



# SUMCO

SUMCO Corporation CSR Report

2016



CEO & Chairman of the Board

Mayuki Hashimoto

COO & President

Michiharu Takii

### SUMCO Vision

1. World's Best in Technology
2. Deficit-Resistant Even during Economic Downturns
3. Empower Employee Awareness of Profit
4. Competitiveness in Overseas Markets

### SUMCO enhances its corporate governance in order to remain a corporation with sustained growth

In the Ordinary General Meeting of Shareholders held on March 29, 2016, SUMCO received the shareholders' approval to amend the Articles of Incorporation, and shifted from a Company with a Board of Corporate Auditors to a Company with Audit and Supervisory Committee. The system is now in place whereby certain Directors belonging also to the Audit and Supervisory Committee Members, with voting rights on the Board of Directors audit and supervise the business executed by Directors. We expect this to enhance the effectiveness of audit and supervision.

The SUMCO Board of Directors is made up of eight Directors (including two Directors who do not execute operations, and excluding Directors who are Audit and Supervisory Committee Members) and six Directors who are Audit and Supervisory Committee Members (of whom four are Independent Outside Directors). We expect that increasing Independent Outside Directors will make it possible for the Board of Directors to engage in discussion supported by a greater breadth of knowledge and insight and in respect with a greater variety, including the viewpoints of our stakeholders. This will vitalize the Board of Directors and enhance the transparency of management.

In conjunction with the transition to a Company with Audit and Supervisory Committee, we have established a Nomination and Compensation Committee with membership composed primarily of Independent Outside Directors to serve as a discretionary advisory body for the Board of Directors. This step is intended to further heighten the transparency and objectivity of the process of selecting candidate Directors as well as of the process of deciding remuneration of Directors and related matters.

Also in conjunction with the transition to a Company with Audit and Supervisory Committee, SUMCO has enacted a Basic Policy on Corporate Governance. This presents an organized summary of our basic conceptual approach in this area in order to further accelerate the movement toward enhancement of corporate governance. The policy is grounded on the SUMCO Vision, which specifies our view of what the SUMCO Group should be, and it will expedite our further enhancement of corporate value.

The semiconductor market in which SUMCO pursues its business has four seasons. Even while being influenced by the short-term fluctuations of the market, in the medium-to-long term we have continued to undergo the growth that accompanies technical innovation. What is necessary in this industry is sustained growth that maintains our momentum in a rapidly changing market, and what progress in technology demands above all is flexible development capabilities. SUMCO's corporate governance has become a system for adjusting SOMCO to this kind of environmental change and reinforcing flexible, and agile management.

As a company aspiring to contribute to society and maintain sustainable growth, the SUMCO Group works on the following issues.

#### Corporate governance and compliance

The SUMCO Group endeavors to maintain efficiency, transparency, and fairness in its management by further enhancing its corporate governance. We also established and implemented the SUMCO Charter as a code of conduct which officers and employees shall comply with, and we ensure that our corporate activities are sound and in accordance with social norms, as well as complying with laws and regulations.

#### Risk management

The SUMCO Group's global market share is about 30%, meaning that our silicon wafers are used in one in every three to four electronic devices around the world. The stable supply of products is therefore our most critical management challenge and an important social responsibility. To ensure stable supply, we are taking various measures to prevent the materialization of risks while working to further develop and improve our business continuity plan, which also covers our supply chain.

#### Environmental conservation

The production of silicon wafers requires plenty of electricity, water, and chemical substances. The SUMCO Group strives to reduce its use of each of these as well as the amount of industrial waste generated by setting reduction targets for each item. We also ensure that harmful chemical substances and waste are handled and managed properly to minimize the environmental risks of our business activities.

#### Working with stakeholders

The SUMCO Group aspires to promote social development through the supply of silicon wafers while endeavoring to contribute to the well-being of the stakeholders who support us. Toward this end, we actively communicate with stakeholders and incorporate their opinions and requests into our activities.

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#### Editorial Policy

The objective of this report is to convey the SUMCO Group's stance on CSR and report its activities to stakeholders in order to enhance their understanding and earn their support. This report has been prepared with reference to portions of the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines, Version 4.

#### Period Covered

January 2015 to December 2015

Data for periods outside the above are noted as such.

#### Organizations Covered

SUMCO Corporation and its Group companies. "SUMCO" and "the Company" as used in this report refers to SUMCO Corporation. The Financial Highlights cover SUMCO Corporation and its consolidated subsidiaries. Other performance data outside the above scope are noted as such.

#### Publication

May 2016

(planned publication of the next issue: May 2017)

#### Note Regarding Forward-Looking Statements

Projections, predictions, prospects, and other forward-looking statements contained in this report are made by the Company based on the information available at the time of the release of the statements and therefore are subject to risks and uncertainties. Due to various factors, actual results may vary significantly from results anticipated in the forward-looking statements.

## Outline of the SUMCO Group

(As of April 1, 2016)

### Company Information

Trade name	SUMCO Corporation
Head office	1-2-1 Shibaura, Minato-ku, Tokyo
Establishment	July 30, 1999
Main business	Manufacture and sales of silicon wafers for semiconductors
Capital	138.718 billion yen
Representative	Mayuki Hashimoto, CEO & Chairman of the Board
Group companies	7 companies in Japan; 12 companies abroad

### Group Companies

#### Japan

SUMCO TECHXIV Corp.	SUMTEC Service Corp.
SUMCO Technology Corp.	SUMCO Insurance Service Corp.
SUMCO Service Corp.	Japan Formosa SUMCO Technology Corporation
SUMCO Support Corp.	

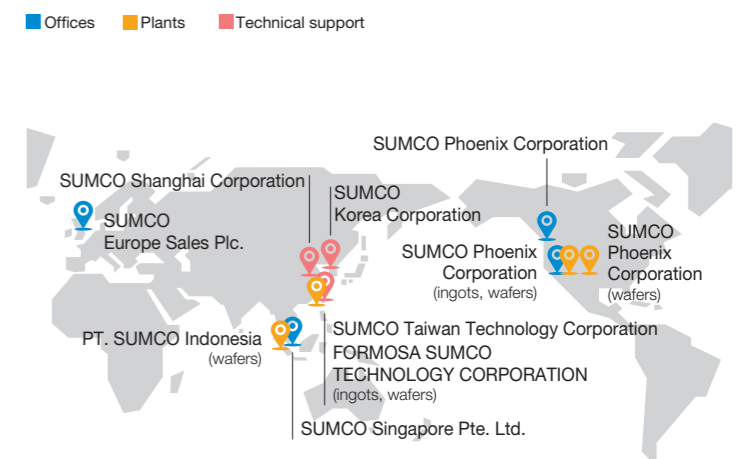
#### Overseas

SUMCO Phoenix Corporation	PT. SUMCO Indonesia
SUMCO Southwest Corporation	SUMCO Singapore Pte. Ltd.
SUMCO Funding Corporation	SUMCO Korea Corporation
STX Finance America, Inc.	SUMCO Taiwan Technology Corporation
SUMCO Personnel Services Corporation	SUMCO Shanghai Corporation
SUMCO Europe Sales Plc	FORMOSA SUMCO TECHNOLOGY CORPORATION

### Network in Japan



### Overseas Network

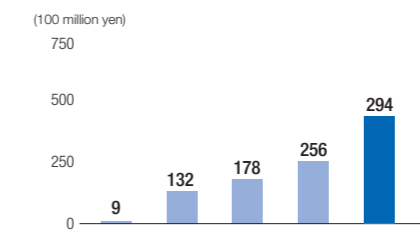


### Financial Highlights

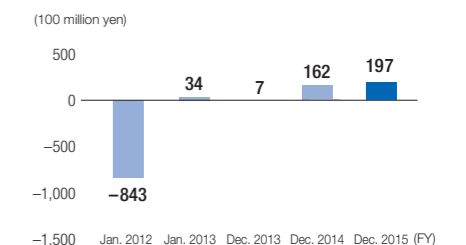
#### Net sales (consolidated)



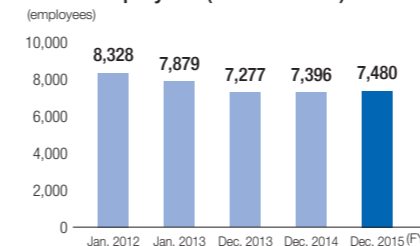
#### Operating income (consolidated)



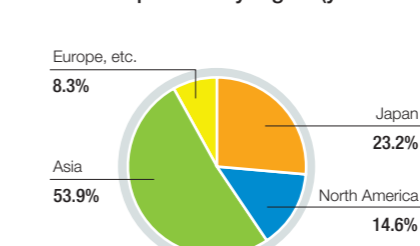
#### Net income/loss (consolidated)



#### No. of employees (consolidated)



#### Sales composition by region (year ended December 2015)

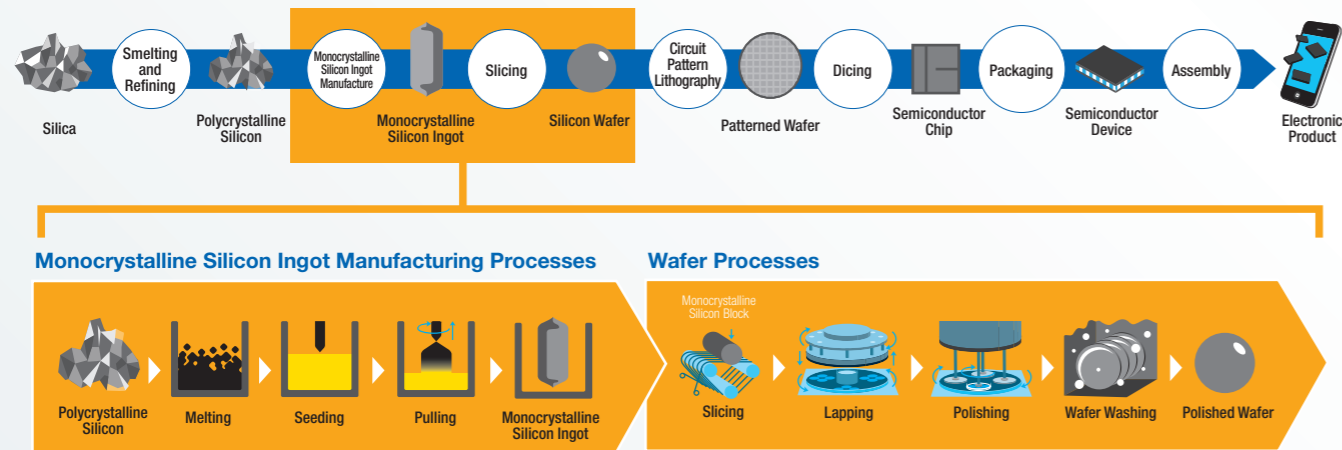


\* The fiscal year ended December 2013 starts in February 2013 and ends in December 2013.

# About the Silicon Wafers Manufactured by SUMCO

SUMCO is a manufacturer of silicon wafers, which are used as substrates for semiconductor devices. Electronic equipments such as mobile phones, personal computers, digital home appliances, and control units for automobiles and industrial machines all incorporate semiconductor devices, and silicon wafers are essential material for manufacturing semiconductor devices. Silicon is the second most abundant element on Earth, after oxygen. Because silicon combines with oxygen easily, it exists in the form of silicon dioxide (silica) in nature. Silica is the main constituent of soil, sand, and stone. High-purity silica that was mined is smelted and refined into polycrystalline silicon with a purity level of 99.99999999%, and wafers are produced from this ultra-high-purity polycrystalline silicon.

## Manufacturing Silicon Wafers



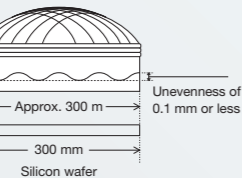
The production of silicon wafers is divided into two processes: the monocrystalline silicon process and the wafer process. In the monocrystalline silicon process, polycrystalline silicon is melted to produce monocrystalline silicon ingots. In the wafer process, these monocrystalline silicon ingots are sliced into wafers, which are then polished and cleaned to create a flat, mirror-like surface.

## Four Quality Requirements for Silicon Wafers

There are mainly four quality requirements for silicon wafers as described below. A silicon wafer is an agglomeration of various advanced technologies and its production requires extensive expertise. Sharing of information across the team and accumulation of techniques are therefore essential.

### Crystal Perfection

Silicon wafers used for semiconductor devices are made from monocrystalline silicon. The number of silicon atoms contained in a piece of 300-mm wafer can be as high as  $3 \times 10^{24}$ . The word "monocrystalline," meanwhile, means the state in which the silicon atoms are arranged in an orderly, crystalline structure, both horizontally and vertically.

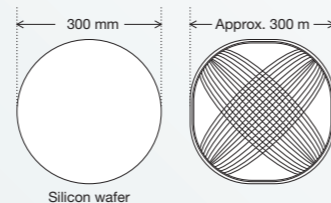


### Flatness

As semiconductor circuits are becoming increasingly miniaturized, silicon wafers are required to be extremely flat and smooth. To illustrate the concept, if we enlarged a 300-mm wafer to the size of 300 meters (making it as big as the Tokyo Dome), the quality requirement is equivalent to permitting unevenness of only 0.1 mm or less across the entire area.

### Cleanliness and Elimination of Contamination

The number of minute particles adhering to the surface of silicon wafers is required to be as close to zero as possible. To illustrate the concept, if we enlarged a 300-mm wafer to the size of 300 meters (making it as big as the Tokyo Dome), the quality requirement is equivalent to permitting a maximum of only 10 grains of sand, each with a diameter of 0.04 mm, across the entire area. Wafers used for image sensors of digital cameras are required to be ultra-pure, at the level of no more than one part per trillion of impurities.



## For All Innovation

In daily life we hardly ever see a silicon wafer, but they are used in every sort of electronic device and are indispensable in our lives. All sorts of technological innovation have enabled the evolutionary development of electronic devices, which have added immeasurably to our lives and greatly facilitated cultural progress.

Some products have consequentially become smaller, and others larger; some lighter, some stronger, some faster. Engineers are carrying on the battles of their predecessors, and are going beyond the achievements of those persons, creating revolutionary change. The continued evolution of the silicon wafer is a precondition for taking up this battle.

SUMCO sees itself as being engaged in this battle, as a corporation dedicated to contributing to all sorts of technological innovation on behalf of the advancement of society and the development of humanity.



### Telecommunications equipment

Large numbers of cutting-edge semiconductors are used in telecommunications equipment, including logic chips to run various applications, e-mail, internet browsing, sensors for taking photographs, and memory to store photographs and other data. Every year the functions of these semiconductors become more sophisticated, and they are made using SUMCO silicon wafers.



### Image Sensors

Image sensors serve as the "eye" for capturing still and video images. The silicon wafers used in these semiconductor devices capable of sensing images are demanded extremely high levels of quality in order to limit the "noise" generated when capturing imagery under low-light conditions.



### Electric Vehicles

Numerous semiconductor devices are already at work inside motor vehicles, in current and voltage control systems, airbag control devices, electronic toll collection (ETC), and other systems. Semiconductor devices for use in motor vehicles, demand high reliability of the silicon wafers that are key factors in the stable operation of semiconductor devices.



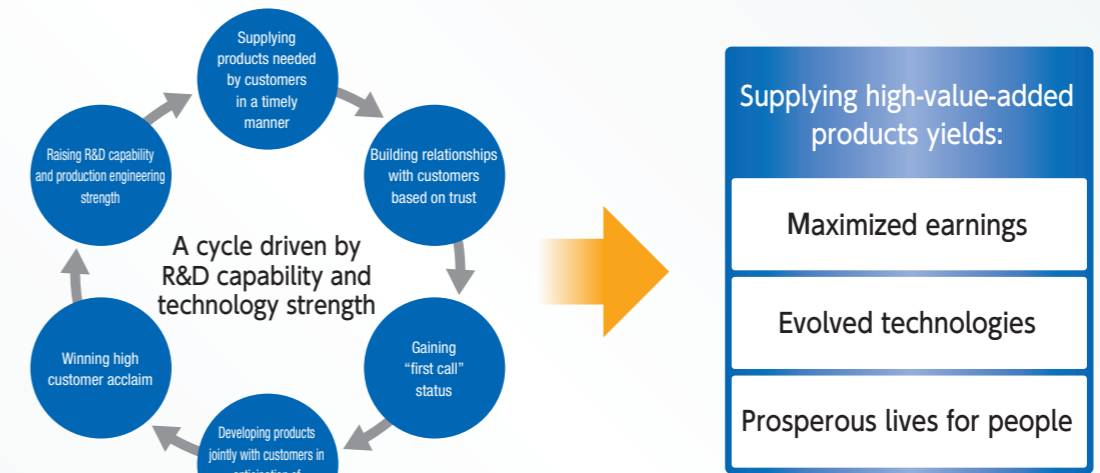
### Power Semiconductors

Devices called power semiconductors are used to control electric power. These are technically complex devices, making this a specialized field. Power supply control for heavy electric machinery, in particular, such as electric trains that use power of over 1000 V, requires special know-how for the silicon wafers, as well.

## Creating corporate value with advanced R&D and technology

SUMCO corporate value is created in a cycle driven by R&D capability and technology strength.

Our unending challenge is to keep on driving, with all our might, this cycle that plays a key role in sustained growth by raising our technology level through R&D at the forefront of the age.



Sustainably Raising our Corporate value

Returning value to stakeholders  
Making contributions to society

# SUMCO's Aim Is to Become an Excellent Company through the Integrated Efforts of All Officers and Employees

## 1 World's Best in Technology

SUMCO's technologies and ability to ensure a stable supply of products are praised by our customers the world over. In fact, our outstanding performance has been officially recognized by many semiconductor manufacturers with their excellent supplier awards. Using this recognition as a springboard to an even higher level of success, we will make greater efforts to promote cooperation with our customers based on long-term commitment and mutual trust, and to enhance our technological capabilities.

In March 2016, we received the Supplier Continuous Quality Improvement (SCQI) Award for the 14th consecutive year from Intel Corporation, the world's largest semiconductor manufacturer. In December 2015, we received the Excellent Performance Award for the second consecutive year from Taiwan Semiconductor Manufacturing Company Limited (TSMC), the world's largest foundry. In February 2016, we also received the Best Partner Award for the third consecutive year from Samsung Electronics Co., Ltd., the world's largest semiconductor memory manufacturer. SUMCO has therefore achieved the feat of simultaneously winning awards for two consecutive years from the top3 corporations in semiconductors Sales.

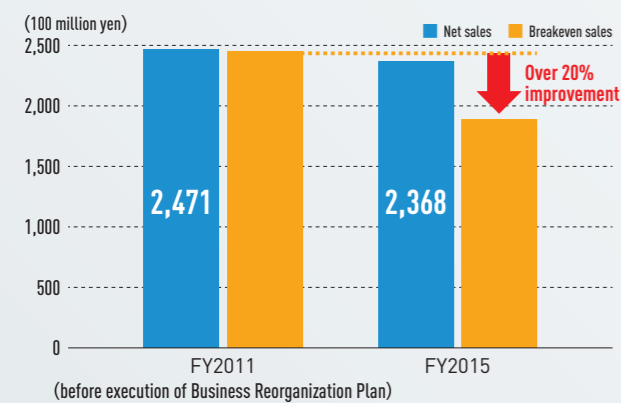


1 Supplier Continuous Quality Improvement (SCQI) Award from Intel  
2 Excellent Performance Award from TSMC  
3 Best Partner Award from Samsung Electronics

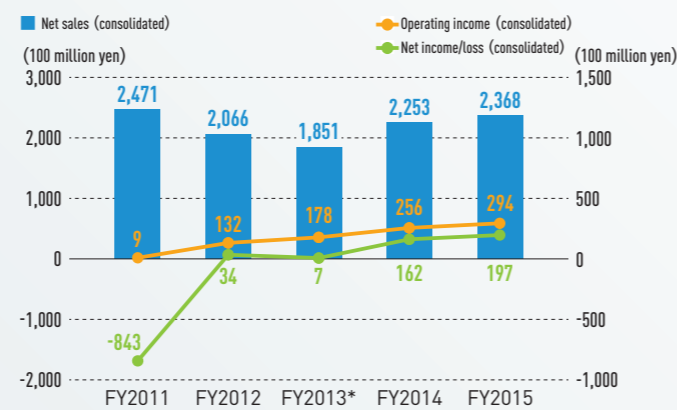
## 2 Deficit-Resistant Even during Economic Downturns

The SUMCO Group has been making every effort to improve the profit and loss breakeven point by reducing costs. As a result, we achieved break-even sales for the fiscal year ended December 2015 that showed over 20% improvement compared to 2011, before the Business Reorganization Plan was put into effect.

Improvement in breakeven point due to successful execution of the Business Reorganization Plan



Net sales/Operating income/Net income (loss)



\* Fiscal year 2013 is the 11-month period from February to December 2013

## 3 Empower Employee Awareness of Profit

Rather than the president or executives, it is the employees who are the actual driving force of a company. The SUMCO Group is no exception to this: SUMCO Vision of becoming the "World's Best in Technology" and "Deficit-Resistant Even during Economic Downturns" cannot be realized unless all employees are highly motivated and committed to the vision. However, even when all employees of the Group share the vision, have high profit and cost awareness, and work to identify and solve issues, such status cannot be maintained unless senior management is willing to share information with the employees. For this reason, the CEO & Chairman of the Board and COO & President visit each plant frequently to hold a management briefing in order to share issues facing the Group in the current business environment.

We also evaluate employees' efforts appropriately to increase their motivation. The President's Award (renamed SUMCO CEO Award as of March 29, 2016) was established in 2013 to recognize individuals and organizations that make outstanding achievements toward enhancing the Company's value every year. Up-and-coming engineers and innovative Total Productive Maintenance (TPM) teams are also given opportunities to present their accomplishments and receive awards every year.

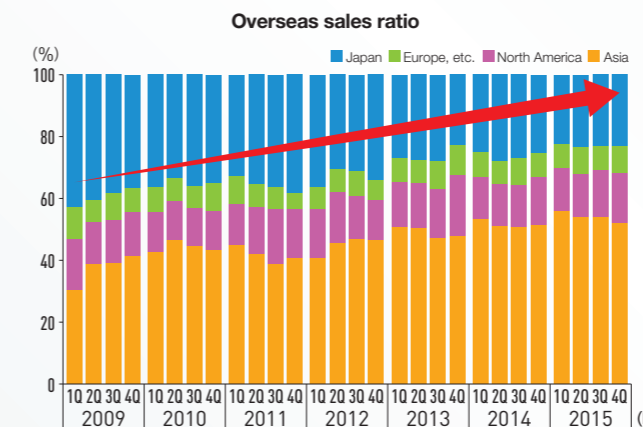
The SUMCO Group has plants in the United States, Taiwan, and Indonesia and a network of sales offices around the world. Aiming for further growth as a global company, we actively recruit employees with outstanding talent regardless of nationality.



1 2 3 TPM presentation terms 4 Employees of FORMOSA SUMCO TECHNOLOGY CORPORATION  
5 Employees of SUMCO Phoenix Corporation 6 Employees of PT. SUMCO Indonesia

## 4 Competitiveness in Overseas Markets

The SUMCO Group supplies silicon wafers to semiconductor manufacturers around the world. All of the global top 10 companies in semiconductor sales are customers of the SUMCO Group.



Global top 10 companies in semiconductor sales (2015)

Ranking	Company	Head office	Semiconductor sales (million USD)
1	Intel	United States	50,305
2	Samsung	South Korea	41,606
3	TSMC	Taiwan	26,562
4	SK Hynix	South Korea	16,917
5	Qualcomm/CSR	United States	16,032
6	Avago/Broadcom	Singapore	15,382
7	Micron	United States	14,816
8	Texas Instruments	United States	12,112
9	NXP/Freescale	Netherlands	10,200
10	Toshiba	Japan	9,734

\* TSMC sales figures only are projected  
Created by SUMCO based on IC Insights' Strategic Reviews database

## SUMCO's Stance on CSR

Based on its aim of playing a leading role in the development of industry and the improvement of living standards through the supply of silicon wafers, an essential substrate material for semiconductor devices, SUMCO aspires to serve society as a good corporate citizen. As such, SUMCO undertakes a wide spectrum of CSR activities.

We believe that companies are expected to meet their corporate social responsibilities from two perspectives.

Firstly, companies have an obligation to ensure compliance, safety, and environmental sustainability as corporate citizens, and are responsible for maintaining and improving the quality of their products and services and returning profits to society as part of their business activities. This obligation and responsibility

are the foundation of CSR, and companies need to have effective corporate governance to fulfill them. For this reason, SUMCO regards corporate governance and corporate ethics as fundamental management issues.

Secondly, on top of this foundation, companies also need to proactively conduct social contribution activities outside their business domains. These activities include environmental maintenance, educational and cultural initiatives, and support for employees' volunteer activities. In this regard, SUMCO actively engages in local beautification projects and educational and cultural activities with the aim of becoming a good partner for local communities.

### Relationships with Stakeholders

SUMCO endeavors to fulfill its responsibilities to stakeholders, who support its business activities.



### Our Main Responsibilities to Stakeholders

#### Customers

- Enhance customer satisfaction (Maintain and improve the quality of products and services)

#### Shareholders

- Return profits (dividends, etc.)
- Enhance corporate value

#### Suppliers

- Develop a solid and sustainable supply chain

#### Employees

- Offer secure employment
- Return profits (bonuses, etc.)
- Build a favorable work environment (mental health, childcare/nursing care leave)

#### Local communities

- Create employment, Pay taxes
- Support the improvement of local environments
- Support local educational and cultural activities

## Corporate Governance

### Basic Stance

- (1) We aim to contribute to the development of industry and the improvement of people's quality of life by supplying high-quality silicon wafers, which are an essential substrate material for semiconductor devices. At the same time, we also consider it an important management issue to repay the trust from our shareholders by enhancing SUMCO's corporate value as well as to build and maintain favorable relationships with our other stakeholders. Based on this understanding, we are implementing various measures related to corporate governance, including enhancing the auditing and supervisory functions of the Board of Directors, assuring the efficiency with which Directors execute their duties, enhancing the internal controls of the SUMCO Group, and other such measures. We are also taking steps to assure prompt decision-making in business as well as transparency and fairness in business execution. In order to heighten the transparency of management, we are also making every effort to disclose information in a timely and appropriate manner.
- (2) In promoting corporate activity, not only do we comply with relevant laws and regulations, but we have also adopted and are implementing the SUMCO Charter of Corporate Conduct as a norm to be observed by SUMCO, our executives, our employees, and any others concerned. These measures guide us to execute business activities in a manner that is sound and in accordance with social conscience.

### Corporate Governance Structure

The ordinary general meeting of shareholders, held on March 29, 2016, voted to amend the Articles of Incorporation to transfer SUMCO to a Company with Audit and Supervisory Committee. As of that date, therefore, the Company made the transition from a Company with a Board of Corporate Auditors to a Company with Audit and Supervisory Committee. Directors who are Audit and Supervisory Committee Members and have voting rights on the Board of Directors will conduct audits. We expect this to make it possible to enhance the effectiveness of audits and supervision as well as to enhance the effectiveness of internal controls by the implementation of audits making active use of the Internal Audit Department.

- (1) The SUMCO Board of Directors comprises of eight Directors (excluding Directors who are Audit and Supervisory Committee Members) and six Directors who are Audit and Supervisory Committee Members (of whom four are Independent Outside Directors). In accordance with legal statutes, the Articles of Incorporation, and the Rules of the Board of Directors, the Board of Directors makes decisions on management strategy,

management plans, and other such important matters relating to business, it receives reports from every Director on the status of the execution of duties, and it exercises supervision of the status of important matters of business execution at affiliated Companies, compliance, internal controls, and risk management. The Board of Directors, with the participation of Independent Outside Directors, also engages in the free exchange of opinions regarding the appropriate evaluation of Company performance and related matters, and reflects that evaluation in the personnel administration of top management members.

It is our basic Company policy that matters relating to the general meeting of shareholders, matters relating to financial results and so on, matters relating to management plans, matters relating to internal controls, and the execution of other such important operation will be decided after enough discussion by the Board of Directors, including the Independent Outside Directors. For this reason, the Articles of Incorporation do not stipulate that decisions on the execution of important business can be delegated to Directors.

SUMCO has appointed four Independent Outside Directors. One is an attorney; one is a management consultant who has experience working as a certified public accountant; one is a person with wide experience and knowledge cultivated through experience in the public sector as well as many years of experience in corporate management; and one is an individual with broad experience and knowledge relating to international finance as well as corporate management, and knowledge of corporate governance. Each Independent Outside Director provides advice based on their own knowledge and engages in supervision of management from the perspective of minority shareholders and other stakeholders. They participate in the appointment and dismissal of Directors and other important decision-making by the Board of Directors, and supervise business execution by top management and others as well as conflicts of interest between the Company and top management and others.

The Board of Directors meets once every month as a rule. When it is necessary, the extraordinary Board of Directors are convened.

- (2) The Company's Audit and Supervisory Committee is made up of six Directors who are Audit and Supervisory Committee Members (of whom the majority of four are Independent Outside Directors). In order to assure the effectiveness of Audit and Supervisory Committee activities, permanent Audit and Supervisory Committee Members are put in place by the mutual vote of Audit and Supervisory Committee Members.

The Audit and Supervisory Committee exercises the statutory right of investigation and audits the Directors' execution of their duties for appropriateness and conformance with legal statute and the Articles of Incorporation by inspecting and confirming the status of compliance with legal statutes, Articles of Incorporation, and so on, and by monitoring and otherwise supervising the development and operational status of the system of internal controls, including the internal controls relating to financial reporting.

The Audit and Supervisory Committee also receives periodic reports from the Internal Audit Department on the status of implementation and the results of internal audits. The system is also set up so that SUMCO and SUMCO Group Directors, Executive Officers, and operation divisions report as appropriate to the Audit and Supervisory Committee regarding matters that seriously affect management, performance, and other such aspects of business.

- (3) SUMCO has established a Nomination and Compensation Committee composed of two Representative Directors and two Independent Outside Directors to serve as a discretionary advisory body for the Board of Directors. The Nomination and Compensation Committee receives inquiries from the Board of Directors regarding the process for selection of candidate Directors of SUMCO (excluding Directors who are Audit and Supervisory Committee Members), their qualifications, the reasons for their designation as candidates, the structure of executive remuneration, and related matters. The committee

examines the appropriateness and other aspects of the matter of inquiry and, also taking evaluations of Company performance into account, delivers its findings. The Board of Directors, receiving the findings of the Nomination and Compensation Committee, designates candidate Directors (excluding Directors who are Audit and Supervisory Committee Members) and decides on their remuneration and related matters.

- (4) The Management Conference, which consists of all executives of Managing Executive Officer or above, deliberates on important management matters. This Conference basically meets every week.
- (5) SUMCO has adopted the executive officer system, thereby separating the decision-making and supervisory functions of the Board of Directors from the function of executing decisions made by the Board. This system provides the means to heighten the Company's agility in responding to changes in the business environment and assure the promptness of decision-making.
- (6) For each business operating organization, authority is clearly defined, supervisors are appointed, and appropriate administrative procedures are established in accordance with internal rules and under the leadership of the executive officer in charge.
- (7) Internal audits are conducted by the Internal Auditing Department (five staff members) to conduct audits of management efficiency, compliance status, and other such

matters in accordance with internal auditing rules and annual audit plan. The Department issues reports and notifications of audit results to the CEO & Chairman of the Board and to the COO & President, and to the audited departments. When necessary, the Department also seeks implementation of corrective measures and performs investigation and

confirmation as required.

The Audit and Supervisory Committee and the Internal Auditing Department hold regular meetings, share reports on audit results, exchange information and views, and collaborate on other such activities in pursuit of efficient audits.

## Compliance

### SUMCO Charter of Corporate Conduct

SUMCO believes that to expand its business and achieve sound growth, executives and employees need to comply with both laws and their underlying spirit as well as adhering to ethical and other social norms in order for the Company to be accepted by the global community.

Positioned above the Company's various rules and compliance programs, the SUMCO Charter of Corporate Conduct is the supreme set of principles guiding our conduct at work. It defines how executives and employees should act so as to enable the Company to fulfill its social responsibilities and achieve further growth. We appoint a Chief Compliance Officer to serve as the company-wide supervisor and monitor the Company's compliance with the charter. Meanwhile, a supervisor in each department regularly reports to the Chief Compliance Officer on how well the charter is observed within his or her department. Each Group company also maintains its own code of conduct, which is similar to the charter, to establish a framework for corporate ethics and develop a compliance structure.

### Internal Hotline

An internal reporting hotline has been in place since 2006. We also established an appointed outside lawyer to whom an internal report is to be made. We ensure that all Company employees know how to use the hotline and contact the lawyer by, among other means, distributing explanatory compliance cards.

### Fair Business Activities

Under SUMCO's Rules on Handling Grant of Benefits the following is prohibited: (1) to make contributions and donations to politicians in violation of the Political Funds Control Act and/or the Public Offices Election Act of Japan; (2) to offer favorable benefits in the form of excessive entertainment or gifts, with the aim of seeking return or receiving favors, in connection with duties of civil servants; (3) to deal with antisocial forces or groups; (4) to give financial benefits concerning the exercise of rights of shareholders; (5) to offer excessive entertainment or gifts, beyond the extent permitted by social ethical standards; and (6) to provide any type

of illegal benefit or favors or engage in transactions which could be recognized as unfair or unjust under social ethical standards. We have also set specific criteria for the activities listed below and permit these activities to be undertaken only when the criteria are met and proper approval is given. The activities are: making donations; providing sponsorship; payment of entertainment expenses/giving celebratory or condolence gifts; purchasing advertising; subscribing to or purchasing newspapers, magazines, or other publications; payment of membership dues to external organizations; and outsourcing.

### Export Control

To ensure export control compliance aimed at maintaining international peace and security, SUMCO established and implemented its Security Export Control Rules. The Company screens customers and transactions under the Rules, and with regard to export of goods or provision of technology to non-residents, it checks whether the due process under the Rules are followed before commencing the export or technology provision.

### Renouncing Relationships with Antisocial Forces

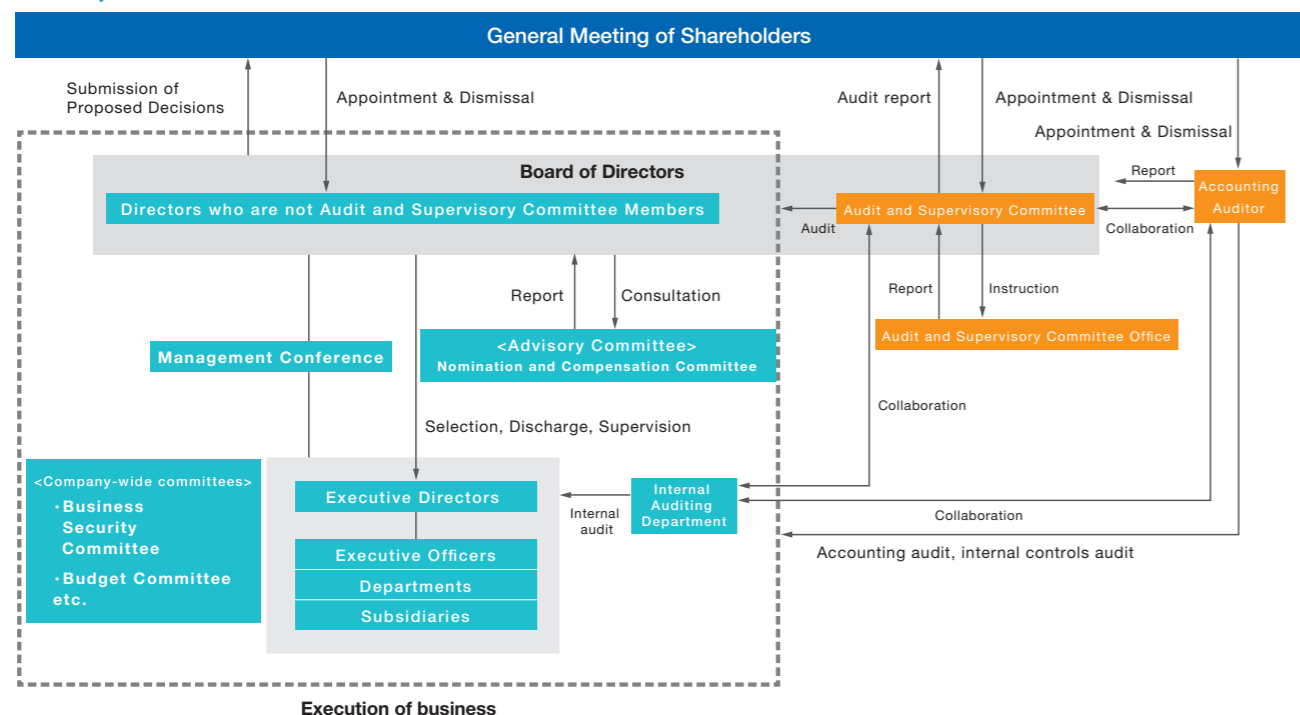
SUMCO Charter declares that the Company denounces any kind of relationship with antisocial forces and rejects any requests or demands from such forces. It is ensured through education and training that all executives and employees of the Company are constantly reminded of the importance of this policy.

### Activities on Intellectual Property

As its basic policy, the SUMCO Group attaches importance to the protection of intellectual property and utilizes it as a strategic tool for the Group's business while at the same time respecting the intellectual property rights of third parties.

Under this policy, we have established internal rules to define how we obtain, maintain, and utilize intellectual property rights; prevent infringements; and provide training to employees. The Intellectual Property Division actively conducts various intellectual property operations in cooperation with other departments. Obtained intellectual property rights are reviewed periodically to eliminate obsolete intellectual property so as to keep costs at a rational level.

## Corporate Governance Structure



# Risk Management

SUMCO has established its Risk Management Basic Rules which set forth fundamental matters concerning risk management. An information communication route to be used in the event of materialization of a risk as well as procedures to respond to a disaster, including the setting up of emergency headquarters have been done in accordance with the rule.

## Risk Management Basic Policies

To ensure the protection of all resources necessary for the continuation of business activities, including personnel, property, funds, and public trust, SUMCO regularly promotes measures to: (1) predict risks and prevent their occurrence (preventive measures against risk occurrence); and (2) minimize damage in the event of risk materialization (response measures to minimize damage).

Our basic policy in promoting risk countermeasures is as follows:

- a. Prioritize risks by likelihood of occurrence and severity of impact to ensure optimum allocation of management resources and maximize effectiveness of measures.
- b. Minimize damage and loss by preventing the suspension or discontinuation of business activities to ensure business continuity in the case of an accident or other emergency situation.

## Business Security Committee (BSC)

Established to oversee SUMCO's risk management as a whole, the Business Security Committee (BSC) is responsible, among other things, for formulating the Company's risk management policies and assessing the progress of risk management.

With regard to specific risks, such as those involving information leakage, the financial market, and product quality, appropriate controls are established under dedicated internal rules.

## BSC's Structure and Objectives



## Ensuring Business Continuity

Our Risk Management Basic Rules define business continuity as an important management issue and we have been developing and improving our business continuity plan accordingly. The BSC, explained above, formulates improvement plans and monitors and reports on the progress of improvement.

In fiscal year 2015, the Imari No. 2 Plant of the Kyushu Factory conducted a disaster preparedness drill that simulated the occurrence of an earthquake of upper-6 magnitude on the Japanese scale.



Earthquake response simulation exercise

## Training for Emergency Situations

Every year, the SUMCO Group assesses and identifies potential risks that may occur in conjunction with an earthquake, typhoon, explosion, fire, chemical spill, or other emergency and plans and conducts exercises for risks identified as serious by providing training to related personnel and in accordance with manuals. After each exercise, we identify problems and review procedures for continuous improvement to make our response as quick and apposite as possible.

We also conduct joint emergency response exercises with chemical suppliers to ensure that we can safely and smoothly handle a chemical spill discovered after delivery to one of our sites.



Training in response to leaks during incoming trichlorosilane transfer

## Training for Total Evacuation

The SUMCO Group conducts a comprehensive drill, nighttime/non-workday drill, and a non-comprehensive drill (firefighting/reporting/evacuation) every year. As part of the comprehensive drill, in addition to joint training with the fire station, there is also training for first-aid firefighting, the use of fire hydrants by the Company's firefighting team, and operation of the Company's own fire engine.

For the nighttime/non-workday drill, we identify and address problems that cannot be discovered on workdays or during the day.



Evacuation training



Training in use of outdoor fire hydrants



Training in transfer to medical care



# Environmental Management

## SUMCO Environmental Policies

### 1. Basic Environmental Philosophy

As a manufacturer of high-quality silicon wafers for semiconductors and of quartz crucibles, SUMCO has established the following action guidelines and is committed to self-initiated and sustained environmental conservation activities to pass on the Earth's irreplaceable environment to future generations.

### 2. Environmental Action Guidelines

#### 1 Through our business activities, we shall pursue activities with an emphasis on the following points.

- (1) We shall act to conserve electricity and other forms of energies consumed by our business activities, thereby curbing emissions of greenhouse gases.
- (2) We shall strive to reduce waste and increase the recycling and reuse rates.
- (3) We shall strive to reduce chemical substances used in our business activities.
- (4) We shall thoroughly manage harmful chemical substances and waste, thereby reducing the risks to the environment.

#### 2 We shall abide by environment-related laws and regulations, bylaws, and other agreed requirements.

#### 3 We shall strive to prevent environmental pollution in our entire business activities and undertake efforts to protect the global environment and coexist in harmony with local communities.

#### 4 We shall define environmental objectives and targets, and by periodically reviewing these objectives and targets, shall promote continuous improvement of our environmental management system.

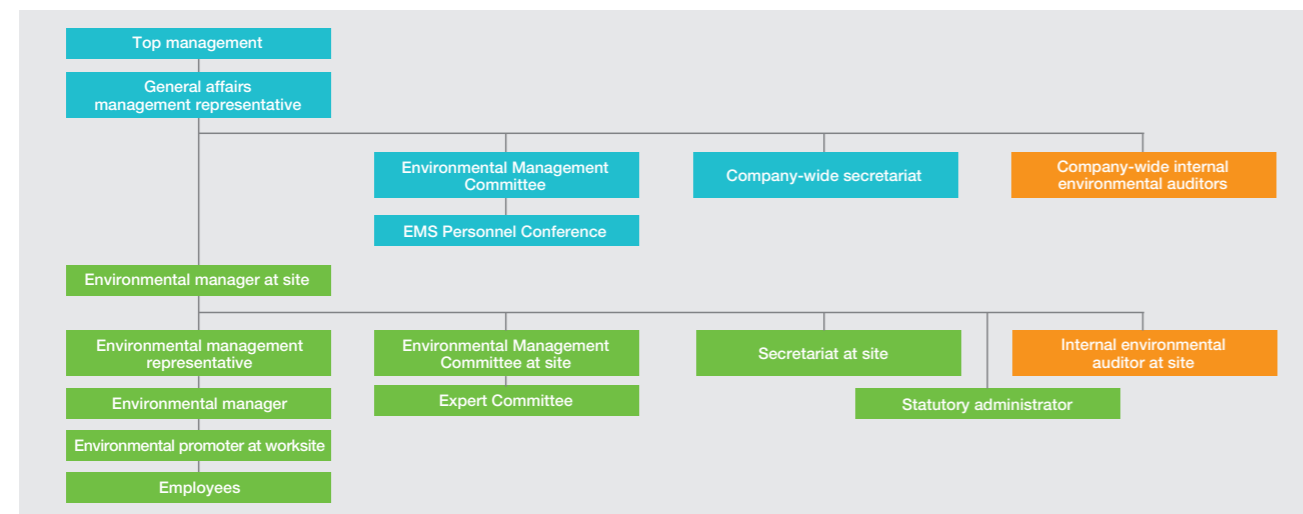
#### 5 We shall make these policies known to all employees within SUMCO and disclose information internally and externally.

March 29, 2016  
Mayuki Hashimoto, CEO & Chairman of the Board

## Environmental Management Structure

The general affairs management representative and the environmental managers at sites report to top management and act in accordance with their respective roles, responsibilities, and authority. Information and instructions are communicated and shared at meetings of the Environmental Management Committee and Environmental Management Committee at each site.

### Environmental Management Structure



\* SUMCO TECHXIV Corporation was operating with the Nagasaki Plant and Miyazaki Plant each having its own independent structure, but as of December 4, 2015, it has integrated its environmental management structure with that of SUMCO, and it operates with the same structure going forward.

## SUMCO Environmental Objectives

We set our environmental objectives for the 2015-2017 period, and work to achieve those objectives. The previous year's performance defines the base year. The status of our performance is checked semiannually and our target figures are reviewed as necessary.

### 2015 Results

Action items in business activities	midterm target:2015	Base year	2015 targets	2015 results
Reduction of power consumption (reduction of CO <sub>2</sub> emissions)	Reduce by 1.0%	2014	Reduce by 1.0%	Reduce by 3.0%
Reduction of chemical substance use	Reduce by 5.8%		Reduce by 5.8%	Reduce by 6.5%
Reduction of industrial waste	Reduce by 3.7%		Reduce by 3.7%	Reduce by 5.5%
Reduction of water consumption	Reduce by 0.8%		Reduce by 0.8%	Reduce by 4.1%

(based on per-unit production)

Beneficial activities	Environmental objectives (set each year)	2015 target	2015 attainment rate
Improvement and increased efficiency of the primary business of each division	Attainment rate: 80%	Attainment rate: 80%	93.4%

## Environmental Education

### Education Targeted at Suppliers to Prevent Environmental Accidents

Environmental education is provided to suppliers of chemicals and other products and to industrial waste treatment firms to ensure the prevention of environmental accidents and compliance with laws and regulations.



Suppliers receiving environmental education on the prevention of environmental accidents

### Contents of education

- 1 Request for vehicle inspection to prevent the leakage of fuel, oil, etc.
- 2 Importance of SUMCO personnel being present at the time of delivery/collection and request that their instructions be followed
- 3 Request for inspection of industrial waste collection vehicles, particularly to prevent leakage or dripping of sludge, liquid waste, etc.
- 4 Report of previous environmental accidents that occurred at the Company

## Environmental Audits

At SUMCO, internal environmental audits are conducted by internal environmental auditors. Environmental management system audits, meanwhile, are implemented by an external auditor.

### Internal Environmental Audit

Internal environmental audits are implemented every year for all organizations subject to the Company's environmental management system. The results are reported to top management and reflected in the following year's activities for continuous improvement of the environmental management system.

### Environmental Management System Audit

Audits of randomly sampled Company sites are implemented every year and a renewal audit is conducted for all sites every three years by an external independent auditor.

## Compliance with Environmental Legislation

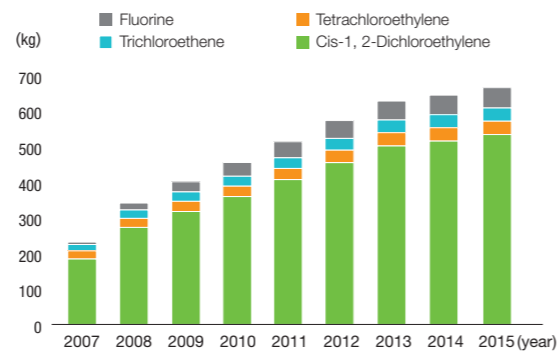
The SUMCO Group ensures that Group companies keep themselves updated about the requirements of laws, regulations, and agreements and that they comply with such requirements.

We also ensure that the Group complies with overseas chemical substance regulations, namely, the Restriction on Hazardous Substances (RoHS) Directive and the Regulation on Registration, Evaluation, Authorisation and Restriction of Chemical Substances (REACH).

### Progress of Countermeasures against Soil and Groundwater Contamination at the Noda Office

In a voluntary survey implemented at the Noda Office in 2005, it was found that amounts of volatile organic compounds (VOC) and fluorine exceeded the soil and groundwater environmental standard values. We have ever since been introducing countermeasures in consultation with concerned authorities and others. At present, we are working to prevent the spread of and recover contaminated substances by using a pumping well set up near the boundary of the plant grounds.

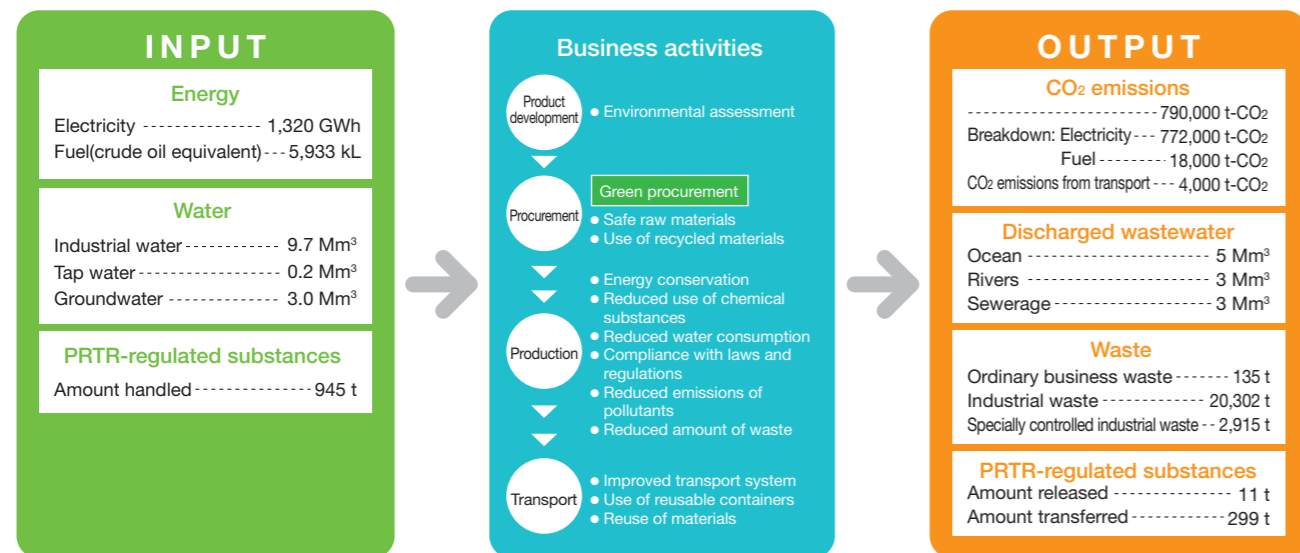
Amount of Contaminated Substances Recovered Annually from Groundwater at the Noda Office



## Environmental Impact of Business Activities

The depletion of energy resources, global warming, threats to biodiversity, and other environmental problems are having an increasingly serious impact on the global environment. SUMCO promotes environmental considerations and the reduction of environmental impacts across its business activities with a particular focus on electric power, chemical substances, waste, and wastewater, which the Company has identified as priority environmental issues.

### Environmental Impact of Business Activities in 2015 (SUMCO Group in Japan)

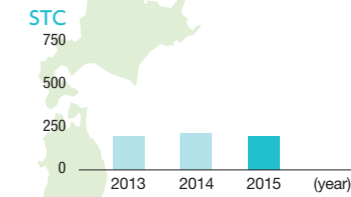
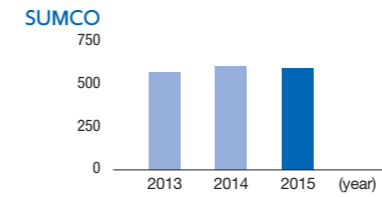


\*CO<sub>2</sub> emissions from electricity are calculated using the CO<sub>2</sub> emission coefficient of each electric power supplier.

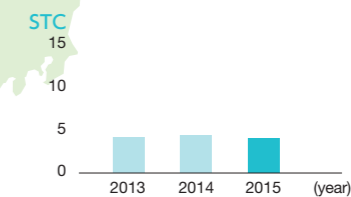
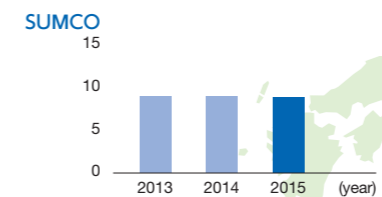
### Trends of Environmental Impact

#### Japan

CO<sub>2</sub> emissions (Japan) (thousand tons per year)

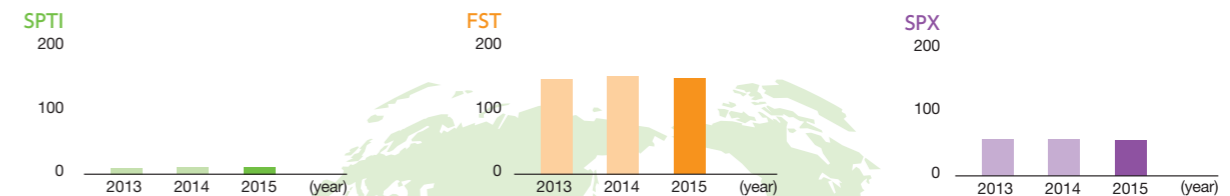


Water consumption (Japan) (million m<sup>3</sup> per year)

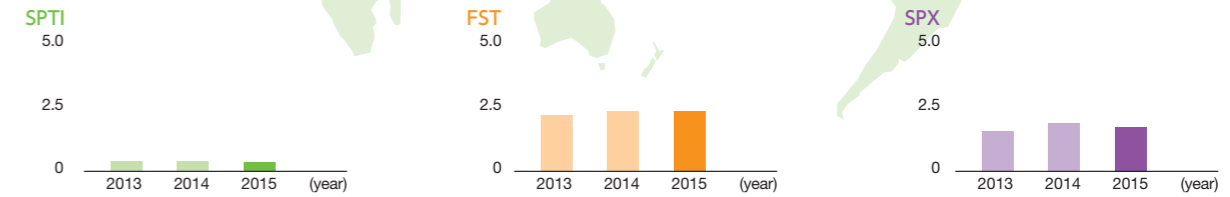


#### Overseas

CO<sub>2</sub> emissions (overseas) (thousand tons per year)



Water consumption (overseas) (million m<sup>3</sup> per year)



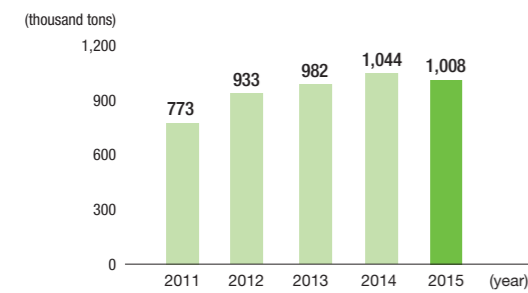
\* STC = SUMCO TECHIV Corporation, SPTI = PT. SUMCO Indonesia, FST = FORMOSA SUMCO TECHNOLOGY CORPORATION, SPX = SUMCO Phoenix Corporation  
\* CO<sub>2</sub> emissions of the overseas subsidiaries are calculated using the emission coefficient of each country based on the Greenhouse Gas Protocol Initiative.

## Combating Global Warming

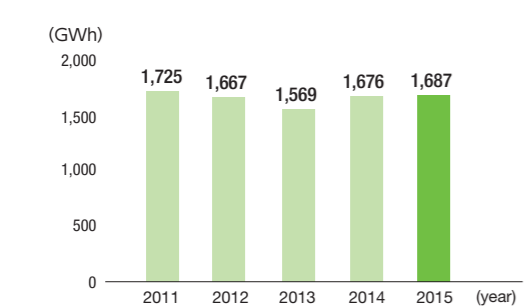
The production of silicon wafers requires a significant amount of electricity. To reduce this power consumption, we make every effort to streamline production and make it more rational. When it comes time to update production and utility facilities, we replace them with energy-saving and high-efficiency alternatives.

In offices, lighting is turned off during lunchtime and other breaks, and air conditioners are set at a reasonable temperature to save energy and reduce CO<sub>2</sub> emissions.

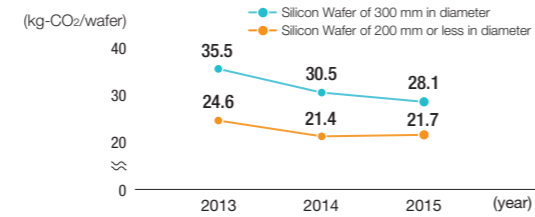
### CO<sub>2</sub> Emissions (SUMCO Group)



### Electric Power Consumption (SUMCO Group)

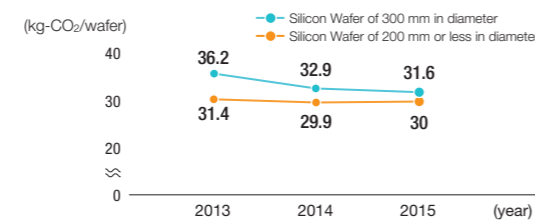


### CO<sub>2</sub> Emissions per Silicon Wafer Manufactured in Japan



\* CO<sub>2</sub> emissions per wafer increased in 2013 because the CO<sub>2</sub> conversion factor (t-CO<sub>2</sub>/kwh) increased due to the higher ratio of thermal power generation.

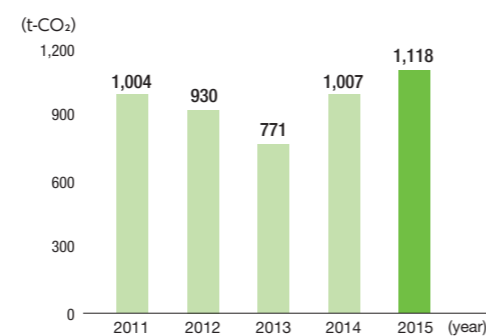
### CO<sub>2</sub> Emissions per Silicon Wafer Manufactured Overseas



### CO<sub>2</sub> Reduction through Modal Shift to Ship Transport in the Field of Logistics

SUMCO used to rely solely on airfreight for the transportation of silicon wafers to overseas markets. However, to reduce both CO<sub>2</sub> emissions and transport costs, we have been promoting a modal shift to ship transport for some of our products since 2009. Since ship transport requires longer transportation lead time and involves changes in the transportation environment, we conduct tests before switching to ship transport to confirm that the quality of products is not affected, as well as consulting with customers.

### CO<sub>2</sub> Reduction through Modal Shift to Ship Transport



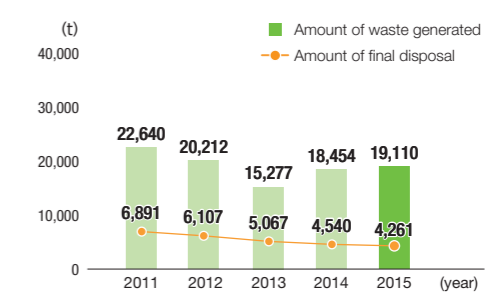
## Reduction of Waste

To reduce the large volume of sludge generated at our plants, efforts are currently being made to optimize the quantity of chemicals injected for wastewater treatment as well as to lessen the moisture content of sludge by improving dehydrator operation. As for waste oil, waste acid, waste alkali, waste plastics, and other waste, we are promoting both their recycling and their conversion into valuable resources.

### Waste Reduction through the Adoption of Reusable Containers

We are replacing the containers used to ship 300 mm in diameter silicon wafers with reusable alternatives to reduce post-delivery waste. The percentage of reusable containers used for shipment in 2014 was 61.4% (56.7% in 2013). We conduct tests on the reusable containers to ensure that the quality of products is not be affected.

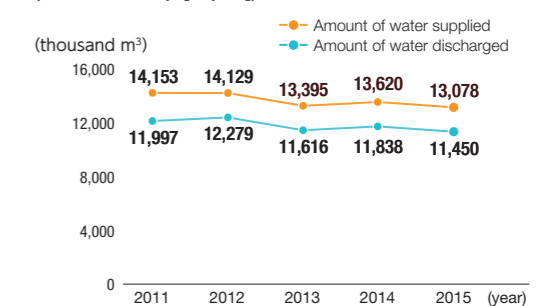
### Amount of Waste Generated and Final Disposal (SUMCO Group [Japan])



## Effective Use of Water Resources

Industrial water and groundwater are purified through filtering and ion exchange for use at our plants. Since we have to use a significant amount of water, a valuable resource, we ensure that water left after the purification process is used to cool utility facilities and dilute wastewater treatment chemicals, rather than discharged. We also collect water used to rinse silicon wafers and for other purposes to conserve as much water as possible for recycling.

### Amount of Water Supplied and Discharged (SUMCO Group [Japan])



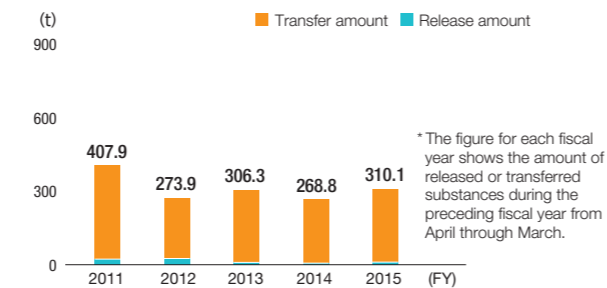
# Chemical Substance Management

## Reported Results

The Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (Law concerning Pollutant Release and Transfer Register/PRTR Law) requires businesses to report the amounts of any designated chemical substances released into the environment or transferred.

During the period from April 2014 to March 2015, there were 13 substances subject to reporting under the PRTR Law. The majority of these were substances contained in cleaning agents and fuels.

Amount of PRTR-Regulated Substances Released and Transferred (SUMCO Group [Japan])



List of Substances Subject to PRTR Reporting (Class 1 Designated Chemical Substances: 1 ton or more per year; Specific Class I Designated Chemical Substances: 0.5 tons or more per year) Period covered: April 2014 to March 2015

Ordinance No.	Name of Class 1 Designated Chemical Substance	Amount handled	Amount released				Amount transferred	
			Atmosphere	Public waters	Soil	Landfill	Sewerage	Waste
20	2-aminoethanol	9.00	0.00	0.00	0.00	0.00	0.00	0.00
30	Linear alkylbenzene sulfonate (LAS)	1.90	0.00	0.00	0.00	0.00	0.00	0.00
53	Ethylbenzene	0.00	0.00	0.00	0.00	0.00	0.00	0.00
71	Ferric chloride	6.20	0.00	0.00	0.00	0.00	0.00	0.00
80	Xylene	81.0	2.39	0.00	0.00	0.00	0.00	0.28
88	Hexavalent chromium compound	0.90	0.00	0.00	0.00	0.00	0.00	0.92
296	1,2,4-Trimethylbenzene	93.50	0.13	0.00	0.00	0.00	0.00	0.00
300	Toluene	9.04	7.80	0.00	0.00	0.00	0.00	0.00
332	Inorganic arsenic and its compounds	0.70	0.00	0.00	0.00	0.00	0.00	0.00
333	Hydrazine	1.00	0.00	0.00	0.00	0.00	0.00	0.00
374	Hydrogen fluoride and its water-soluble salts	685.26	0.35	0.03	0.00	0.00	0.00	254.99
407	Poly (oxyethylene) alkyl ether	2.93	0.00	0.03	0.00	0.00	0.00	2.90
410	Poly (oxyethylene) nonylphenyl ether	53.70	0.00	0.00	0.00	0.00	0.00	39.00
Total		945.12	10.67	0.06	0.00	0.00	0.00	299.37

\* The amount handled is not equal to the total amount of released and transferred because some substances were released after decomposition and detoxification.

## Environmental Impact (SUMCO Phoenix Corporation)

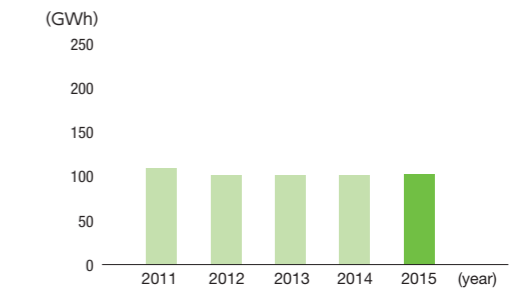
Operation of a sound environmental management system was furthered again in fiscal year 2015, and the amounts of electric power and water used and of hazardous waste generated were all on a level with or lower than in the previous year.

### Energy Conservation

Due to continuing efforts to reduce usage in the manufacturing business, the amount of electric power consumption has remained flat since 2012.

- Main improvement measures
- Continued to expand the use of variable-frequency drive motors.
  - The use of energy-saving lighting continued to be expanded.
  - The operational efficiency was maximized.

Electric power consumption

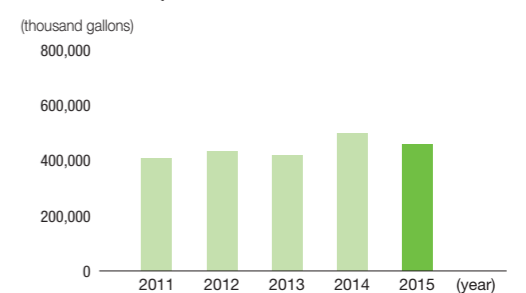


### Reduction of Water Consumption

Along with electric power, water is one of the main resources used in SUMCO's manufacturing processes, and it is the focus of measures to reduce usage. Large volumes of water amounting to millions of gallons are recovered and reused in our plants every day.

- Main improvement measures
- Water used for rinsing and other purposes in the production process is reused to reduce the amount of tap water used.
  - The production process was improved in such a way as to reduce the amount of water used.
  - Landscape plants on the premises were replaced with drought-resistant species.

Water consumption

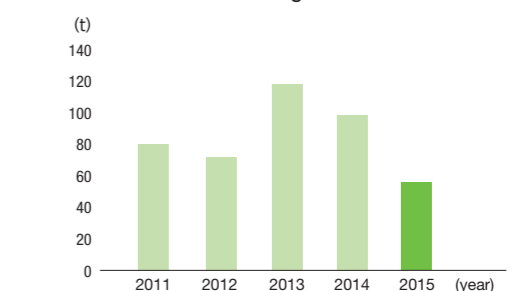


### Waste and Chemical Substances

Although the amount of waste are directly determined by customer demand and product formation, improvement in the monocrystalline silicon process using process water that was implemented in 2014 led to significant reduction in hazardous waste in fiscal year 2015. Activities to reduce hazardous waste volume with a focus on arsenic waste were also begun in 2015.

- Main improvement measures
- Focus of reduction activities was placed on major sources of waste.
  - Scrap materials were recycled and reused.
  - Monthly report to management on total amount of hazardous waste.
  - Adoption of strict process for material approval.

Amount of hazardous waste generated



## Interaction with Customers

### Quality Control System

Maintaining and enhancing product reliability and safety is one of our most important social responsibilities.

The SUMCO Group works hard to supply high-quality products that will satisfy customers under its Group-wide unified Quality Policy. It controls quality throughout all processes from design and development to production and shipment under a quality management system based on ISO 9001 and ISO/TS 16949 standards across all Group companies, including those abroad, so as to enhance the safety and reliability of its products.

We have also built an internal quality auditing system to ensure continuous improvement of the quality management system.

Our silicon wafer production sites in Japan and abroad are certified to ISO 9001 and ISO/TS 16949.

### Quality Education

To enhance the reliability and safety of products, it is necessary to continuously improve the awareness and skills of both workers and their supervisors.

For this reason, we have developed quality education programs for each job and level of employee and assigned instructors for each education program to each silicon wafer production site in Japan to provide necessary education whenever needed.

We held a total of 188 seminars at our plants in Japan in fiscal year 2015, and more than 100 seminars are planned in fiscal year 2016. We also provide assistance for quality education at our plants in other countries.



Quality education at one of the SUMCO seminars

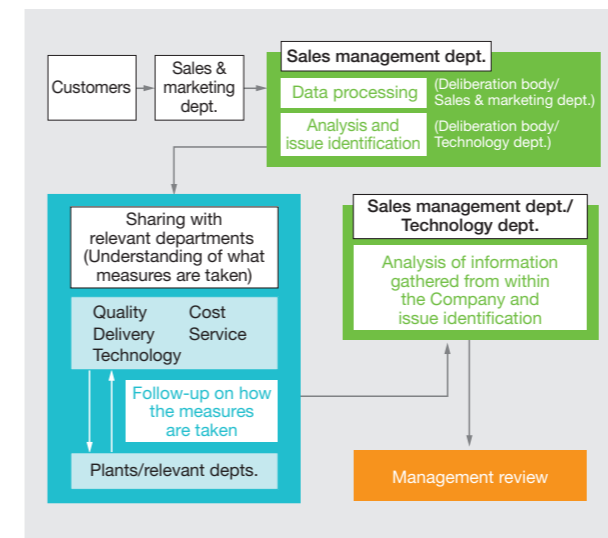
### Improvement of Customer Satisfaction

#### Customer Satisfaction Survey

To maintain our "first call" status among our customers, evaluations received from customers are shared with relevant departments for continuous improvement and analyzed regularly from four different aspects: quality, cost, delivery, and service (QCDS).

The results of analysis are shared among sales & marketing and other relevant departments for inclusion in improvement plans to further enhance customer satisfaction.

#### Flow for Sharing Customer Satisfaction (CS) Evaluation Information

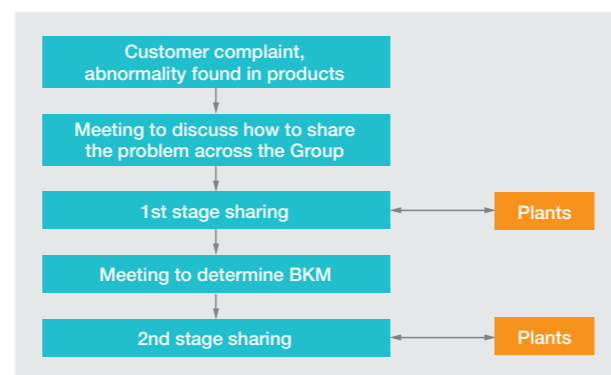


### Response to Quality Problems

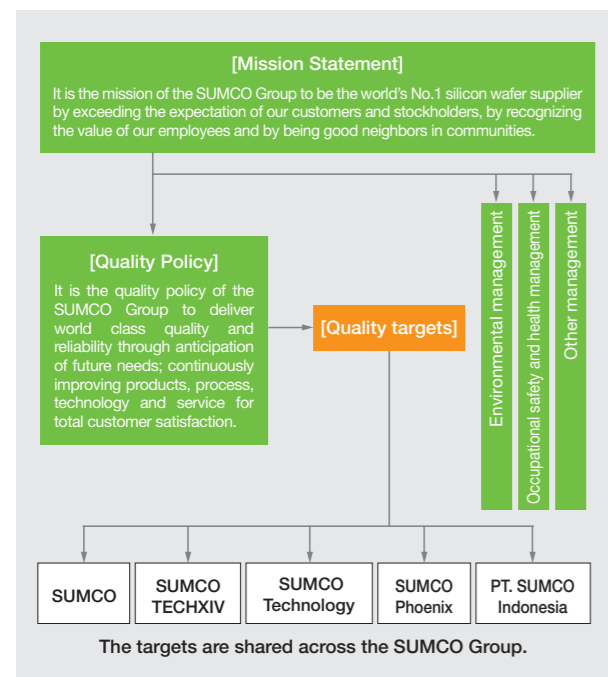
Should a plant become the subject of a customer complaint or experience an abnormality or other quality problem, the plant handles the problem immediately, investigating the cause and taking measures to prevent recurrence.

Then, the Quality Assurance Department holds a meeting to discuss and determine the best known method (BKM) to prevent recurrence and shares it with all of the Group's manufacturing companies to prevent similar problems from occurring at other plants in Japan and abroad.

#### Flow for Sharing Quality Problems



#### SUMCO Group's Mission Statement and Quality Policy and Targets



into our ongoing quality improvement activities. We also utilize this invaluable input in creating technological roadmaps for further miniaturization, further increased quality, and other such purposes, as well as to examine business developments in view of market trends. By means of our technical communication meetings, we aim to enhance customer satisfaction and to further improve the quality of our products.

In communicating with our customers, we always make effort to provide the best information with the customer's best interests in mind while also taking care to comply with laws, regulations, and ethical standards.

### Ensuring the Safety of Products

#### Management of Chemical Substances Contained in Products

SUMCO ensures that chemical substances regulated by law or those that customers have asked us to eliminate or reduce the use of are managed properly according to internal rules and standards.

#### Submission of Material Safety Data Sheets (MSDS)

SUMCO makes available material safety data sheets based on JIS Z7250 to provide information on the related hazards of chemical substances used by the Company and instructions on how to handle them safely. We are planning to replace the sheets with safety data sheets (SDS) based on JIS Z7253, a revised standard that is compatible with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS)\*, an internationally recognized system.

\* Globally Harmonized System of Classification and Labelling of Chemicals (GHS): A system established by the United Nations in 2003 to provide internationally unified standards for the classification of chemicals by types of hazard and toxicity as well as to propose internationally harmonized labels and safety data sheets (SDS) in order to facilitate the proper management of chemicals.

### Communication with Customers

SUMCO actively promotes interactive communication with customers through technical communication meetings in and outside of Japan with the aim of grasping customer needs at an early stage, accomplishing product development swiftly, and offering products that meet customer needs.

We consider technical communication meetings as opportunities to obtain a fair evaluation of our products and to earn the trust of our customers not only by presenting suggestions for use of our proprietary technologies but also by grasping our customers' needs quickly and accurately, reflecting that grasp in our product delivery performance, and confirming these points and providing follow-up accordingly. The customer needs that we identify at technical communication meetings are incorporated

# Interaction with Suppliers

## ■ Purchasing Policy

To manufacture products that will bring greater convenience and comfort to people around the world and contribute to the enrichment of society, we ensure that our material procurement is based on mutual trust and fair transactions with superior suppliers. We also collaborate with our suppliers to together actively promote compliance with laws, regulations, and social norms, support global environmental conservation, and conduct other activities to fulfill our social responsibilities.

### 1 Transactions based on partnership

We will share and unify our goals and visions with those of our suppliers and develop favorable partnerships based on mutual trust.

### 2 Fair transactions

We will ensure that our procurement is clean, open, and fair.

### 3 Promotion of value analysis (VA) activities

We will encourage our suppliers to conduct value analysis (VA) activities in order to propose cost improvement methods, new materials, new technologies, and others and will actively adopt such proposals.

### 4 Compliance in purchasing activities

We will comply with laws, regulations, and social norms in the course of our purchasing activities.

### 5 Fulfillment of corporate social responsibilities

We will fulfill our social responsibilities when conducting purchasing activities across our entire supply chain, including with respect to our suppliers.

### 6 Green procurement

We will procure environmentally considerate goods to help ensure our priceless natural environment is preserved and passed down to future generations.

## ■ CSR Procurement

### 1. Basic Stance

SUMCO promotes responsible procurement to fulfill our social responsibilities across our entire supply chain. Together with our suppliers, we pursue procurement that gives due consideration to human rights, work environments, safety and health, environmental conservation, and other issues to ensure that customers can use our products with peace of mind and enhance the satisfaction of various stakeholders.

### 2. Promotion of Our CSR Policy

Through periodic briefings to suppliers and daily procurement activities, we request our suppliers to make voluntary efforts to promote CSR-oriented management.

Specifically, we distribute to each supplier a copy of our

Supplier Handbook, which includes a section on CSR as well as our Purchasing Policy and requests to suppliers. The Supplier Handbook is also posted on the procurement website for easy reference at any time.

The Supplier Handbook also contains, as an attachment, guidelines on CSR activities that we invite our suppliers to voluntarily conduct which we have prepared and is based on the Electronic Industry Citizenship Coalition (EICC) Code of Conduct. Suppliers are requested to utilize these guidelines for their own CSR management practices and to also encourage their secondary and tertiary suppliers to use and follow the guidelines.

In addition, we asked our major suppliers to fill out a self-assessment questionnaire that we had prepared in accordance with the EICC Code of Conduct and checked the collected questionnaires to evaluate the current situation regarding the suppliers' CSR practices.



Briefing to Supplier

### 3. Elimination of Conflict Minerals

Through periodic supplier briefings and the Supplier Handbook, SUMCO requests its suppliers to meet the requirements of EICC Code of Conduct concerning conflict minerals.

\* None of tantalum, tin, gold or tungsten is necessary for the functionality or production of SUMCO's products. Therefore, our products are not subject to the conflict minerals regulation based on Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act enacted in July 2010.

### 4. Strengthening of Business Continuity Plans for Material Procurement

In addition to well-planned emergency preparedness, such as maintaining an optimum inventory that matches the level of risk as well as sourcing across multiple channels, we also have a system in place that enables us to investigate the impact of a disaster or accident immediately after it takes place. At the same time, we will also source from alternative suppliers, adopt alternative materials, and take every other measure possible for procurement in the event of an emergency to minimize the effect on production.

### 1 Optimum inventory control for each category of procured material

We will review inventory quantities, storage sites, transportation methods, and others for each type of material whenever necessary.

### 2 Source investigation and risk response

We will investigate and confirm production sites and sources of major items and respond according to the level of risk involved.

### 3 Development, maintenance, and review of business continuity plans for each item procured

We will develop business continuity plans for each major item so that we can properly respond to the occurrence of any risk.

### 4 Risk assessment of suppliers

We will periodically conduct checks on our main suppliers with respect to their financial condition, production systems, business continuity plans, and others and respond appropriately depending on the results.

# Interaction with Shareholders and Investors

## ■ Basic Policy on Information Disclosure

1 Based on a full acknowledgment that the timely disclosure of appropriate corporate information to investors constitutes the basis of a sound securities market, we will conduct honest business practices by, among other efforts, ensuring accurate, equitable, and prompt disclosure of corporate information that meets the needs of investors.

2 We will actively disclose corporate information that we are not required to disclose by law or rules of the stock exchange but that we believe will be useful for investors.

## ■ Communication with Shareholders and Investors

### Annual Shareholders' Meeting

Annual shareholders' meetings are where important decisions on the Company's policies and other matters are made as well as an opportunity to promote shareholders' understanding of the Company. Convocation notices, in both Japanese and English, are posted on our website. Efforts are also made to provide explanations of the details of each agenda item and answer questions asked by shareholders during meetings in as clear a manner as possible by utilizing narrated video footage.

## IR Activities

SUMCO's basic policy on investor relations is to ensure fair, impartial, and timely disclosure of the Company's management vision, business situation, financial performance, and other corporate information to allow investors to evaluate the Company's value fairly. We also ensure that opinions from investors are reflected in our management for the continuous enhancement of our corporate value.

The English and Japanese version of documents are published simultaneously to ensure fair disclosure of information for both Japanese and overseas investors.

The Timely Disclosure Network (TDnet) of the Tokyo Stock Exchange is utilized to disclose information that needs to be disclosed in a timely fashion, and documents are posted both in Japanese and English simultaneously on our website. Annual Reports and Message to Shareholder are also published to convey messages from top management and report business performance and conditions to help investors develop a better understanding of the Company.



Message to Shareholder



Annual Report 2014

# Interaction with Local Communities

Aspiring to be a good partner for local communities, SUMCO's factories and plants are actively involved in local activities.

## Support for a Vocational Facility for People with Disabilities

At the Yonezawa Plant (Yonezawa City, Yamagata Prefecture), used PET bottles and empty cans are collected from the plant and homes of employees and provided, via a recycling company, to a vocational facility for people with disabilities to help increase employment opportunities for such people. Using the money received from the recycling firm for the sale of such bottles and cans, the plant also periodically purchases useful items and donates to the facility.

## Participation in Cleanup and Beautification Activities

SUMCO's Chitose Plant (Chitose City, Hokkaido Prefecture) is carrying on a clean-up program on approximately 1.5 km of sidewalks along the main roads of the Chitose Industrial Complex where the plant is located. Plant members pick up empty cans and trash that have been discarded, as well as fallen leaves and other refuse, to keep the sidewalks pleasant for joggers and people who walk there on the way to work and school. The program will also be continued with the aim of creating a roadside environment where people will be less likely to discard refuse.



Clean-up program in the Chitose Industrial Complex

The JSQ Division (Akita City) participates with local residents and companies in a cleanup activity for areas along the Omoro River organized by the city every year.

The Yonezawa Plant (Yonezawa City, Yamagata Prefecture) actively engages in various environmental activities in cooperation with other companies in the Hachimanpara Industrial Park in which the plant is located. These activities include planting seasonal flowers in median strips of roads inside the park, in which the local government and a local elementary school also take part, as well as releasing white-spotted charr fry into the Tenno River, which flows through in the park, together with local elementary school children.

At SUMCO TECHXIV Corporation's Nagasaki Plant (Omura City, Nagasaki Prefecture), many employees participate in the concerted cleanup efforts for the Omura Bay area, hosted by the Society to Beautify Omura Bay, which is organized by municipalities and others in the area. The event is held twice a year.

Together with nearby companies, SUMCO TECHXIV Corporation's Miyazaki Plant (Miyazaki City, Miyazaki Prefecture) is involved in a twice-yearly cleanup activity for Kiyotake-cho named as 'Kiyotake-cho KINRIN Clean Activity', the town in which the plant is located, as well as a cleanup activity for the Kiyotake River every October.



Kiyotake-cho KINRIN Clean Activity



Cleanup activity for the Kiyotake River

As a member of the South Noda City Factory Coordination Council, SUMCO Technology Corporation (Noda City, Chiba Prefecture) participates annually in the Edogawa Clean Campaign, which is sponsored by the Edogawa River Office of the Kanto Regional Development Bureau, Ministry of Land, Infrastructure, Transport and Tourism and other organizations in 13 municipalities located near the Edogawa River. SUMCO Technology also engages in a local community cleaning activity, as its own activity, to clean up areas outside its site once every two months.



Edogawa Clean Campaign



Campaign to clean up areas outside the Noda Plant site

SUMCO Support Corporation\* (Imari City, Saga Prefecture) has been engaged in a volunteer project to create flower beds, plant seedlings, and grow flowers on land adjoining the front gate at the SUMCO Corporation Kyushu Factory (Nagahama). An empty lot belonging to Imari City, the land was borrowed for this activity, which has been named the Flower Project. The flowers blooming

there in different seasons throughout the year are a relaxing sight for local residents and visitors to the plant. Bulbs and seeds are harvested and reused in the next year's planting.

\* SUMCO Support Corporation is a special subsidiary company of SUMCO Corporation established for the purpose of employing people with disabilities.



The Flower Project

## Joint Fire Drill with a Social Welfare Facility

At SUMCO TECHXIV Corporation's Nagasaki Plant (Omura City, Nagasaki Prefecture), employees participate in a joint emergency drill based on the scenario of a fire at a nearby social welfare facility once a year.

## Participation in Local Traffic Safety Campaigns

SUMCO's Chitose Plant (Chitose City, Hokkaido Prefecture) participates in a traffic safety campaign undertaken during the traffic safety campaign week each spring and autumn. Participation involves the employees lining up along a road to remind drivers and pedestrians about traffic safety.

SUMCO's Kyushu Factory (Saga Prefecture) has been participating annually in traffic safety campaigns as a member of the Shiraiishi District Council of Safe Driving Supervisors. In March there is a program to clean traffic mirrors at curves, mainly in areas around local elementary and junior high schools, and in December a program urging drivers to turn on their lights earlier at twilight.



Appealing to drivers to drive safely



Urging drivers to turn on their lights earlier

## Recognized by the Volunteer Fire Corps Office of the Fire and Disaster Management Agency

The SUMCO Kyushu Factory (Saga Prefecture) has actively engaged in fire brigade activities and prevention of disaster activities. In March 2016, the factory meets the criteria of recognition in the Volunteer Fire Corps Factory system of the Fire and Disaster Management Agency of the Ministry of Internal Affairs and Communications. With a recommendation from Imari City, the factory's program was recognized as a Volunteer Fire Corps Factory by the Fire and Disaster Management Agency of the Ministry of Internal Affairs and Communications.



Conferral ceremony for certificate of official recognition as a Volunteer Fire Corps Factory

## Participation in the Tozai Matsuura Ekiden Road Relay Race

The SUMCO Imari ekiden road relay race team from the Kyushu Factory (Saga Prefecture) won its 11th victory, for the first time in 3 years, in the 69th Tozai Matsuura Ekiden Road Relay Race (organized by the Saga Shimbusu Company) on January 31, 2016. The Tozai Matsuura Ekiden Road Relay Race is an event with a tradition created by the localities and the occupations involved, and it contributes to vitalization of local communities. This time there were 20 teams competing over the 59.8-km course in eight sections that stretched from the Arita-cho Higashi Shutchojo-mae bus stop to Karatsu Jinja shrine.



Image credit: The Saga Shimbusu Co., Ltd



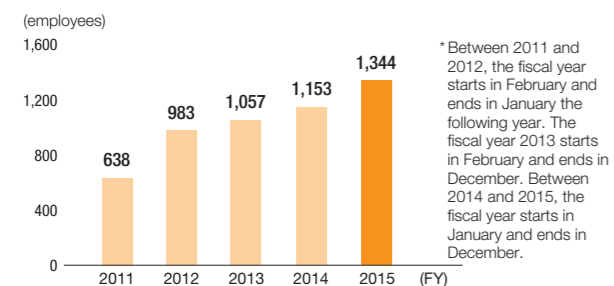
Image credit: The Saga Shimbusu Co., Ltd

# Interaction with Employees

## Respect for Human Rights

The SUMCO Group holds a meeting of the Human Rights Awareness Promotion Committee, made up of representatives from all Group companies, every year to ensure that human rights awareness-raising activities are conducted on an ongoing basis throughout the Group. At the meeting, the policy for activities for the coming fiscal year is decided and shared so that activities based on that policy—including lectures by external experts and training using audiovisual aids—will be carried out at each site and Group company. Furthermore, to maintain a comfortable and pleasant working environment at all times, a workplace bullying consultation desk is set up at each site where both male and female staff members are available for consultation by anyone whenever needed. Moreover, the SUMCO Group does not use child labor of any kind, and through daily work management, ensures the absence of forced labor. We also ensure that both male and female employees receive fair treatment and that the pay system is not gender-biased.

### The Number of Employees Who Received Human Rights Awareness Training in the Past Five Years (SUMCO Group [Japan])



## Human Resources Development

As declared in the SUMCO Vision, SUMCO aspires to become the "World's Best in Technology." To reach this goal, diversified training opportunities are provided to employees at all levels, from new recruits to managers and executives, to encourage them to pursue lifelong education and stay abreast of changing needs as well as to develop them into individuals able to think and act independently. Young engineers are also provided every year with an opportunity to present their research achievements to senior managements as a means of enhancing their motivation.

To pursue the SUMCO Vision of "Empower Employee Awareness of Profit" the President's Award (renamed the SUMCO CEO Award as of March 29, 2016) was established in 2013. This award will be presented every year to individuals and organizations—including those of Group companies—that have made a meaningful contribution to increasing the Group's value. Furthermore, in line with our aim to enhance "Competitiveness in Overseas Markets," which is included in SUMCO Vision, we are working to develop a globally competitive human resources by encouraging employees to become familiar with and respect different cultures and values as well as by enhancing programs for studying abroad and acquiring foreign language skills.



Presentation by an up-and-coming engineer



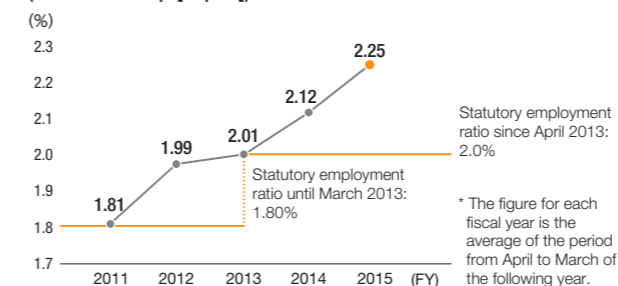
Presentation by an up-and-coming engineer

## Utilization and Development of a Diverse Workforce

### Employment of People with Disabilities

SUMCO established SUMCO Support Corporation, which gives special consideration to employing people with disabilities, in 2004. In May the same year, SUMCO Support was designated as a "special subsidiary company" by the government. Ever since, people experiencing various challenges in their lives have found job opportunities and been employed in a wide range of areas, both at SUMCO Support and various other Group companies. The SUMCO Group continues its efforts to fit the right person to the right job in order to help individual employees reach their full potential as well as to provide employment opportunities and maintain and improve supportive work environments for people with disabilities.

### Employment Ratio of People with Disabilities (SUMCO Group [Japan])



### Employment of Older Workers

SUMCO has a post-retirement reemployment scheme in place that allows experienced and willing employees to continue to contribute their high-level skills after mandatory retirement at age 60, provided their skill sets meet the Company's needs. Employees reemployed under the scheme can work until the age of 65.

Due to the amendment of the Act on Stabilization of Employment of Elderly Persons enforced on April 1, 2013, we have gradually abolished the criteria limiting employees' eligibility for reemployment under a "transitional measure," as defined in the act, and reemployed all employees who wish to continue to work.

### Childcare Leave and Nursing Care Leave

We support employees' childcare and other family care responsibilities by offering childcare leave, nursing care leave, and special work arrangements for employees with a child aged under three years old.

### The Number of Employees Who Took Family Leave (January to December 2015) (SUMCO)

	Male	Female	Total
Maternity leave	0	4	4
Childcare leave	0	10	10
Nursing care leave	1	0	1

## Occupational Safety and Health Management

We have introduced occupational safety and health management systems (OSHMS) aimed at achieving zero accidents at various workplaces. These systems are designed to prompt business operators and workers to cooperate with each other to implement safety and health management voluntarily and continuously through an established PDCA (plan-do-check-act) cycle in order to prevent accidents and create comfortable work environments that will help enhance employee health. The systems are thus instrumental in the continuous improvement of the safety and health standards of our business sites.

To prevent accidents and mitigate risks, SUMCO implements risk assessments for facilities, operations, chemical substances, and others. Various activities are also performed to ensure safety, including safety education, risk prediction, "pointing and calling," and reporting of close calls.

We have conducted a stress check for each employee across the Group since 2007 to promote the further improvement of work environments.

In addition, there are no workplaces with a particularly high inherent risk of accidents or illnesses within the Group.

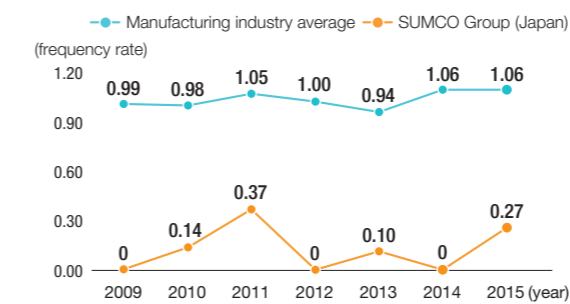


### Safety and Health/Disaster Prevention Awards Received

Year & month	Award	Awarded site
March 2008	Letter of Appreciation from Miyazaki Pref. Governor for Cooperation with Volunteer Fire Corps	SUMCO TECHXIV Corp. Miyazaki Plant
October 2008	Japan Industrial Safety and Health Association Chairman's Award	SUMCO Corp.
October 2008	Akita Pref. Labor Standards Association Chairman's Award	Japan Super Quartz Corp. <sup>1</sup>
October 2008	Nagasaki Labor Bureau Director's Commendation for Safety and Health	SUMCO TECHXIV Corp. Nagasaki Plant
December 2008	Ministry of Health, Labour and Welfare Class 1 No Accident Record	SUMCO TECHXIV Corp. Nagasaki Plant
June 2009	Fire and Disaster Management Agency Commissioner's Commendation for the Safety Management and Security of Hazardous Materials	SUMCO TECHXIV Corp. Nagasaki Plant
July 2009	Commendation and Letter of Appreciation from Health, Labour and Welfare Minister for Cooperation in Blood Donation	SUMCO TECHXIV Corp. Nagasaki Plant
September 2009	Commendation from Chief of Miyazaki Pref. Police Headquarters for the Promotion of Traffic Safety	SUMCO TECHXIV Corp. Nagasaki Plant
February 2010	Ministry of Health, Labour and Welfare Class 1 No Accident Record (7 million hours)	SUMCO Corp. Kyushu Factory (Saga)
November 2010	Ministry of Health, Labour and Welfare Class 1 No Accident Record (7 million hours)	SUMCO Corp. Kyushu Factory (Imari)
November 2010	Letter of Appreciation from Japanese Red Cross Society	SUMCO Corp. Kyushu Factory (Imari)
December 2010	Golden Order of Merit from Japanese Red Cross Society(Blood Donation)	SUMCO TECHXIV Corp. Miyazaki Plant
December 2010	Accreditation as a Cooperating Business with Miyazaki City Volunteer Fire Corps	SUMCO TECHXIV Corp. Miyazaki Plant
August 2011	Health, Labour and Welfare Minister's Commendation from Japanese Red Cross Society	SUMCO Corp. Kyushu Factory (Imari)
August 2011	Order of Merit from Japanese Red Cross Society	SUMCO Corp. Kyushu Factory (Saga)
October 2011	Nagasaki Labor Bureau Director's Commendation for Safety and Health	SUMCO Corp. Nagasaki Office
November 2011	Nuclear and Industrial Safety Agency Director-General's Award for Safety Management of High-Pressure Gas	SUMCO TECHXIV Corp. Miyazaki Plant
October 2013	Federation of Labour Standards Associations Chairman's Commendation for Safety Management	SUMCO Technology Corp. Noda Plant
October 2013	Saga Labor Bureau Director's Commendation for Safety and Health	SUMCO Corp. Kyushu Factory (Kubara)
October 2013	Ministry of Health, Labour and Welfare Class 2 No Accident Record (10.5 million hours)	SUMCO Corp. Kyushu Factory (Saga)
February 2014	Ministry of Health, Labour and Welfare Class 1 No Accident Record (7 million hours)	SUMCO Corp. Kyushu Factory (Kubara)
May 2014	Letter of Appreciation from Saga Pref. Governor for Safety Management of High-Pressure Gas	SUMCO Corp. Kyushu Factory (Saga)
July 2015	Hokkaido Labor Bureau Director's Commendation	SUMCO Corp. Chitose Plant
March 2016	Recognized by the Volunteer Fire Corps Factory of the Fire and Disaster Management Agency, Ministry of Internal Affairs and Communications	SUMCO Corp. Kyushu Factory (Imari)

<sup>1</sup> Current JSQ Division  
\* Awards listed include those received by the date of publication of this report.

### Accident Frequency Rate<sup>2</sup>



<sup>2</sup> Accident frequency rate = Number of workers killed or injured in occupational accidents ÷ Total working hours × 1,000,000

### Labor-Management Relations

SUMCO's basic labor-management policy is to maintain sound relations based on mutual understanding and trust and to solve issues through discussion for the perpetual development of the Company and improvement of working conditions.

Specifically, with the aim of maintaining business operations based on integrated efforts between labor and management, a labor-management meeting is generally held twice a year to share information and promote communication.

Also, at labor-management meetings held once a month at each plant, plant managers and union representatives discuss such issues as the production situation.

Furthermore, the Labor-Management Study Committee meets regularly throughout the year to discuss important issues such as the improvement of working conditions and review of various systems from multifaceted, holistic, and long-term perspectives, thus allowing labor and management to work closely together to address various issues.

### Employment Status

(as of the end of December 2015)

Item	Regular employees	Temporary employees
SUMCO	3,489	194
Consolidated	7,480	349
	Japan	
	Overseas	2,148

### Number of Employees by Region (Consolidated)

Region	No. of employees
Japan	5,332
North America	553
Southeast Asia	343
East Asia	1,232
Europe	20
Total	7,480

### Breakdown of Employees (Consolidated)

	Managers	General employees	Total
Male	757	6,083	6,840
Female	39	601	640
Total	796	6,684	7,480

## Site Data

### 2015 data on the acquisition status of ISO 14001 certification for the SUMCO Group's business sites/plants and regulated substances discharged from each site/plant to the surrounding air and water

Name of business site/plant	SUMCO Corporation Kyushu Factory (Nagahama)	SUMCO Corporation Kyushu Factory (Kubara)	SUMCO Corporation Kyushu Factory (Saga)
Scope of business	Design, development and manufacture of silicon wafers	Design, development and manufacture of monocrystalline silicon ingots and silicon wafers	Design, development and manufacture of monocrystalline silicon ingots and silicon wafers
Status of acquisition of ISO 14001 certification	Examining organization	Japan Quality Assurance Organization	Japan Quality Assurance Organization
	Date of acquisition	January 11, 1999	January 11, 1999
	Date of renewal	January 11, 2014	January 11, 2014

Air		Measurement results (regulation value)	Measurement results (regulation value)	Measurement results (regulation value)
Nitrogen oxides (NOx)	ppm	Boiler 97 (150)	Boiler 78 (150)	Boiler 55 (110)
Sulfur oxides (SOx)	m <sup>3</sup> N/h	ND (K-value regulation 17.5)	ND (K-value regulation 17.5)	/
Soot and dust	g/m <sup>3</sup> N	Boiler ND (/)	Boiler ND (/)	Boiler ND (0.001)

Water		Regulation value	Measurement result	Regulation value	Measurement result	Regulation value	Measurement result
Biological oxygen demand (BOD)	mg/l	/	/ <sup>1</sup>	/	/ <sup>1</sup>	10	3.4
Chemical oxygen demand (COD)	mg/l	30	14	30	7.5	/	/
Suspended solids (SS)	mg/l	30	13	30	7	25	14
N-hexane extract	mg/l	5	ND	5	ND	3	ND
Iodine consumption	mg/l	/	/	/	/	/	/
Fluorine and its compounds	mg/l	8	4.1	8	3.05	3	0.8
Ammoniac nitrogen	mg/l						
Nitrate nitrogen	mg/l	80	19	80	30	100	8.9
Nitrite-nitrogen	mg/l						
Nitrogen content (T-N)	mg/l	120	43	120	34	60	16
Chromium content (T-Cr)	mg/l	0.2	ND	0.2	ND	0.2	ND
Phosphorus content (T-P)	mg/l	12	0.26	12	0.36	8	0.61
Arsenic	mg/l	0.05	ND	0.05	ND	0.1	ND
Trichlorethylene	mg/l	0.1	ND	0.1	ND	0.1	ND

<sup>1</sup> Only the drainage standard concerning COD applies to the Kyushu Factory (Nagahama) and Kyushu Factory (Kubara) because their treated drainage is discharged into the sea.

Name of business site/plant	SUMCO Corporation Noda Office	SUMCO Corporation Yonezawa Plant
Scope of business	Manufacture of Silicon wafer	Design, development and manufacture of monocrystalline silicon ingots
Status of acquisition of ISO 14001 certification	Examining organization	Japan Quality Assurance Organization
	Date of acquisition	January 11, 1999
	Date of renewal	January 11, 2014

Air		Measurement results (regulation value)	Measurement results (regulation value)
Nitrogen oxides (NOx)	ppm	Boiler 58 (260)	Boiler (/)
Sulfur oxides (SOx)	m <sup>3</sup> N/h	0.33 (K-value regulation 9.0)	/
Soot and dust	g/m <sup>3</sup> N	Boiler 0.005 (0.3)	Boiler (/)

Water		Regulation value	Measurement result	Regulation value	Measurement result
Biological oxygen demand (BOD)	mg/l	25	18.4	600	11
Chemical oxygen demand (COD)	mg/l	20	14.6	/	/
Suspended solids (SS)	mg/l	50	10	600	33
N-hexane extract	mg/l	3	ND	5	ND
Iodine consumption	mg/l	/	/	220	1.2
Fluorine and its compounds	mg/l	8	4.4	8	5.5
Ammoniac nitrogen	mg/l				
Nitrate nitrogen	mg/l	100	7	380	134
Nitrite-nitrogen	mg/l				
Nitrogen content (T-N)	mg/l	30	13	/	/
Chromium content (T-Cr)	mg/l	1	ND	0.5	ND
Phosphorus content (T-P)	mg/l	2	0.3	/	/
Arsenic	mg/l	0.05	ND	0.1	ND
Trichlorethylene	mg/l	0.1	ND	0.1	/

\* The drainage standard concerning COD applies to the Noda Office based on the total pollutant load control standards for drainage into Tokyo Bay.

\* Wastewater from the Yonezawa Plant is discharged to a public sewer and therefore falls under the category of "wastewater discharged into rivers after treatment at sewage plants" under the Sewerage Act. For this reason, the regulation value for fluorine compounds is 8 mg/l.

Name of business site/plant		SUMCO Corporation Chitose Plant	SUMCO Corporation JSQ Division
Scope of business		Design, development and manufacture of silicon wafers	Design, development and manufacture of quartz crucibles
Status of acquisition of ISO 14001 certification	Examining organization	Japan Quality Assurance Organization	Bureau Veritas Japan Co., Ltd.*
	Date of acquisition	January 11, 1999	November 22, 1999
	Date of renewal	January 11, 2014	December 14, 2014

Air		Measurement results (regulation value)	Measurement results (regulation value)
Nitrogen oxides (NOx)	ppm	Boiler / (/)	Firing furnace (/)
Sulfur oxides (SOx)	m <sup>3</sup> N/h	/	/
Soot and dust	g/m <sup>3</sup> N	Boiler / (/)	Firing furnace 0.08 (0.2)

Water		Regulation value	Measurement result	Regulation value	Measurement result
Biological oxygen demand (BOD)	mg/l	600	3.1	160	7.3
Chemical oxygen demand (COD)	mg/l	/	/	/	/
Suspended solids (SS)	mg/l	600	6	200	18
N-hexane extract	mg/l	5	3	5	1
Iodine consumption	mg/l	/	/	/	/
Fluorine and its compounds	mg/l	8	3.9	8	0.3
Ammoniac nitrogen	mg/l				
Nitrate nitrogen	mg/l	/	/	100	4
Nitrite-nitrogen	mg/l				
Nitrogen content (T-N)	mg/l	/	/	120	6.6
Chromium content (T-Cr)	mg/l	2	ND	2	ND
Phosphorus content (T-P)	mg/l	/	/	16	1.2
Arsenic	mg/l	/	/	0.1	ND
Trichlorethylene	mg/l	0.1	/	0.1	ND

\* The Sewerage Law applies to Chitose Plant because drainage from these facilities is discharged into the sewerage system (subsequently released into the river). Accordingly, the fluorine compound regulation value is set as 8 mg/l.  
\* The JSQ Division changed its ISO 14001 registration agency to the Japan Quality Assurance Organization from fiscal year 2015.

Name of business site/plant		SUMCO TECHXIV Corporation Nagasaki Plant	SUMCO TECHXIV Corporation Miyazaki Plant
Scope of business		Design, development and manufacture of monocrystalline silicon ingots and silicon wafers	Design, development and manufacture of monocrystalline silicon ingots and silicon wafers
Status of acquisition of ISO 14001 certification	Examining organization	Japan Quality Assurance Organization	Japan Quality Assurance Organization
	Date of acquisition	January 11, 1999	January 11, 1999
	Date of revision	December 14, 2015	December 14, 2015

Air		Measurement results (regulation value)	Measurement results (regulation value)
Nitrogen oxides (NOx)	ppm	Boiler 125 (260)	Boiler 65 (150)
Sulfur oxides (SOx)	m <sup>3</sup> N/h	ND (K-value regulation 17.5)	/
Soot and dust	g/m <sup>3</sup> N	Boiler ND (0.3)	Boiler – (0.1)

Water		Regulation value	Measurement result	Regulation value	Measurement result
Biological oxygen demand (BOD)	mg/l	600	38.6	25	3.5
Chemical oxygen demand (COD)	mg/l	/	/	/	/
Suspended solids (SS)	mg/l	600	23	30	2
N-hexane extract	mg/l	5	ND	5	ND
Iodine consumption	mg/l	/	/	/	/
Fluorine and its compounds	mg/l	15	5.0	8	1.3
Ammoniac nitrogen	mg/l				
Nitrate nitrogen	mg/l	380	47.7	100	9.6
Nitrite-nitrogen	mg/l				
Nitrogen content (T-N)	mg/l	240	71	120	4.8
Chromium content (T-Cr)	mg/l	2	ND	0.2	ND
Phosphorus content (T-P)	mg/l	32	0.23	16	0.04
Arsenic	mg/l	0.1	ND	0.1	–
Trichlorethylene	mg/l	0.1	ND	0.1	–

\* The Sewerage Law applies to SUMCO TECHXIV Corporation Nagasaki Plant because drainage from the company is discharged into the sewerage system (subsequently released into the sea). Accordingly, the fluorine compound regulation value is set at 15 mg/l.  
\* The drainage standard concerning BOD applies to SUMCO TECHXIV Corporation Miyazaki Plant because its treated drainage is discharged into the river.  
\* The frequency of measurement of air dust and soot at SUMCO TECHXIV Corporation Miyazaki Plant has been revised to once every five years. (The next measurement will take place in 2018.)

## Note

Name of business site/plant		SUMCO Phoenix Corporation Albuquerque Factory	SUMCO Phoenix Corporation Phoenix Factory
Scope of business		Design, development and manufacture of silicon wafers	Design, development and manufacture of monocrystalline silicon ingots and silicon wafers
Status of acquisition of ISO 14001 certification	Examining organization	DNV	DNV
	Date of acquisition	June 19, 2000	June 19, 2000
	Date of renewal	April 16, 2015	April 16, 2015

Air		Measurement results (regulation value)	Measurement results (regulation value)
Nitrogen oxides (NOx)	t/y	0.86 (10.2)	12.5 (26.0)
Sulfur oxides (SOx)	t/y	0.01 (0.34)	0.26 (1.0)
PM10 (Particulate Matter)	t/y	0.06 (0.84)	1.07 (2.88)

Water		Regulation value	Measurement result	Regulation value	Measurement result
Biological oxygen demand (BOD)	mg/l	/	/	/	/
Chemical oxygen demand (COD)	mg/l	/	/	/	/
Arsenic	mg/l	2.09	/	0.13	ND
Cadmium	mg/l	/	/	0.047	ND
Copper	mg/l	/	/	1.5	0.07
Cyanide	mg/l	0.5	/	2	ND
Fluorine and its compounds	mg/l	36	/	/	/
Lead	mg/l	1	/	0.41	ND
Mercury	mg/l	0.004	/	0.0023	ND
Molybdenum	mg/l	2	/	/	/
Selenium	mg/l	0.46	/	0.1	ND
Silver	mg/l	5	/	1.2	ND
Zinc	mg/l	2.2	/	3.5	0.03
Suspended solids (SS)	mg/l	/	/	/	/

\* Monitoring for pH and flow is only required for Albuquerque Factory. The City of Albuquerque monitors the effluent discharge on a regular basis.



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