressed. This allows labor and management to conduct bilateral and effective communication in order to create the goal of win/win for both labor and management. Furthermore, for the prevention of workplace violence and sexual harassment, Taiwan region specifically establishes related requirements and report window for the prevention of workplace violence and sexual harassment. This provides employees with a smooth report channel and communication platform.

In most of our operation sites, we implement 0.5 or 1-hour human rights related education training to new employees. For existing employees, we have related courses of workplace violence trespassing and promotion of sexual harassment prevention from time to time each year. There are no occurrence or report of related human rights incidents (forced labor, child labor, discrimination, harassment or violation of freedom in association) within the last 3 years for our respective operation sites. We shall continue to work hard towards the goal of zero report in human rights incident.



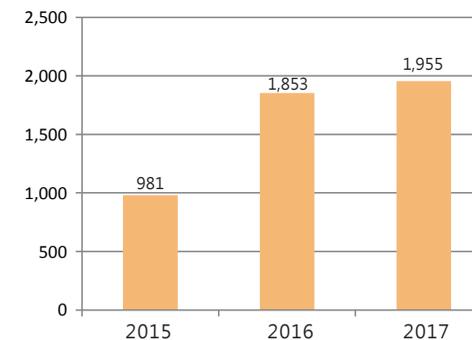
### > Union

In 2017, we have a total of 1,955 employees join in the union, accounting for 28.3% of all employees. Among them, there is no union established in Taiwan region. Operation sites with union established are Asia region (Japan, South Korea), Europe region and U.S. Number of employees joining in union in 2016 had an obvious increase over the one for 2015 due to our acquisition of SunEdison Semiconductor in 2016.



Number of Employees Joining in Union

Unit: person



Note:  
 1.2015 Factories: GlobalWafers Headquarters, GlobiTech Incorporated, GlobalWafers Japan, KunShan Sino Silicon Technology Co., Ltd.  
 2.2016, 2017 Factories: Compared with 2015, adding Taisil Electronic Materials Corporation, MEMC Electronic Materials, Sdn Bhd., MEMC Electronic Materials, SpA, MEMC Japan Ltd., MEMC Korea Company, SunEdison Semiconductor, LLC, Topsil GlobalWafers A/S.

## 5.2 Occupational Safety and Sanitation

### 5.2.1 Safe Environment

GlobalWafers aims at the goal of providing a safe, healthy and comfortable work environment. In order to establish a safe work environment, the company not only complies with local related safety and sanitation regulations, it also allows all employees to participate in safety and sanitation management activities through review, audit, communication and education training. Appropriate rectification measures are taken in due time and improvements are conducted continuously for the purpose of protecting life, safety and health of employees, contract worker and related third party as well as recreating a sustainable operation environment. Take Taiwan region for example, we introduced Occupational Health and Safety Assessment System (OHSAS 18001). Through the system's management mechanism (P→D→C→A), we reach to purpose of continuous improvement, eliminate hazardous factors in work environment and lower hazard risks accordingly. Each year, the company implements internal audit to review management system fulfillment, and commissions third party verification unit for system external verification and review in order to ensure management system effectiveness.

In Taiwan region, we establish occupational safety and sanitation committees in respective factories. These committees are composed of management, engineering technology representative, labor representative, medical staff and safety and sanitation personnel. Percentage for labor representatives is higher than the one required by laws, accounting for more than 1/3 of all committee members. Each quarter, the company holds occupational safety and sanitation committee meeting regularly to allow employees to participate in and supervise execution performance of occupational safety management system.

#### Occupational Safety & Sanitation Committees for Respective Factories in Taiwan Region

| Item   | GlobalWafers | Taisil |
|--|--------------|--------|
|  Committee (number of members)            | 20           | 25     |
|  Labor Representative (number of members) | 7            | 14     |
|  Labor Representative Percentage          | 35%          | 56%    |

We establish various work safety and sanitation management procedures for employees to comply with accordingly in order to lower operation risks and provide employees with a safe operation environment.



#### > Special Hazardous Operation Control

For operation items with high potential risks such as special operations of elevated work, hot work and limited space, hanging operation and firefighting disruption, related operation controls have been established and mandatory related safety measures protection and inspection are in place. Employees shall submit application prior to implementation of special operations, and shall conduct operation safety inspection in advance to ensure operation safety and achieve the purpose of disaster prevention.



#### > Contractor Management

Contractor management requirements are established. Contractors entering factory are required to submit 6-hour labor safety and sanitation education completion certificate or other related certificates better than this certificate. Operations are categorized into average operations and special hazardous operations (high risk operations of hot work operations, limited space operations, hanging operations and elevated work operations) for control over operation application and risks. During operation period, contractors are required to dispatch on-site supervision staff for operation supervision and operation application units are required to implement on-site supervision management. Meanwhile, environmental safety department staff will also conduct irregular inspections to ensure operations' compliance with safety, sanitation and environmental protection requirements as well as to strengthen contractor's operation safety.

#### Contractor Safety, Sanitation & Environmental Protection Education & Training





## > Chemical Substance Management

A safe material chart has been established to provide employees with enquiries on hazardous characteristics of chemical substance and related information. Hazardous substance lists are established accordingly for regular reporting to competent authority. All chemical machines are equipped with local exhaust ventilation on operations sites. Chemical substance GHS labels are placed on machines and Safety Data Sheet (SDS) is in place on operation zone to ensure employee's full understanding on chemical substance storage, hazards and prevention measures during their operations. Meanwhile, highly flammable chemical substance shall be stored in safety cabinet and explosion proof cabinet after being utilized in order to lower risks of chemical substance exposure. In addition to supplying personal protection gear, the company also arranges tightness tests on breathing protection gears to ensure effectiveness for employee's protection gears.



## Tightness Tests on Breathing Protection Gears



## > Monitoring of Operation Environment

As required by "Rules Governing Implementation of Labor Operation Environment Monitoring," qualified miner health technician and operation monitoring institute are commissioned to regularly research operation monitoring plan and implementation of operation environment tests, and verified if test results comply with regulatory requirements. Rectifications will be implemented immediately in the event of irregularity for the purpose of providing employees with a friendly operation environment.



### > Human Factor Engineering Improvement

To prevent human factor hazards and to avoid repetitive muscle bone injury or disease, human factor hazards prevention plan is established and muscle bone injury questionnaires are distributed in a full scale to conduct investigation. Suspected hazardous cases of high/middle risks are screened out accordingly. Occupational health management personnel will conduct operation site observation and occupational medical doctor will conduct interview and offer guidance accordingly. Improvement recommendations will be presented for improvement based on assessment result. This has effectively lowered employee's risk of having muscle bone injury. Meanwhile, education training and promotion on muscle bone injury prevention are also implemented.

#### Vacuum Lifter, Lift Platform, Energy Saving Device



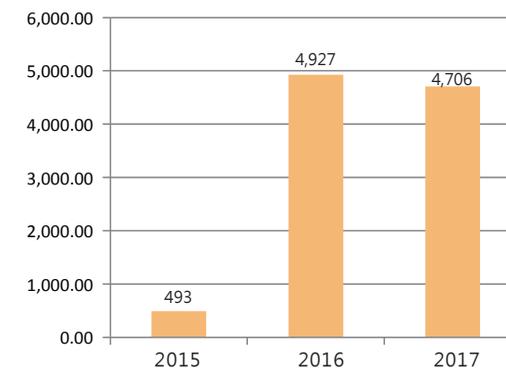
### 5.2.2 Safety Promotion and Education Training

We regularly implement labor safety health education training to new and existing employees. In the meantime, through measures of the company's internal website, e-mail and bulletin, we deliver safety and health knowledge for work environment, implant safety culture concept to base line employees and establish employee's safety consciousness in order to lower occupational disaster risks. Our safety health education training courses include related courses on hazardous substance control, personal protection gear utilization, prevention of human factor muscle and bone injury, dangerous machine, safety knowledge on equipment operation, prevention of limited space danger as well as hearing protection. For 2016 and 2017, annual man times for employees receiving safety health education training reached more than 4,700. This indicates our dedication to actions delivering employee safety consciousness.

Additionally, for the purpose of building up comfortable and safe work environment, GlobalWafers headquarters started to promote occupational safety proposal campaign in 2017. Award receiving units are selected through proposal contents and weighted scores, and will be recognized with cash award granted by the Safety Health Committee each quarter. This is to encourage employees to enhance their safety health consciousness, promote employees' aggressive participation and lower occurrence of occupational disaster.

#### Man Times Receiving Safety Health Education Training

Unit: man times



Note: Scope of Statistics – GlobalWafers headquarters and Taisil Electronic. Taisil Electronic was integrated into GlobalWafers Group since 2016.

Safety Health Education Training



Taisil Electronic Internal Website "ESH Environmental Safety & Health Section"

TEM  
環安衛專欄

| Date       | Subject  |
|------------|--|
| 2017/07/11 | 防範流感請落實咳嗽禮節與手部衛生，並減少至擁擠之公共場所。(Stella Lu/TEM/MEMC)          |
| 2017/07/07 | ESH責任區與負責部門一覽表 (Anny Chen/TEM/MEMC)                        |
| 2017/06/30 | 106年七月份ERT班表 (Marco Lin/TEM/MEMC)                          |
| 2017/06/26 | 耀華電子工安意外事件宣導 (Anny Chen/TEM/MEMC)                          |
| 2017/06/21 | 2017下半年度醫師臨廠服務日期公告 (Stella Lu/TEM/MEMC)                    |
| 2017/06/08 | 滅火器編號Layout與檢查清單 (Wilson Tseng/TEM/MEMC)                   |
| 2017/06/06 | 6/21(三)~6/23(五)將進行2017年上半年度勞工作業環境測定採樣 (Marco Lin/TEM/MEMC) |
| 2017/06/05 | 106年上半年度作業環境監測計畫 (Marco Lin/TEM/MEMC)                      |
| 2017/06/05 | 106年度東元綜合醫院親子教室課程表 (Stella Lu/TEM/MEMC)                    |
| 2017/06/01 | 同仁感染A型流感之通報及返回上班程序 (Stella Lu/TEM/MEMC)                    |
| 2017/05/31 | 106年六月份ERT班表 (Marco Lin/TEM/MEMC)                          |
| 2017/05/26 | 轉知 勞動部『職業安全衛生監督輔導及檢查作業規定』 (Anny Chen/TEM/MEMC)             |
|            | 職災案例宣導 --- 從事外牆玻璃更新作業發生墜落致死災害 (Anny Chen/TEM/MEMC)         |
|            | 職災案例宣導 --- 從事繼電器基座安裝作業發生墜落致死災害 (Wilson Tseng/TEM/MEMC)     |
|            | 職災案例宣導 --- 勞工拆除牆面施工用三角托架發生墜落致死災害 (Wilson Tseng/TEM/MEMC)   |
|            | 職災案例宣導 --- 從事廣告布幕框架修繕作業發生墜落致死災害 (Wilson Tseng/TEM/MEMC)    |
| 2017/05/24 | 炎炎夏日，預防熱傷害撇步123 (Stella Lu/TEM/MEMC)                       |

Taisil Electronic Internal Website "ESH Environmental Safety & Health Section"



GlobalWafers Headquarters – Occupation Safety Proposal Campaign



### 5.2.3 Emergency Response

Purpose of emergency response lies in real-time processing conducted in the event of factory emergency incident in order to avoid aggravation of disaster. To ensure accurate and effective response strategy upon occurrence of urgent irregular circumstances, and minimize possible personnel injury, property loss and impact to environment generated from accidents, we conduct emergency response team training and emergency escape evacuation drill each year for the purpose of enhancing factory disaster rescue as well as employee's knowledge and familiarity over work environment and escape route. Our emergency response training conducted in 2017 included firefighting, emergency response equipment training (AED, CPR, fire-fighting coat and SCBA operation and utilization), chemical substance leakage and emergency escape evacuation drill.

#### Chemical Substance Leakage Handling Drill



#### Emergency Response Equipment (compressed air breathing apparatus, fire-fighting coat, chemical protection coat and gas detector)



#### Emergency Escape Evacuation Drill – Ensure effective personnel evacuation during disaster



#### Fire Fighting – Strengthening fire-fighting skill to ensure that employees are capable of putting out fire immediately in the early stage of fire and avoid aggravation of disaster

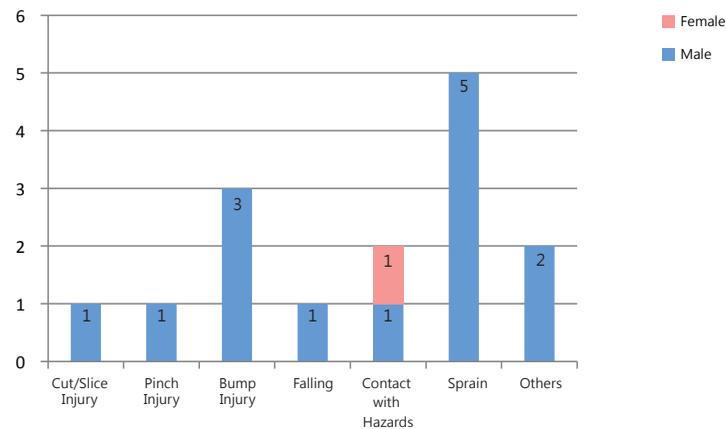


## 5.2.4 Disability Injury

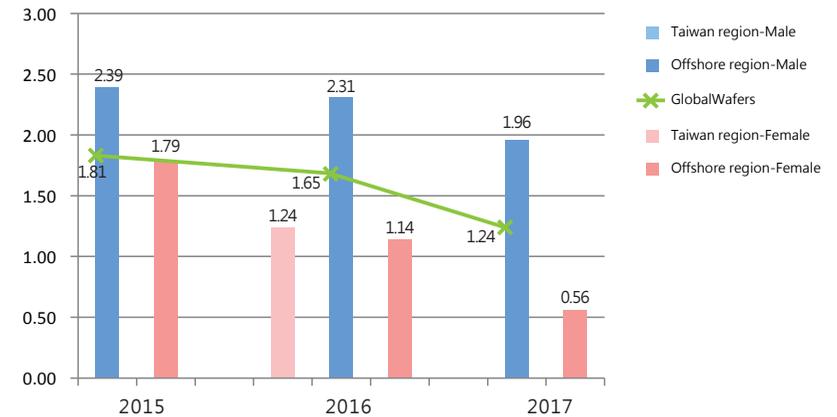
Occupational disaster statistics analysis data are generated based on disability injury statistics indicator published by the Ministry of Labors and GRI G4. With Per million work hours as standards, Disabling Frequency Rate, (FR), Disabling Severity Rate (SR), Occupational Disease Rate(ODR) and Absence Rate(AR) are utilized as main basis for statistics (with disabling injury statistics excluding traffic accidents outside factory).

In 2017, there was no incident of occupational injury in Taiwan region but there are a total of 15 incidents in offshore regions, with sprain injury accounting for the highest 33.3% of total occupational injury and hit injury accounting for the 2nd highest percentage of 20%. For global factories, disabling frequency rate is 1.24 (with male of 1.49 and female of 0.37) and disabling severity rate is 47 (with male of 59 and female of 6). There are no cases of occupational disease or death from work. According to occupational disaster statistics for the last 3 years, disabling frequency rate has been declining slightly each year, while disabling severity rate (SR) increases each year. This indicates that number of disabling injury cases are reducing, while loss of work hour from work injury is increasing. Main reason for this is that, among categories of work injuries, the number for cut or slice injuries, which have relatively lower loss of work hours, reduced from 6 cases in 2016 to 1 case in 2017. Additionally, there were no work injury incidents from contractors in respective offshore and domestic factories in 2017. We shall utilize occupational disaster statistics analysis result as an important basis for improvement in order to reduce injury occurrence rate and mitigate injury severity while marching towards the goal of zero disaster incidents.

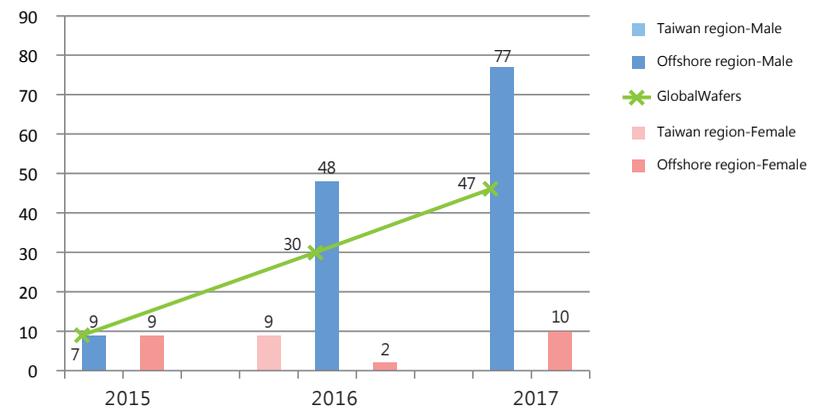
### 2017 Work Injury Category Statistics



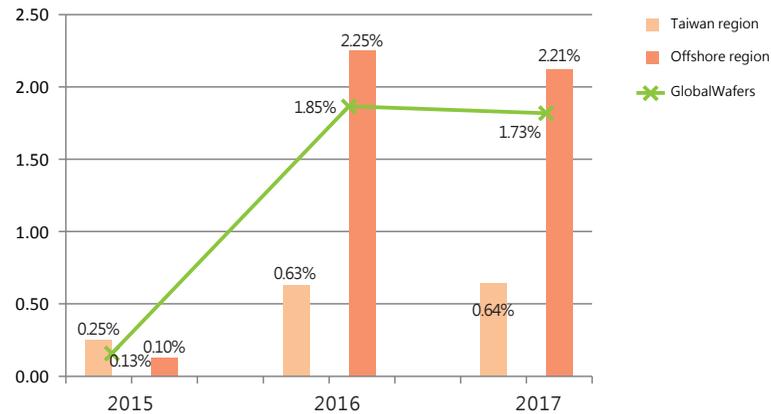
### Disabling Frequency Rate (FR)



### Disabling Severity Rate (SR)



### Absence Rate (AR)



Note:

- 1.Taiwan: GlobalWafers headquarters. Taisil Electronic was included since 2016.
- 2.Offshore: GlobalWafers Japan, KunShan Sino Silicon Technology Co., Ltd., and with MEMC Electronic Materials, Sdn Bhd., MEMC Electronic Materials, SpA, MEMC Japan Ltd. and MEMC Korea Company added since 2016.
- 3.Disabling Frequency Rate (FR) = total number of disabled employees ×10<sup>6</sup> / Total man-hours worked
- 4.Disabling Severity Rate (SR) = Number of lost work days ×10<sup>6</sup> / Total man-hours worked
- 5.Total man-hours worked: mandatory work days in respective factories × mandatory work hours × total number of employees for that factory
- 6.Absence rate (AR) = Total days of absence / Total working days \* 100%
- 7.Definition of Absence: Employee leaves his/her duty from loss of labor capability. This includes sick leave (menstruation leave), personal leave and occupational injury leave but excludes approved vacation, maternity leave, paternity leave and funeral leave.

### 5.2.5 Healthy Work Place

Employees are GlobalWafers' most valuable assets. We are dedicated to building up a safe and comfortable work environment and we consider employee's health as the critical element for enterprises marching towards success and sustainable development. Take Taiwan region for example, we install medical rooms in factories and equip them with designated nurses and contract professional medical doctors. With application of public health 3-tier and 5-level prevention concept, we plan for complete health exam and hold related health promotion activities to provide employees with emergency caring, health caring and implementation of special protection, and allow all employees to receive comprehensive health care while preventing occurrence of occupation related injuries and diseases.



#### Primary Prevention Health Promotion & Special Protection

- Regular Health Check
- Health Promotion Activities
- 4-Cancer Screening
- Flu Vaccination
- Provision of Health Information & Sanitation Education
- Identification & Assessment of Work Place Hazards
- Taks Selection & Task Distribution

#### Secondary Prevention Early Diagnosis & Proper Treatment

- Special Health Exam
- Prevention of Disease Triggered by Irregular Workload
- Maternal Health Protection
- Muscle Bone Injury Prevention
- Metabolism Case Management
- Injury & Disease Intervention

#### Tertiary Prevention Restrictive Disability & Rehabilitation

- Medical Treatment & Referral Assistance
- Duty Resumption Assessment & Task Distribution





> Health Check

We conduct health check regularly in accordance with regulations. In addition to average check items, we also implement special hazardous operation health check and provide free screening of four cancers (Colorectal cancer, Cervical cancer, Mammography, Oral cancer) based on age terms. Personal health check report counseling activities are also provided after health check to allow employees to understand more of their own health conditions. Labor health medical personnel will conduct statistics analysis on health check result and implement graded management accordingly in order to realize health check follow-up.



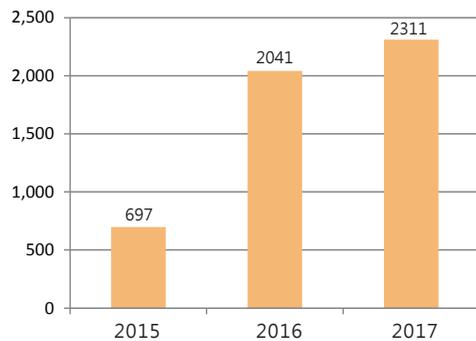
> Health Promotion

Labor health medical personnel conduct statistics analysis in accordance with health check result and plan for respective theme health promotion activities, health seminar and in-factory service doctor counseling accordingly. Meanwhile, medical treatment and health promotion services from the Hsinchu Science Park Clinic are combined to promote preventive medicine and disease prevention and treatment in order to enhance employee's health consciousness. Contents for health promotion launched in 2017 include various seminars and activities of weight loss and body fitness, four-cancer screening and lung cancer screening, CPR & AED training, flu vaccination, bone densitometry and eye care. This provides employees with accurate health knowledge and concepts. Charity blood donation activities are also held regularly to encourage employees to donate blood for charity purpose and presentation of spirits dedicated to charity.

Additionally, we emphasize a lot on the prevention and control over epidemics. Each year, free flu vaccination is provided to factory employees. Labor health medical personnel is responsible for collecting related epidemic information, and conduct promotion in the company's internal website to remind employees to strengthen their personal health and increase epidemic prevention knowledge. Epidemic active report system is established to avoid expansion of epidemics and ensure the company's various operations continue to function normally.

Participation in Health Promotion

Unit: Employees

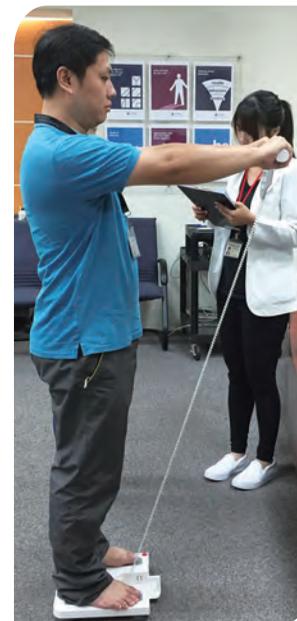


Note: Scope of Statistics - GlobalWafers Headquarters, Taisil Electronic Materials Corporation. Taisil Electronic Materials Corporation was included in GlobalWafers Group in 2016.

CPR & AED Training Courses



Body Fat Test, Dietitian Personal Counseling, Stress Relief Aerobics Lesson



### Smart Eating & Happy Weight Loss Activity – Achievement Lottery Draw



### Blood Donation Activity



### Special Protection Health Management



#### > Special Operations

Each year, special hazards health check is arranged for new and existing employees. Check items, which are arranged in accordance with employee operation characteristics, include noise, ionizing radiation, Dimethylformamide, n-Hexane, Manganese and inorganic compound, fine dust, Chromium, Mercury and inorganic compound. For employees with health check result higher than class two (included) of management classification, professional medical doctor will conduct assessment under references from operation environment test report and employee's health check results over the years, and personal health guidance and duty allocation recommendations will be provided accordingly. With respect to 2017 special operation inspection result, there are no irregular cases related to occupational factors.



#### > Maternal Health Protection

To avoid female employee's exposure to health hazardous operation sites, we establish maternal health protection plan. Maternal health risk assessment is implemented in accordance with the plan. Tier management and operation adjustment are conducted after professional medical doctor's integrated assessment to ensure that female employees with pregnancy or with less than one year after giving birth are not engaged in operations which may affect fetus development, pregnancy or mother and baby's health during lactation period. Designated parking space, breastfeeding room and benevolence badge are provided to pregnant employees to create a friendly work environment for career mothers.

### Designated Parking Space and Benevolence Badge for Pregnant Employee



### Breastfeeding Room





> Prevention of Disease Triggered by Irregular Work Load

For the purpose of preventing diseases triggered by work shifts, nighttime work, long-hour work and other irregular work load, we establish related plans for prevention of diseases triggered by work load. Summarized analysis is conducted based on all employees' health check data, work hour, and overwork questionnaire results. Tier management is implemented and high risk groups are listed accordingly. Through professional medical doctor's interview and health guidance and adoption of related prevention measures, we lower risk level for triggered diseases and ensure employee's mental and physical health.



> Health Information & Health Promotion Platform



| Date       | Subject   | Size(KB) |
|------------|---|----------|
| 2017/03/28 | 清明節要到了，大家踏青掃墓時，記得幾點防蟲措施。(Stella Lu/TEM/MEMC)  | 351      |
| 2017/03/24 | 3/27、3/29 免費眼壓&驗光檢測已額滿，請報名 4/26、4/28 檢查梯次 (Stella Lu/TEM/MEMC)                        | 167      |
| 2017/03/23 | 3/27 免費眼壓&驗光檢測已額滿，請報名 3/29、4/26、4/28 檢查梯次 (Stella Lu/TEM/MEMC)                        | 151      |
| 2017/03/22 | 清明掃墓當心恙蟲病 (Stella Lu/TEM/MEMC)  | 596      |
| 2017/03/17 | 3/27、3/29、4/26、4/28 免費眼壓&驗光檢測，名額有限，歡迎同仁踴躍報名參加。(Stella Lu/TEM/MEMC)                    | 195      |
| 2017/03/16 | 「迷子鳥資訊服務網」提供婦幼衛生相關資訊查詢 (Stella Lu/TEM/MEMC)   | 248      |
| 2017/03/15 | 新竹市衛生局活動-每日一萬步，健康大邁步 (Stella Lu/TEM/MEMC)   | 4,529    |
|            | ISO 14001:2015 & OHSAS 18001:2007 Formal Certificate.(2017~2020) (Joye Fang/TEM/MEMC) | 9,039    |
|            | 員工權人防護具與職業災害教育訓練 (Marco Lin/TEM/MEMC)   | 3        |
| 2017/03/09 | 同仁感染A型流感之通報及返回上班程序 (Stella Lu/TEM/MEMC)   | 94       |

E-bulletin Updates Health Information Irregularly



News Ticker Provides Promotions on Health, Disease Prevention



## 5.3 Society Participation

GlobalWafers encourages employees to develop their benevolence, make contributions, interact with society, care for disadvantaged groups and fulfill corporate social responsibility. In Taiwan, we aggressively participate in remote area's dream realization projects, various social benevolence activities of sponsoring disadvantage children and charity groups for the purpose of fulfilling corporate civil concept of "receiving from society and feeding back to society."

### Feedback and Participation in 2017



Moon Cake Donation

Shih Guang Educational & Nursing Institute, Hua Kuang Intellectual Development Center, Blue Sky Homeland, Lan Der Children Center, SOS Children's Village, Hsin Chu Adolescent's Home, Ren Ai Children's Home

204 Boxes of Moon Cake



Dream Realization Project

School children from remote counties of Hsin Chu County, Taiwan Fund for Children and Families

93 Dream Realization Gifts



Charity Activity in Winter

Jen Shih Township Show Luan Elementary School, Hao Shen Nursing School

NT\$ 220,000

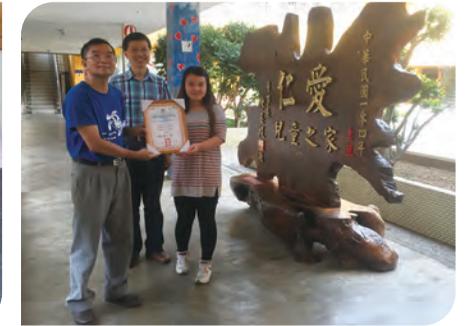


Donation of Uniform

Shih Guang Educational & Nursing Institute

3 Large Cartons of Uniform

### Donation of Moon Cake



### Dream Realization Project



## Charity Activity in Winter



奉獻愛心、寒冬送暖，  
照顧偏鄉弱勢孩童。

籌募資訊/  
12/14(四) - 12/15(五) 12/18(一) - 12/20(三) - 12/22(五)  
員工餐廳 11:00-13:00

合作單位/  
福祿壽山 - 新竹縣尖石鄉秀華國小  
秀如園舞 - 財團法人新竹縣好生育幼院

公司聯絡單位/  
Albert Chen #1219

注意事項/  
本次活動僅接受金錢捐款，不接收物資捐贈

 **One Kind Activity  
Can Change  
Someone's Entire Life.**

Taipei Electronic Materials Fundraising Activities  
Donation 2017

**Booth Information/**  
12/14(Thu.) - 12/15(Fri.) - 12/18(Mon.) - 12/20(Wed.) - 12/22(Fri.)  
Cafeteria 11:00-13:00

**Activities Partners/**  
Tunan Elementary School, Hsinchu County  
Legal Foundation Hao-Sheng Preschool

**Activities organizer/**  
Contact with Albert Chen #1219

**Attention/**  
Accept money donation ONLY.

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We are also fully dedicated to technology enhancement and academic exchange. In 2017, we received visits to our factories from teachers and students of the Central University, National Formosa University and Fu Jen University. Our management staff has also been invited to National Taiwan University, the National Tsing Hua University and National Chiao Tung University numerous times to share related experiences of technology and culture management. The company also provides students with opportunities of practical training and delivers market trend and corporate management culture to students through academy-industry collaboration in order to achieve the purpose of academic exchange.

## Academy – Industry Exchange





Taisil Electronic Materials, receiving silver award from participation in The City Cup Cheerleader Campaign

## GRI G4 content index table

| Index   | Description  | Corresponding chapter                               | Page | Note/ Reasons for non-disclosure          | Guarantee is only for disclosed Taiwan statistics and excludes those of offshore subsidiaries. |
|---|--|---|------|---|--|
| <b>Strategy and Analysis</b>                      |  |   |      |   |  |
| G4-1  | Provide a statement about the relevance of sustainability to the organization and the organization's strategy for addressing sustainability.                       | Words from Management                               | 7    |   | ☉  |
| <b>Organizational Profile</b>                     |  |   |      |   |  |
| G4-3  | Name of the organization.  | About GlobalWafers                                  | 9    |   | ●  |
| G4-4  | Primary brands, products, and services.  | About GlobalWafers                                  | 9    |   | ●  |
| G4-5  | Location of the organization's headquarters.   | About GlobalWafers                                  | 9    |   | ●  |
| G4-6  | Number of countries where the organization operates.   | About GlobalWafers                                  | 9    |   | ●  |
| G4-7  | Nature of ownership and legal form.  | About GlobalWafers                                  | 9    |   | ●  |
| G4-8  | Markets served and nature of market.   | About GlobalWafers                                  | 9    |   | ●  |
|   |  | 2.3 Operation Performance                           | 29   |   | ●  |
| G4-9  | Scale of the organization.   | About GlobalWafers                                  | 9    |   | ●  |
|   |  | 2.3 Operation Performance                           | 29   |   | ●  |
| G4-10   | Report the total number of employees by employment type/contract/region/and gender.  | 5.1 Employee Caring                                 | 53   |   | ●  |
| G4-11   | Percentage of total employees covered by collective bargaining agreements.   | 5.1.4 Human Rights                                  | 55   |   | ●  |
| G4-12   | Describe the organization's supply chain.  | 3.4 Industry Supply Chain & Management              | 39   |   | ●  |
| G4-13   | Any significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain.                                  | -   | -    | First release of CSR Report               | ●  |
| G4-14   | Commitments to External Initiatives<br>Report whether and how the precautionary approach or principle is addressed by the organization.                            | 2.4 Risk Management                                 | 31   |   | ●  |
| G4-15   | List externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses. | -   | -    | No related initiative have been developed | ●  |
| G4-16   | List memberships of associations and national or international advocacy organizations.   | About GlobalWafers                                  | 9    |   | ●  |
| <b>Identified Material Aspects and Boundaries</b> |  |   |      |   |  |
| G4-17   | List of entities included.   | About this Report                                   | 1    |   | ●  |
| G4-18   | Explain how the organization has implemented the Reporting Principles for Defining Report Content.   | 1.3 Verification and Analysis of Material Issues    | 16   |   | ●  |
| G4-19   | List all the material Aspects identified in the process for defining report content.   | 1.3 Verification and Analysis of Material Issues    | 16   |   | ●  |
| G4-20   | For each material Aspect, report whether the Aspect is material within the organization.   | 1.3 Verification and Analysis of Material Issues    | 16   |   | ●  |
| G4-21   | For each material Aspect, report the Aspect Boundary and report which aspects are material outside of the organization.  | 1.3 Verification and Analysis of Material Issues    | 16   |   | ●  |
| G4-22   | Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements.  | -   | -    | First release of CSR Report               | ●  |
| G4-23   | Report significant changes from previous reporting periods in the Scope and Aspect Boundaries.   | -   | -    | First release of CSR Report               | ●  |
| <b>Stakeholder Engagement</b>                     |  |   |      |   |  |
| G4-24   | Provide a list of stakeholder groups engaged by the organization.  | 1.1 Identification of Stakeholders                  | 16   |   | ●  |
| G4-25   | Report the basis for identification and selection of stakeholders with whom to engage.   | 1.1 Identification of Stakeholders                  | 16   |   | ●  |
| G4-26   | Report the organization's approach to stakeholder engagement.  | 1.2 Communication with and Response to Stakeholders | 16   |   | ●  |
| G4-27   | Report key topics and concerns that have been raised through stakeholder engagement.   | 1.2 Communication with and Response to Stakeholders | 16   |   | ●  |
| <b>Report Profile</b>                             |  |   |      |   |  |
| G4-28   | Reporting period.  | About this Report                                   | 1    |   | ●  |
| G4-29   | Date of most recent previous report.   | -   | -    | First release of CSR Report               | ●  |
| G4-30   | Reporting cycle.   | About this Report                                   | 1    |   | ●  |
| G4-31   | Provide the contact point for questions regarding the report or its contents.  | About this Report                                   | 1    |   | ●  |

| Index                                | Description  | Corresponding chapter                  | Page    | Note/ Reasons for non-disclosure | Guarantee is only for disclosed Taiwan statistics and excludes those of offshore subsidiaries. |
|--------------------------------------|--|--|---------|----------------------------------|--|
| <b>GRI CONTENT INDEX</b>             |  |  |         |                                  |  |
| G4-32                                | Report the 'in accordance' option the organization has chosen.   | GRI G4 content index table             | 69      |                                  | •  |
| <b>ASSURANCE</b>                     |  |  |         |                                  |  |
| G4-33                                | External assurance for the report.   | About this Report<br>Report Assurance  | 1<br>73 |                                  | •  |
| <b>Governance</b>                    |  |  |         |                                  |  |
| G4-34                                | Report the governance structure of the organization.   | 2.2.1 Governance Structure             | 23      |                                  | •  |
| G4-35                                | Report the process for delegating authority for economic, environmental and social topics from the highest governance body to senior executives and other employees.   | 2.1 Sustainable Organization           | 22      |                                  | •  |
| G4-36                                | Report whether the organization has appointed an executive-level position or positions with responsibility for economic, environmental and social topics, and whether post holders report directly to the highest governance body. | 2.1 Sustainable Organization           | 22      |                                  | •  |
| G4-37                                | Report processes for consultation between stakeholders and the highest governance body on economic, environmental and social topics.   | 2.1 Sustainable Organization           | 22      |                                  | •  |
| G4-41                                | Report processes for the highest governance body to ensure conflicts of interest are avoided and managed. Report whether conflicts of interest are disclosed to stakeholders.  | 2.2.2 Ethics and Integrity             | 26      |                                  | •  |
| <b>Ethics and Integrity</b>          |  |  |         |                                  |  |
| G4-56                                | Describe the organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics.  | 2.2.2 Ethics and Integrity             | 26      |                                  | •  |
| G4-58                                | Report the internal and external mechanisms for seeking advice on ethical and lawful behavior, and matters related to organizational integrity, such as helplines or advice lines.   | 2.2.2 Ethics and Integrity             | 26      |                                  | •  |
| <b>CATEGORY: ECONOMIC</b>            |  |  |         |                                  |  |
| <b>Aspect: Economic Performance</b>  |  |  |         |                                  |  |
| G4-DMA                               |  | Chapter DMA                            | 20      |                                  | •  |
| G4-EC1                               | Direct economic value generated and distributed.   | 2.3 Operation Performance              | 29      |                                  | •  |
| G4-EC3                               | Coverage of the organization's defined benefit plan obligations.   | 5.1.2 Compensation Benefits            | 54      |                                  | •  |
| <b>Aspect: Procurement Practices</b> |  |  |         |                                  |  |
| G4-EC9                               | Proportion of spending on local suppliers at significant locations of operation.   | 3.4 Industry Supply Chain & Management | 39      |                                  | •  |
| <b>CATEGORY: ENVIRONMENTAL</b>       |  |  |         |                                  |  |
| <b>Aspect: Materials</b>             |  |  |         |                                  |  |
| G4-DMA                               |  | Chapter 4 DMA                          | 42      |                                  | •  |
| G4-EN2                               | Percentage of materials used that are recycled input materials.  | 4.3.1 Raw Material Re-Exploitation     | 46      |                                  | •  |
| <b>Aspect: Energy</b>                |  |  |         |                                  |  |
| G4-DMA                               |  | Chapter 4 DMA                          | 42      |                                  | •  |
| G4-EN6                               | Reduction of energy consumption.   | 4.3.2 Energy Management                | 46      |                                  | •  |
| G4-EN7                               | Reductions in energy requirements of products and services.  | 4.3.2 Energy Management                | 46      |                                  | •  |
| <b>Aspect: Water</b>                 |  |  |         |                                  |  |
| G4-DMA                               |  | Chapter 4 DMA                          | 42      |                                  | •  |
| G4-EN8                               | Total water withdrawal by source.  | 4.3.3 Water Resource Management        | 48      |                                  | •  |
| G4-EN10                              | Percentage and total volume of water recycled and reused.  | 4.3.3 Water Resource Management        | 48      |                                  | •  |
| <b>Aspect: Emissions</b>             |  |  |         |                                  |  |
| G4-DMA                               |  | Chapter 4 DMA                          | 42      |                                  | •  |
| G4-EN15                              | Direct greenhouse gas (GHG) emissions (scope 1).   | 4.1 Greenhouse Gas                     | 43      |                                  | •  |
| G4-EN16                              | Energy indirect greenhouse gas (GHG) emissions (scope 2).  | 4.1 Greenhouse Gas                     | 43      |                                  | •  |
| G4-EN21                              | Nox, Sox, and other significant air emissions.   | 4.1 Greenhouse Gas                     | 43      |                                  | •  |

## GRI G4 content index table

| Index  | Description   | Corresponding chapter  | Page | Note/ Reasons for non-disclosure | Guarantee is only for disclosed Taiwan statistics and excludes those of offshore subsidiaries. |
|--|---|--|------|----------------------------------|--|
| <b>Aspect: Effluents and Waste</b>                   |   |  |      |                                  |  |
| G4-DMA   |   | Chapter 4 DMA  | 42   |                                  | •  |
| G4-EN23  | Total weight of waste by type and disposal method.  | 4.2 Waste Management   | 44   |                                  | •  |
| G4-EN24  | Total number and volume of significant spills.  | 4.2 Waste Management   | 44   |                                  | •  |
| G4-EN25  | Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex i, ii, iii, and viii, and percentage of transported waste shipped internationally. | 4.2 Waste Management   | 44   |                                  | •  |
| <b>Aspect: Products and Services</b>                 |   |  |      |                                  |  |
| G4-DMA   |   | Chapter 4 DMA  | 42   |                                  | •  |
| G4-EN27  | Extent of impact mitigation of environmental impacts of products and services.  | 4.4 Pollution Prevention   | 50   |                                  | •  |
| G4-EN28  | Percentage of products sold and their packaging materials that are reclaimed by category.   | 4.3.1 Raw Material Re-Exploitation   | 46   |                                  | •  |
| <b>Aspect: Compliance</b>                            |   |  |      |                                  |  |
| G4-DMA   |   | Chapter 2 DMA  | 20   |                                  | •  |
| G4-EN29  | Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.  | 2.2.4 Regulation Compliance  | 27   |                                  | •  |
| <b>CATEGORY: SOCIAL</b>                              |   |  |      |                                  |  |
| <b>SUB-CATEGORY: LABOR PRACTICES AND DECENT WORK</b> |   |  |      |                                  |  |
| <b>Aspect: Employment</b>                            |   |  |      |                                  |  |
| G4-DMA   |   | Chapter 5 DMA  | 52   |                                  | •  |
| G4-LA2   | Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation.  | 5.1.2 Compensation Benefits  | 54   |                                  | •  |
| <b>Aspect: Labor/Management Relations</b>            |   |  |      |                                  |  |
| G4-DMA   |   | Chapter 5 DMA  | 52   |                                  | •  |
| G4-LA4   | Minimum notice periods regarding operational changes, including whether these are specified in collective agreements.   | 5.1.4 Human Rights<br>Procedures for Turnover, Leave without Pay and Discharge | 55   |                                  | •  |
| <b>Aspect: Occupational Health and Safety</b>        |   |  |      |                                  |  |
| G4-DMA   |   | Chapter 5 DMA  | 52   |                                  | •  |
| G4-LA5   | Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs.                             | 5.2.1 Safe Environment   | 56   |                                  | •  |
| G4-LA6   | Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender.  | 5.2.4 Disability Injury  | 61   |                                  | •  |
| G4-LA7   | Workers with high incidence or high risk of diseases related to their occupation.   | 5.2.1 Safe Environment   | 56   |                                  | •  |
| <b>Aspect: Training and Education</b>                |   |  |      |                                  |  |
| G4-LA9   | Average hours of training per year per employee by gender, and by employee category.  | 5.1.3 Talent Incubation  | 54   |                                  | •  |
| <b>SUB-CATEGORY: HUMAN RIGHTS</b>                    |   |  |      |                                  |  |
| <b>Aspect: Investment</b>                            |   |  |      |                                  |  |
| G4-DMA   |   | Chapter 5 DMA  | 52   |                                  | •  |
| G4-HR3   | Total number of incidents of discrimination and corrective actions taken.   | 5.1.4 Human Rights   | 55   |                                  | •  |

| Index   | Description   | Corresponding chapter       | Page | Note/ Reasons for non-disclosure  | Guarantee is only for disclosed Taiwan statistics and excludes those of offshore subsidiaries. |
|---|---|-----------------------------|------|---|--|
| <b>Aspect: Freedom of Association and Collective Bargaining</b> |   |                             |      |   |  |
| G4-DMA  |   | Chapter 5 DMA               | 52   |   | •  |
| G4-HR4  | Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and measures taken to support these rights. | 5.1.4 Human Rights          | 55   |   | •  |
| <b>Aspect: Child Labor</b>                                      |   |                             |      |   |  |
| G4-DMA  |   | Chapter 5 DMA               | 52   |   | •  |
| G4-HR5  | Operations and suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor.                                | 5.1.4 Human Rights          | 55   |   | •  |
| <b>Aspect: Forced or Compulsory Labor</b>                       |   |                             |      |   |  |
| G4-DMA  |   | Chapter 5 DMA               | 52   |   | •  |
| G4-HR6  | Operations and suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor.   | 5.1.4 Human Rights          | 55   |   | •  |
| <b>Aspect: Human Rights Grievance Mechanisms</b>                |   |                             |      |   |  |
| G4-DMA  |   | Chapter 5 DMA               | 52   |   | •  |
| G4-HR12   | Number of grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanisms.   | 5.1.4 Human Rights          | 55   |   | •  |
| <b>SUB-CATEGORY: SOCIETY</b>                                    |   |                             |      |   |  |
| <b>Aspect: Anti-corruption</b>                                  |   |                             |      |   |  |
| G4-SO4  | Communication and training on anti-corruption policies and procedures.  | 2.2.2 Ethics and Integrity  | 26   |   | •  |
| <b>Aspect: Anti-Competitive Behavior</b>                        |   |                             |      |   |  |
| G4-SO7  | Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes.   | -                           | -    | The company was not involved in lawsuits due to anti-competitive behavior | •  |
| <b>Aspect: Compliance</b>                                       |   |                             |      |   |  |
| G4-DMA  |   | Chapter 2 DMA               | 20   |   | •  |
| G4-SO8  | Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations.  | 2.2.4 Regulation Compliance | 27   |   | •  |
| <b>Aspect: Grievance Mechanisms for Impacts on Society</b>      |   |                             |      |   |  |
| G4-SO11   | Number of grievances about impacts on society filed, addressed, and resolved through formal grievance mechanisms.   | -                           | -    | No grievances have been filed   | •  |
| <b>SUB-CATEGORY: PRODUCT RESPONSIBILITY</b>                     |   |                             |      |   |  |
| <b>Aspect: Customer Health and Safety</b>                       |   |                             |      |   |  |
| G4-PR5  | Results of surveys measuring customer satisfaction.   | 3.3 Customer Service        | 38   |   | •  |
| <b>Aspect: Marketing Communications</b>                         |   |                             |      |   |  |
| G4-PR6  | Sale of banned or disputed products.  | 2.2.4 Regulation Compliance | 27   |   | •  |
| G4-PR7  | Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcomes.           | -                           | -    | No violations of relevant laws or regulations                             | •  |
| <b>Aspect: Compliance</b>                                       |   |                             |      |   |  |
| G4-DMA  |   | Chapter 2 DMA               | 20   |   | •  |
| G4-PR9  | Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services.   | 2.2.4 Regulation Compliance | 27   |   | •  |

This is the first publication of this report. With respect to statistics from 2015 to 2017 disclosed in the contents of this report, the third party verification institute only offers guarantee on the verified 2017 statistics.

# Verification statement issued by independent third-party



## Independent assurance statement

### Scope and approach

GlobalWafers Co., Ltd. ("GWC" or the "Company") commissioned DNV GL Business Assurance Taiwan ("DNV GL") to undertake independent assurance of the 2017 Corporate Social Responsibility Report (the "Report") for the year ended 31 December 2017.

We performed our work using DNV GL's assurance methodology VeriSustain<sup>TM1</sup>, which is based on our professional experience, international assurance best practice including International Standard on Assurance Engagements 3000 (ISAE 3000) and the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines.

We understand that the reported financial data and information are based on data from GWC's Annual Report and Accounts, which are subject to a separate independent audit process. The review of financial data taken from the Annual Report and Accounts is not within the scope of our work.

We planned and performed our work to obtain the evidence we considered necessary to provide a basis for our assurance opinion. We are providing a 'moderate level' of assurance.

### Responsibilities of the Directors of GlobalWafers Co., Ltd. and of the assurance providers

The Directors of GWC have sole responsibility for the preparation of the Report. In performing our assurance work, our responsibility is to the management of GWC; however, our statement represents our independent opinion and is intended to inform all of GWC stakeholders. DNV GL was not involved in the preparation of any statements or data included in the Report except for this Assurance Statement.

We have no other contract with GWC and this is the 1<sup>st</sup> year that we have provided assurance. DNV GL's assurance engagements are based on the assumption that the data and information provided by the client to us as part of our review have been provided in good faith. DNV GL expressly disclaims any liability or co-responsibility for any decision a person or an entity may make based on this Assurance Statement.

### Basis of our opinion

A multi-disciplinary team of sustainability and assurance specialists performed work at headquarters and site level. We undertook the following activities:

- Review of the current corporate responsibility issues that could affect GWC and are of interest to stakeholders;
- Review of GWC approach to stakeholder engagement and recent outputs;
- Review of information provided to us by GWC on its reporting and management processes relating to the Principles;
- Interviews with selected Directors and senior managers responsible for management of corporate responsibility issues and review of selected evidence to support issues discussed;
- Site visits to the 2 major production sites at Hsinchu and include HQ to review process and systems for preparing site level corporate responsibility data and implementation of corporate responsibility strategy;
- Review of supporting evidence for key claims and 2017 data in the report. Past two years' data reported in the report are not within the scope of our work. Our checking processes were prioritised according to materiality and we based our prioritisation on the materiality of issues at a consolidated corporate level;

<sup>1</sup> The VeriSustain protocol is available on [dnvgl.com](http://dnvgl.com)



- Review of the processes for gathering and consolidating the specified performance data and, for a sample, checking the data consolidation.
- An independent assessment of GWC's reporting against the Global Reporting Initiative (GRI) G4 Guidelines.
- The verification was conducted based only on the Chinese version Report.

### Opinion

On the basis of the work undertaken, nothing came to our attention to suggest that the Report does not properly describe GWC's adherence to the Principles. In terms of reliability of the performance data, nothing came to our attention to suggest that these data have not been properly collated from information reported at operational level, nor that the assumptions used were inappropriate.

### Observations

Without affecting our assurance opinion we also provide the following observations.

- As an international corporation where different regulatory regimes and market requirements and social responsiveness, strengthening of the materiality assessment process based on multi-stakeholder engagement, covering all business verticals and supply chain partners, can identify relevant sustainability topics in the supply chain.
- To incorporate environmental, social and economic performance indicators into international corporation management processes where they can be routinely reported, monitored and improved.
- The management approach can be improved on establishing long-term objectives/ targets for continuous performance improvement.

### Materiality

The process developed internally has not missed out any significant, known material issues, and these issues are fairly covered in the Report. A methodology has been developed to evaluate the priority of these issues.

### Completeness

The Report covers performance data against the GRI G4 core indicators that are material within the Company's reporting boundary. The information in the Report includes the company's most significant initiatives or events that occurred in the reporting period.

### Accuracy and Reliability

The Company has developed the data flow for capturing and reporting its CSR performance. In accordance with Moderate level assurance requirements, we conclude that no systematic errors were detected which causes us to believe that the specified CSR data and information presented in the Report is not reliable.

### For and on behalf of DNV GL Taiwan

Date: 17 May, 2018



Chun-Nan Lin  
Lead Verifier  
DNV GL – Business Assurance Taiwan

Statement Number: 00004-2018-ACSR-TWN



David Hsieh  
Sustainability Service Manager,  
Greater China

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