

Extract from the Annual Report 2017

Non-financial report

Non-financial report issued by Siltronic AG, Munich

(Implementation of the requirements contained in sections 315b, 315c in conjunction with sections 289c to 289e of the German Commercial Code)

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Foreword

GRI 102-14

In order to achieve economic success, companies need to be trusted by society. We take our corporate responsibility seriously. We combine corporate success with responsible action – in our production processes, in our use of resources and in all our interactions with employees.

We are one of the global market leaders in the field of hyperpure silicon wafers and supply all leading consumers of these wafers within the semiconductor industry. Silicon wafers are key components in the vast majority of electronic parts that make our lives easier, safer, and ecologically friendlier. Our technologies form the basis for manufacturing smaller and more energy-efficient components in the modern world of electronics. That way, we contribute towards preserving precious resources and reducing carbon dioxide emissions worldwide. We continually and consistently improve our production processes with the aim of reducing energy consumption and increasing the percentage of supplies that can be reused. In order to make deliveries to our customers as environmentally friendly as possible, we combine deliveries and utilize multiple-use packaging solutions.

Our employees represent our greatest asset and the cornerstone of our success. We treat one another with respect, honesty, and openness and see the differences between people as a source of enrichment. Our goal is to achieve even greater diversity within our organization, focusing in particular on mentoring more women and employees with varying cultural experiences to take up positions in middle and upper management. We support the reconciliation of work and family life with a variety of measures. Occupational health and safety are deeply embedded in our business processes.

Siltronic implements the ten principles of the United Nations 'Global Compact' initiative for the protection of human rights, social and environmental standards, and the fight against corruption. We respect internationally proclaimed human rights and promote their observance within our sphere of influence.

Siltronic employees worldwide take on the daily challenge of making our processes better, safer, simpler, environmentally friendlier, and therefore more sustainable. Together, we want to live up to our responsibility to reconcile the impact of our business activities with the expectations and needs of society.



Dr. Christoph von Plotho
CEO

1. The framework for this sustainability report and non-financial report

We see sustainability as the positive impact of our current activities on future conditions in the ecological, economic, and social spheres, mitigating inequalities and promoting an open future. Consequently, the underlying reason for this non-financial report or sustainability report is the question of how Siltronic contributes towards the improvement or deterioration of ecological, economic, and social aspects at local, regional, and global levels.

Apart from the external impact achieved, we believe that sustainable activity is also beneficial for Siltronic as a company. For instance, we are safeguarding our profitability by deploying raw materials more efficiently and optimizing energy consumption. Profitability is an important factor in our ability to provide employees with above-average social benefits and offer them a wide range of advanced training measures. A dedicated, well-trained workforce is, for example, more capable of breaking new ground in the field of research and development, which, in turn, has a beneficial impact on our profitability in the medium and long term. Thus, a cycle is created that is not only positive for stakeholders and the environment, but for Siltronic as a company, too.

With this sustainability report or non-financial report we supplement the economic aspects outlined in the consolidated financial statements and the combined management report by including ecological and social aspects and explaining how we propose to reconcile these with one another.

This sustainability report is the first to be independently prepared by Siltronic AG and the Siltronic Group, based in Munich. Up to March 15, 2017, Wacker Chemie AG held both directly and indirectly the majority of Siltronic shares. For this reason, in previous years, information relating to sustainability at Siltronic was contained in the sustainability reports published by Wacker Chemie AG, which were drawn up for the entire Wacker Group. On March 15, 2017 Wacker Chemie AG reduced its share in Siltronic AG to 31 percent and Siltronic ceased to be a subsidiary of the Wacker Group from that point in time. The reduction of this shareholding does not have a major impact on Siltronic, as the Siltronic Group was already an independent group. **GRI 102-1, -3, -5, -10, -48, -49, -51**

This report is the summarized, separate non-financial report for the financial year 2017 and applies to both the Siltronic Group and Siltronic AG. Information that applies only to the AG, are indicated in the text. The non-financial report has been issued and was made available to the public on <https://www.siltronic.com/en/our-company/sustainability.html>.

The non-financial information contained in this sustainability report was prepared based on the Sustainability Reporting Standards of the Global Reporting Initiative (GRI). Moreover, this report provides information regarding sustainability to the degree relevant for reporting the 'Communication on Progress' of the United Nations Global Compact. The period under report corresponds to that of the consolidated financial statements and all Group entities were included. In future we intend to prepare the sustainability report on an annual basis. **GRI 102-50, -52**

This non-financial report is audited by the Supervisory Board of Siltronic AG. On behalf of the Supervisory Board, the non-financial report was audited by KPMG AG Wirtschaftsprüfungsgesellschaft using the ISAE 3000 to obtain a limited assurance regarding the information required in accordance with Sections 315b, 315c in conjunction with 289c to 289e of the German Commercial Code. **GRI 102-56**

2. The Siltronic business model and our ethical principles

Section 289c para. 1 of the German Commercial Code

The Siltronic business model

Siltronic is a globally operating market and technology leader specialized in manufacturing hyperpure silicon wafers. Since wafers form the basis for semiconductors all our customers are manufacturers of semiconductors. [GRI 102-2](#)

Wafers are produced by melting hyperpure silicon and extracting a crystal from the melt by means of a pulling process. The crystal is sawn into individual slices, polished, and subjected to a final inspection prior to packaging. We deploy many special-purpose machines in the course of manufacturing and a considerable part of the process takes place in cleanrooms. Production costs are attributable (in decreasing order) to personnel, auxiliaries and operating materials, depreciation, raw materials and energy. [GRI 102-9](#)

The production equipment largely consists of machines for pulling crystals, furnaces, measurement equipment, cleaning systems, and machines for the mechanical and chemical treatment of the wafer surfaces. Most of the wafer manufacturing process takes place in cleanrooms. From our four production sites we dispatch our wafers directly to our customers' chip factories, which are located (in alphabetical order) in (mainland) China and Taiwan, Israel, Japan, Korea, Malaysia, Singapore, the USA, and Western Europe. Apart from our production sites, which all have their own administration and sales departments, we operate five small sales or administration units in five countries. [GRI 102-4, -6, -9](#)

We produced some 28 million wafers in 2017 (2016: approx. 26 million).

Additional information on our business model is available in the management report.

Corporate ethics at Siltronic

In order to achieve economic success, companies need the trust of society. In our efforts to ensure that Siltronic's business is conducted responsibly and compliant to all statutory regulations, we have developed various guidelines, including: [GRI 102-16](#)

- Code of Conduct: We have drawn up a Code of Conduct for our Group that sets out binding rules for responsible and law-abiding conduct, which all Siltronic employees are required to observe. The Code of Conduct deals in particular with the

topics behavior towards one another, leadership as an example, dealings with business partners, handling information, separation of private and corporate interests, quality, safety, health and environment, and social responsibility. [GRI 102-17](#)

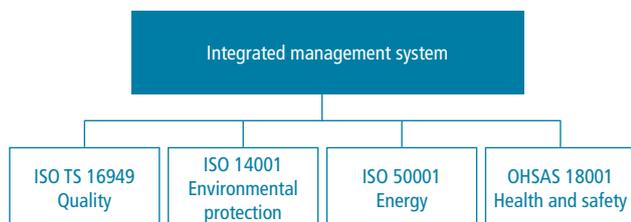
- Voluntary commitments: Siltronic implements the ten principles of the United Nations Global Compact initiative for the protection of human rights, social and environmental standards, and the fight against corruption. Siltronic adheres to the principles of the chemical industry's Responsible Care® initiative. In 2017, Siltronic became signatory to the 'Diversity Charter'. As a signatory, Siltronic undertakes to actively implement and promote equal opportunity and diversity. As a supplier to the electronics industry, Siltronic observes the Code of Conduct set out by the Responsible Business Alliance (RBA, formerly known as the Electronic Industry Citizenship Coalition or EICC), which leading companies in the electronics industry use to promote social and ecological responsibility as well as ethical business practices worldwide. [GRI 102-12, -13](#)
- Strategy handbook: This handbook sets out Siltronic's highest aims and defines our mission statement. Our mission statement consists of aspiring to create added value for our stakeholders. We want to achieve this aim by offering wafers of outstanding quality at competitive cost.

The impact of ethical principles on the organization of Siltronic

The above guidelines have an impact on the organizational structure of Siltronic, whereby the most important organizational measures for ensuring the ethical principles are (a) management systems, (b) the existence of a separate department for environmental protection, occupational health and safety, and plant process safety, and (c) reporting channels to the Executive Board and Supervisory Board.

We control operational processes via our Integrated Management System (IMS). The IMS outlines processes and responsibilities and defines group-wide standards, including those relating to quality, energy, occupational health and safety, environmental protection, and plant process safety. The standards are based on national and international standards, laws, customer requirements, and our own principles. Selected management systems are certified by a globally operating service provider. The certifications include ISO 14001 for environmental protection, OHSAS 18001 for occupational health and safety, ISO 50001 for energy management at our sites in Germany, and ISO TS 16949 for quality systems.

Group management system



In order to identify and manage the variety of possible risks entailed in conducting business, the Executive Board has implemented a risk management system, which is described in detail in the consolidated management report in the chapter 'Risk and opportunity report'. In addition, we have installed a compliance system aimed at avoiding, identifying, and sanctioning company-related statutory violations, for which the Siltronic compliance organization is responsible. Siltronic has appointed compliance officers in all of its active entities (Germany, USA, Japan, Singapore, Taiwan). As a protected reporting channel, we have also appointed an external ombudsman to whom our employees and third parties can anonymously report any violations of statutory regulations. The Chief Compliance Officer reports directly to the CEO of Siltronic AG. [GRI 102-17](#)

As a company working with complex chemical and mechanical processes, we have a high degree of responsibility for the operation of our equipment as well as for the protection of people and the environment. For this reason, we have appointed employees at production sites who are specially trained in the fields of environmental protection, occupational health and safety, and plant safety. These employees are grouped together in the department Quality Management and Sustainability reports directly to the CEO. The allocation of responsibilities among the members of the Executive Board is presented in the management report. [GRI 102-11](#)

For information on the composition of the Supervisory Board and its cooperation with the Executive Board, please refer to the explanations in the Corporate Governance Report and the Report of the Supervisory Board. Information on the remuneration of the Executive Board and the Supervisory Board is available in the Remuneration Report.

Non-financial performance indicators within our organization

The management of the Siltronic organization is based on financial performance indicators. The most important of these are recorded monthly on a local and Group basis and entered in reporting systems, where they are compared with previously determined targets. The most important financial performance indicators in 2017 have been EBITDA margin, ROCE and free cash flow. These most important financial performance indicators are explained in the outlook of the management report.

Apart from the financial performance indicators, our organization uses non-financial performance indicators. However, none of these indicators are used to manage the Company.

Similar to the financial performance indicators, non-financial performance indicators also have a hierarchy according to their significance. From the wide range of non-financial performance indicators that can be assigned to sustainability, the Executive Board has selected five performance indicators via which it is informed in the course of routine reporting. Each of these indicators has a target for the fiscal year. The five non-financial indicators relating to the field of sustainability are as follows: [Section 289c para. 3 number 5 of the German Commercial Code](#)

- The efficient use of silicon (raw materials management)
- The efficient use of energy (energy management)
- The avoidance of waste (waste management)
- The number of work accidents
- Accidents involving chemicals

Similar to the financial performance indicators, the causes of negative variants in non-financial performance indicators are analyzed and discussed and improvement measures are introduced.

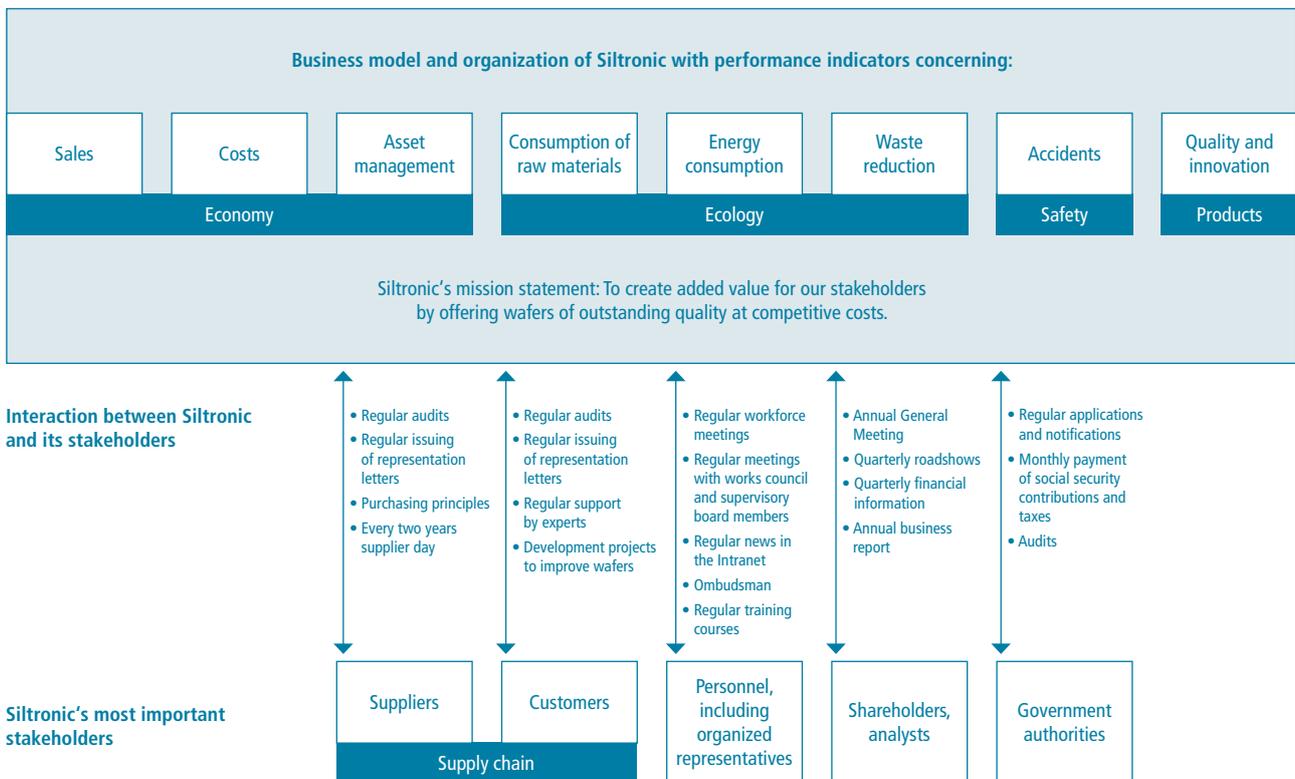
3. Determining the contents of this report

Siltronic's most important stakeholders

Due to its extensive activities, Siltronic impacts outside individuals, companies, and public authorities in a variety of ways. The defining of stakeholder groups that have been assessed as the most important ones is based on the number of interactions with a particular stakeholder group and the involvement of managers. [GRI 102-42](#)

The following diagram shows the most important interactions and their frequency of exchange. [GRI 102-40, -43](#)

The content selected for the Sustainability Report was determined by taking the above-mentioned most important stakeholders of Siltronic into account.



Determining the contents of the report

In order to identify the topics important for this report, we identified various sustainability aspects as a first step, prioritized them according to materiality in a second step, and assigned them to interdisciplinary areas in a third step. Prioritization was based on the ten principles of the United Nations Global Compact project

as well as on industry-specific and company-related aspects. In a fourth step, we subjected the result to a validation process, which was carried out in consultation with internal experts and by comparing it with the corporate strategy. The result was the following list: [GRI 102-46, -47](#)

	Environmental aspects	Supply chain	Personnel aspects	Society
Reduction of specific silicon consumption	x			
Reduction of the specific consumption of auxiliary materials	x	x		
Reduction of specific energy consumption	x			
Occupational health and safety			x	
Compliance	x	x	x	x
Diversity			x	x
Greenhouse gas emissions	x	x		
Advanced training, demographics			x	x
Recycling	x	x		
Environmental impact of transportation	x	x		
Environmental protection measures	x			
Water consumption	x			

4. Environmental aspects

Section 289c para. 1 of the German Commercial Code, UNGC

Management of raw materials and supplies

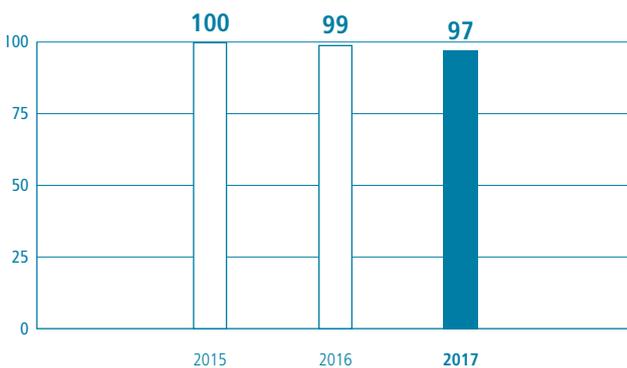
As wafers consist almost entirely of hyperpure silicon, silicon is by far the most important raw material for Siltronic. After oxygen, silicon is the second-most frequently found element in the Earth's crust and non-toxic. For this reason we regard silicon wafers as an unrivalled raw material for manufacturing semiconductors and the raw material of choice for our products in the long term.

We endeavor to use silicon as efficiently as possible, thereby contributing towards reducing environmental pollution and helping us remain competitive. The performance indicator 'efficient use of silicon' triggers in particular that silicon residues are recycled in our production cycle, that manufacturing processes are further developed with the aim of increasing yield, and that investments are made in new machinery. We set a target value for this performance indicator on an annual basis. The will to achieve our targets leads to the development of new ideas, which are subject to testing. If their use in production scenarios looks promising, investments are made to implement them. Unfortunately, the increasing physical and chemical specifications required by our customers on many wafer types has a negative impact on the yield.

The following table illustrates how the efficient use of silicon has developed, whereby 2015 was selected as the basis for comparison:

Development of the efficient use of silicon

in %



The specific target for 2017 was an improvement of 4 percent percent on the previous year. This target was not met, the main reason being that the product mix required by customers shifted from the previous year to wafer types that require an above-average amount of silicon to manufacture.

Apart from the raw material silicon, chemicals, gases, and polishing agents used in the form of auxiliary materials play a role in our production process. As the various auxiliary materials are of less importance to us than silicon, no performance indicators were reported to the Executive Board. We work continuously to change our production processes with the aim of reducing the specific amounts of auxiliary materials required. Specific reductions are usually achieved by avoidance (e.g. by using less chromium) or by recycling (e.g. by reducing the use of polishing agents and cleaning baths). Progress is usually measured using quantitative factors and compared with targets after one or two years.

Management of energy (consumption of energy within Siltronic)

A substantial part of the process of transforming the purchased silicon into wafers is performed at high temperatures and in air-conditioned cleanrooms. The large amount of energy required to drive this process makes wafer production an energy-intensive industry.

In 2017, energy consumption totaled 721 GWh. Consumption includes production, research and development, and administration. Sales offices are not included in the total, as their overall energy consumption is insignificant. Electricity is by far the most important source of energy.

Energy consumption

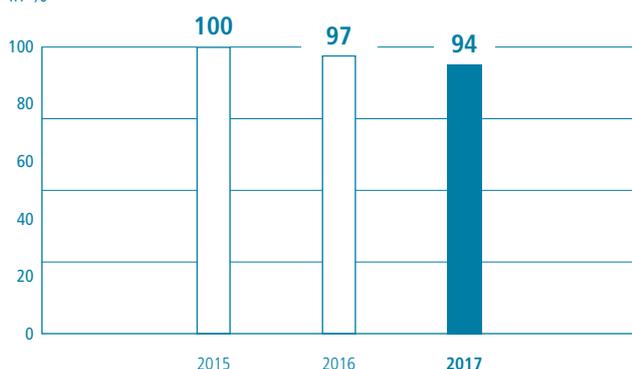
in GWh	2015	2016	2017
Electricity consumption	574	586	601
Use of primary energy			
Natural gas	72	75	75
Steam, heat	40	42	39
Fuel oil	10	7	6
	122	124	120
Total	696	710	721

The electricity Siltronic requires is purchased. About 55 percent of the electricity is consumed in Germany. According to the Federal Association of the Energy and Water Industry (BDEW), more than 36 percent of the electricity consumed in Germany stems from renewable sources, which mainly includes wind, biomass and solar.

Energy consumption per square centimeter of wafer manufactured describes the energy intensity of our products (the forms listed in the table 'Energy consumption' are used to calculate energy consumption). The following table illustrates how energy intensity has developed since 2015.

Energy consumption per sq cm wafer surface

in %



In order to reduce energy intensity, projects are being initiated to lower specific electricity consumption. Sustainable changes are achieved in particular by reducing the temperatures of selected cooling water and using less energy-intensive lasers.

The 'efficient use of energy' performance indicator is reported to the Executive Board on a regular basis and ambitious targets are determined annually.

Siltronic pursues the strategic target of reducing its specific energy consumption by an average of 1.5 percent per year. On this basis and using planned production volume, we calculate absolute savings targets in MWh for the sites and absolute targets for the production areas.

Numerous energy efficiency measures have contributed to meeting the 2017 target, resulting in a total sustainable reduction in electricity consumption of 8.9 GWh per annum and an equivalent value of EUR 0.6 million. The annual target of 1.5 percent was surpassed.

Management of waste

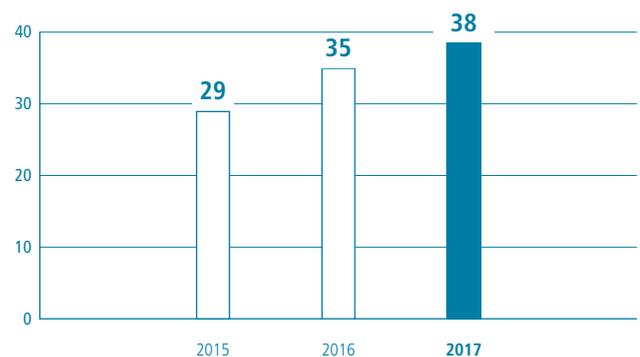
In order to reduce packaging waste, we have taken an initiative with our customers and introduced two recyclable types of reusable packaging, namely the 'Hybox' and the 'FOSB'. As multiples of FOSBs can be stacked in a Hybox, an FOSB forms the inner reusable packaging and the Hybox the outer reusable packaging solution. Since both types of reusable packaging impact customers' production processes, customers first need to agree to the use of the Hybox and the FOSB.

Over the years, we have nearly always been able to convince customers of the benefits of this form of packaging wherever the use of the Hybox was technically feasible. Through this reuse concept we reduce the transport of packaging by around 438 tons and the waste by about 876 tons in comparison to carton packaging.

Our main focus in reusable packaging is the use of the FOSB. The percentage of multiple use of the FOSB for packaging purposes between the customer and us is one of the five non-financial performance indicators that are regularly reported to the Executive Board.

Share of wafer area in returnable packaging

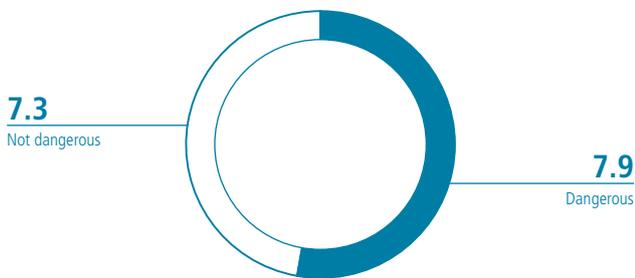
in %



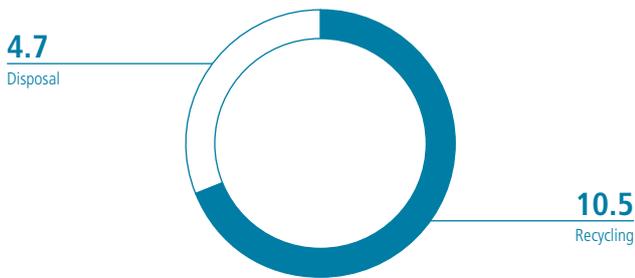
The target for 2017 was to achieve a percentage of 35 percent. This target was achieved.

With regard to waste, the disposal of hazardous material is also a significant factor. The composition of waste and its disposal channels during the year under report were as follows:

Composition of the waste GRI 306-2
in 1,000 t



Disposal routes of waste GRI 306-2
in 1,000 t



Disposal routes as well as the classification of waste into the categories 'dangerous' and 'not dangerous' are based on local legal or quasi-legal regulations.

39 percent of the waste is caused by Siltronic AG.

We are not affected by particularly critical aspects of materials and work practices in the supply chain. So-called 'conflict materials', such as metals originating from critical regions in Africa or Asia, are not involved in our manufacturing process.

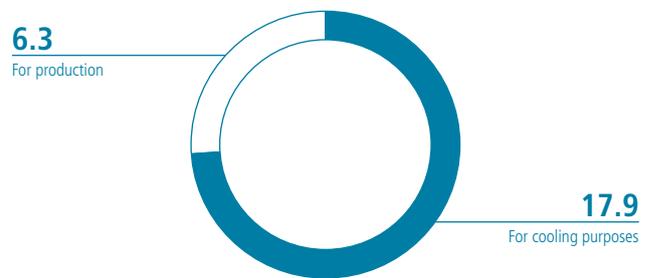
Management of water

Water is primarily used in our manufacturing process for cleaning and cooling purposes. We endeavor to protect natural water resources and use them as sparingly as possible. Furthermore, the World Business Council for Sustainable Development defines Singapore as a water shortage area and for that reason we operate our own water treatment plant in Singapore.

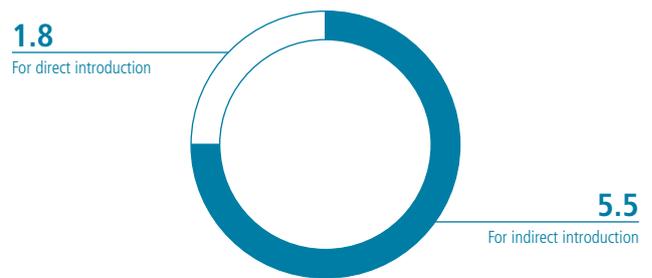
Due to the increased risk of flooding in Freiberg, in 2017 Siltronic AG completed the construction of a new water reservoir at the site, effectively reducing the amount of rainwater flowing into the nearby stream by almost half and making an important contribution to flood protection. The system is monitored via sensors connected to computers in Siltronic's control center in Freiberg.

The following graphs show the use of waste and wastewater in 2017.

Use of water
in million m³



Use of wastewater (without cooling water)
in million m³



About 86 percent of the use of water falls to Germany and about 59 percent is wastewater (without cooling water).

Environmental protection measures

We take preventive measures to protect the environment, mainly by ensuring that our systems are safe.

Siltronic invested approximately EUR 3.6 million in environmental management, including prevention.

Emission of greenhouse gases

The groupwide carbon footprint is an essential instrument for improving climate protection. In addition to direct greenhouse gas emissions (in accordance with the Greenhouse Gas Protocol 'Scope 1') and indirect emissions from the purchase of energy ('Scope 2'), we also calculate emissions generated along the value chain ('Scope 3', which relates in particular to polysilicon, auxiliary materials, water, and waste). The carbon footprint is calculated within the framework of the sustainability assessments of the Carbon Disclosure Project (CDP).

The emissions attributable to Scope 3 will be calculated for the first time in 2017. We plan to report emissions according to Scope 3 in the CDP.

Name of emissions

Description of emissions in accordance with the Carbon Disclosure Project (CDP), causes and main sources			Tonnes of CO ₂ equivalents
Scope 1	Direct emission	Natural gas, fuel, climate-impacting gases	11,891
Scope 2	Indirect emission	Electricity, steam	277,331

The collection methodology is in accordance with the guidelines of the GHG Protocol for the chemical industry. The calculation includes all Group entities.

The climate-impacting gases comprise only a marginal part of Scope 1 emissions. Nevertheless, we are continuously working on more effective use and on the substitution with gases that have a lower greenhouse effect. We also motivate our employees to leave their cars at home. At our Burghausen site we have provided commuter buses for shift workers for over ten years. At our site in Portland, Oregon, USA, we provide our employees with subsidies for public transport tickets and in Singapore, Siltronic offers shuttle buses from the company to various parts of the city.

Our activities to minimize Scope 2 emissions mainly focus on utilizing energy with increasing efficiency.

As a result of our measures to increase the efficiency of energy use, the CO₂ emissions of the wafer area produced per Scope 2 have declined by a medium single-digit percentage over the previous year.

NO_x amounted to 90 tons in 2017 and NMVOC to 53 tons. Ozone is used negligibly in production. SO_x, POP, HAP and PM are irrelevant in terms of quantity.

Influence of climate change

The demand for wafers is mainly driven by demand in the fields of mobile communication, computers and servers, data storage on local devices and in the cloud, automotive electronic components, and industry in general. We do not view our business model as being negatively impacted by climate change. On the contrary: without semiconductor components and therefore wafers, electric mobility would not be possible, the feeding in of electricity generated by solar installations and wind farms unthinkable, and a great many smart ways of reducing power consumption unfeasible. Moreover, storing data on semiconductor components consumes less electricity than other forms of electronic data storage. [GRI 201-2](#)

5. Personnel aspects

Section 289c para. 2 number 2 of the German Commercial Code, UNGC

Headcount and personnel planning strategy

On December 31, 2017, the Siltronic Group employed 3,730 people, 62 percent of whom were employed by Siltronic AG, 27 percent in Asia, and 11 percent in the USA.

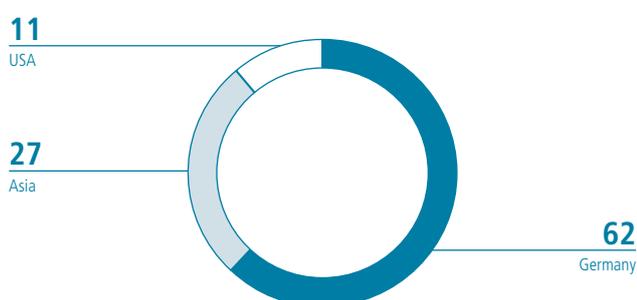
Headcount as at December 31, 2017 [GRI 102-8](#)

	Men	Women	Total	Employees in the Group
Germany	1,833	465	2,298	62%
Of which on permanent contracts	1,830	462	2,292	
Of which on temporary contracts	3	3	6	
Singapore and other Asian countries	730	299	1,029	27%
Of which on permanent contracts	730	297	1,027	
Of which on temporary contracts	0	2	2	
USA	294	109	403	11%
Of which on permanent contracts	294	109	403	
Of which on temporary contracts	0	0	0	
Employees in the Group	2,857	873	3,730	100%

Of the 3,730 employees employed at the end of 2017, 3,281 worked full-time and 449 part-time. Of the part-time workers, 52 percent were women and 100% part-time workers were in permanent employment. [GRI 102-8](#)

Breakdown of employees by region (excluding temporary employees)

in %



As demand in the semiconductor industry has historically shown considerable ups and downs and we are required to cope with these changes, we pursue a flexible strategy in our personnel planning. The strategy includes covering a certain percentage of our personnel requirements in the field of production with temporary staff, which also protects the core workforce. If a perceptible upturn in demand leads to production peaks, we deploy temporary staff. Conversely, if personnel cost cuts become necessary due a market downturn, we initially reduce the number of temporary workers. If that measure proves insufficient, as a second stage we stop renewing fixed-term contracts. In a third step, we consider introducing reduced working hours for staff in areas particularly impacted by a downturn.

In order to react promptly to any significant changes in demand, the personnel requirements resulting from incoming orders are continuously compared with current and future staff levels. Any measures planned to substantially increase or reduce the number of employees are discussed by employer and employee representatives in a structured process.

On December 31, 2017, Siltronic employed a total of 709 temporary workers (524 men and 185 women). The last time Siltronic needed to reduce working hours was in 2012. [GRI 102-8](#)

Relationship with employee representatives and employees' rights

The Siltronic Group cooperates with employee representatives in a spirit of goodwill, and regular meetings between employer and employee representatives are convened.

Our workforce has always been highly unionized, particularly in Germany. Since employees are not required to report union membership and as it is inadmissible for employers to ask, we do not know how many of our employees are union members. Some 60 percent of employees work in units covered by collective agreements. **GRI 102-41**

If an employer's collective bargaining agreement is in place, Siltronic is obliged by the employment contract to treat employees as if the respective collective bargaining agreement were applicable – regardless of their membership in a trade union.

At sites that do not have an established representation, there are employees who act as contacts for employee issues.

In addition to remuneration and working time, essential employee rights include the right to parental leave or maternity leave. Of course, Siltronic employees also make use of this right and at December 31, 2017, 14 women and 3 men were on either maternity or parental leave.

Siltronic regularly informs the workforce about current developments that could have an impact on the business performance. Employees are comprehensively informed of any significant operational changes in a timely manner. Siltronic hereby complies with the respective national and international information requirements.

Diversity and equal opportunity

Siltronic operates in Europe, North America, and Asia and therefore in a culturally diverse environment. Siltronic AG, the largest of the Group's companies, employed people of about 30 different nationalities during the year under report.

One focus of our efforts is to leverage the diversity that exists in modern society and, with this point in mind, Siltronic AG has appointed a Diversity Officer. Among other advantages, the diversity of the workforce with its variety of skills and talents provides a range of opportunities for developing innovative and creative solutions. Among other factors, diversity includes gender, nationality, ethnic origin, religion, and disability (the management report provides information on employees with disabilities).

We reject discrimination or degradation on the basis of gender, race or ethnic origin, religion or belief, disability, sexual orientation, or age. These principles apply throughout the Group and are set out in writing as part of our corporate culture. Employees can report potential discrimination to their managers, to compliance officers, the works council, the personnel department, or an ombudsman. The complaint will be reviewed and the complainant duly informed of the outcome.

All employees working at Siltronic sites in Germany are required to familiarize themselves with the General Act on Equal Treatment (AGG) by participating in an e-learning course. The advanced training course is obligatory for employees at all levels of Siltronic's hierarchy.

Our long-term goal is to raise the level of diversity within our workforce, also by increasing the percentage of women in management positions. At the end of 2017, two out of 17 positions one level below the Executive Board and two out of 37 positions on the second level below are represented by women. The Corporate Governance Report provides more information on this subject.

The following table shows the percentage of men and women at management level at German sites:

Headcount as at December 31, 2017

	Men	Women	Total
Employees in the Group	50	4	54
<i>In percent</i>	93%	7%	100%
Of which first level below Executive Board	15	2	17
<i>In percent</i>	88%	12%	100%
Of which second level below Executive Board	35	2	37
<i>In percent</i>	95%	5%	100%

Advanced training and demographic trends in Germany

Competent employees keep the company both innovative and competitive. We encourage our employees in Germany in particular to keep learning throughout their lives and retain a flexible attitude towards change, as we believe that we all need to be prepared for longer working lives in Germany in order to cope with the demographic change. To enable employees to make the most of their potential, Siltronic offers a wide range of opportunities for further development. The training measures relate to personality, management, and social competence as well as technical expertise.

Employees and their managers discuss development measures at least once a year in a performance review, regardless of hierarchic level, gender, or location.

At the end of 2017, the average age of the typical employee was 45 years. The following table shows the age structure of Siltronic employees worldwide.

Age structure as at December 31, 2017

	Male	Female	Total
Under 30 years of age	14%	16%	15%
30 to 50 years of age	47%	51%	48%
Over 50 years of age	39%	33%	37%
Total	100%	100%	100%

In 2017 15,100 e-learning courses were provided and around 2,400 employees attended seminars, further education or similar events.

Remuneration and equal pay

In order to attract new employees and retain existing ones, both of which we require in order to ensure a successful future, we need to offer competitive levels of remuneration. In addition to their basic salary with vacation and Christmas bonuses, employees in Germany receive variable remuneration if the company achieves certain defined financial targets. This voluntary payment benefits both employees paid according to standard tariffs and those who are not. There are also variable remuneration components for those employed by foreign subsidiaries.

We regard it as important to treat temporary workers fairly. We pay at least the wage in accordance with the collective agreement on industry surcharges for temporary employment in the chemical industry (TV BZ Chemie). In addition, there are workplace, shift, and other voluntary allowances, which can vary according to business and location. In addition, Siltronic meets the requirements for an equivalent wage in accordance with the German Temporary Employment Act (AÜG).

In addition to salary, remuneration includes various other benefits that extend beyond the statutory minimum requirements, regardless of whether an employee works full-time or part-time. In Germany, the most important company benefits include in particular the company pension scheme, partial retirement programs, bus subsidies, anniversary bonuses, canteen subsidies, and preventative health care programs. Company pension plans and health insurance are provided in the USA.

The staff turnover rate can be seen as a sign of how well we manage to retain employees and attract new members of staff. During the year under report, Siltronic recruited 452 employees, 108 within Germany and 344 at foreign subsidiaries. At the balance sheet date, recruitment accounted for 12 percent of the workforce. In 2017, 10 percent of the workforce or 362 employees left the company. In 77 cases, the departure was in Germany and in 285 cases abroad. The fluctuation was low in both Germany and the US and on a typically higher level in Asia.

Just like Siltronic AG's employees at sites in Germany, temporary workers employed at those locations also receive performance-related remuneration for 2017.

The notes to the consolidated financial statements contain information on personnel expenses and pensions.

Occupational health and safety

Responsibility towards the entire workforce in the field of occupational health and safety plays a major role at Siltronic and is primarily reflected in extensive preventative measures. Secondly, the Executive Board receives regular reports on the development of accident figures, which are a non-financial indicator, as well as on any relevant occupational accidents and their related corrective measures. Special attention is given to injuries involving chemicals. The target figure for injuries involving chemicals is 0.

With our safety program, we work continuously to improve safety standards within the working environment. Key measures include the appointment of safety officers, safety inspection tours, training courses, talks with operating staff, and emergency drills, all aimed at identifying and avoiding unsafe activities – whether when operating equipment, handling chemicals, in the workplace, in the office, or on the way to work. The occupational health and safety standard OHSAS 18001 has been defined as a group-wide standard. However, despite these measures, accidents still occur.

The following table shows the development of accident figures, which the Executive Board has defined as an indicator, and on which it receives regular reports.

Number of work accidents per 1 million working hours

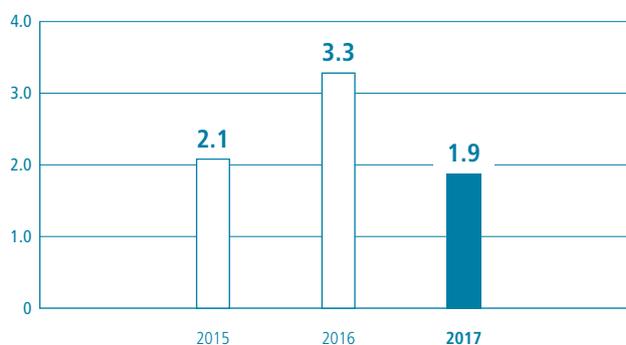
	2015	2016	2017
Work accidents ¹⁾	2.1	3.3	1.9
Injuries involving chemicals	1	2	1

¹⁾ Accidents are entered in the statistics if the employee involved is unfit to work for at least one day. The statistics include work accidents involving temporary staff.

The targets for 2017 were 1.8 for occupational accidents and 0 for injuries due to chemicals. The number of occupational accidents exceeded the self-imposed target to a negligible extent, and for injuries with chemicals the target was not reached because of one incident. There have been no fatal or serious accidents at work in recent years.

Accidents at work¹⁾

Number of accidents per million working hours



¹⁾ Loss of one or more working days

The number of accidents has decreased compared to 2016 but is still not satisfactory. As the accidents are essentially behavior-related, we have launched initiatives that specifically address this cause. These include workshops especially designed for raising awareness among new staff members as, according to our internal statistics, they are exposed to a higher risk of accidents during their first few months of employment. We also run awareness-raising campaigns on the subject of stumbling, slipping, and falling. Moreover, we have introduced a program for reporting safety-critical situations in which reports are recorded using the company's tried-and-tested suggestion system, according to which, the number of reports on potential stumbling risks and hazards involving in-house transportation as well as in production areas has increased significantly.

6. Supply chain

Supplier relationships

In 2017, our purchasing volume totaled almost EUR 571 million. We cooperate with more than 3,450 suppliers worldwide, nearly 250 of whom constitute some 90 percent of our purchasing volume. The volume purchased in Europe accounts for around 70 percent, from Asia roughly a quarter is sourced and North America accounts for 6 percent. The most important of these is the former parent company Wacker Chemie AG, which not only supplies us with the raw material polysilicon, but also provides a variety of on-site services at our plant in Burghausen under the terms of a service agreement. Furthermore, suppliers of electricity and equipment is particularly important. [GRI 102-9](#)

We strive to ensure that our suppliers act responsibly with regard to working conditions, ethical standards, safety standards, and the management of local resources. One of the key measures we have enacted is to ensure that our suppliers commit, within the framework of our general procurement conditions, to comply with the principles of the UN Global Compact and the Responsible Care® initiative. However, should we detect any violations of these regulations within the framework of our cooperation, we discuss these observations with the relevant suppliers and demand improvements.

In the course of 2017, we began taking over some of the services previously provided to Siltronic by our former parent company Wacker Chemie AG within Germany and plan to continue reducing the volume of services received from Wacker over the next few years. [GRI 102-10](#)

Sustainability with regard to customers

Technical progress and innovation in the interaction between Siltronic and many of its customers is of great significance, due to the fact that technical progress in the semiconductor industry is advancing quicker than in many other branches of industry. The technical advancement that semiconductor manufacturers are achieving is above all evident in the fact that electronic circuits are becoming more compact. Smaller circuits make semiconductors more efficient and they consume less electricity at the same time. This development can only be maintained if wafers meet more sophisticated physical and chemical specifications. Our customers set the pace of development. In order to satisfy their expectations, we spend around seven percent of our total sales on research and development based on a multi-year average.

As previously mentioned in the section on waste management, we have worked for years to convince our customers to use reusable transport packaging and our efforts were successful.

7. Social responsibility and social aspects

Section 289c para. 2 numbers 3/4/5 of the German Commercial Code

For Siltronic, sustainability also means transparency and openness in the sense of corporate citizenship. This begins with a good relationship to our neighbors and speaking openly about what happens within the plant as well as addressing questions posed by the public worldwide. This is the only way to create the spirit of social trust that companies need in order to be economically successful. With these points in mind, Siltronic assumes social responsibility, particularly in the regions near its various locations. Our concepts in this respect extend beyond the above-mentioned global initiatives RBA (formerly EICC) and the United Nations Global Compact:

Fighting legal violations, particularly corruption and bribery

According to the Corruption Perception Index of Transparency International (CPI), Siltronic operates predominantly in countries with a medium to low risk of corruption.

We resolutely oppose any form of violation of the law. Irrespective of the national probabilities of occurrence, our compliance system described above, in every market in which we operate, is designed to avoid, prevent, identify and sanction compliance violations in form of corruption, fraud, infringements of competition rules, and other manifestations of white-collar crime.

Employees are required to report any violations they observe to their managers, compliance officers, the works council, or the responsible members of staff in the personnel department. Moreover, both employees and third parties can anonymously report violations of legal regulations to an external ombudsman, who has been appointed by Siltronic. The Company investigates every reasonable suspicion, examines the case and defines measures to remedy any weaknesses identified. It also takes any disciplinary measures deemed necessary. The Chief Compliance Officer reports to the Executive Board of Siltronic AG on a monthly and ad-hoc basis. [GRI 102-17](#)

Employees who have contact with business partners are required to complete an e-learning course on compliance. Furthermore, all employees in sales and marketing are required to undergo online training courses on antitrust law. [GRI 102-17](#)

Human rights

Our four production sites are located in highly developed industrialized countries, where there is a low risk of human rights violations compared to less developed nations. However, a certain degree of risk remains. Since we want to actively fight human rights violations within our company as well as in the upstream and downstream supply chain, we have taken measures to identify possible contraventions.

Via our Code of Conduct, we explicitly endorse the ten principles of the United Nations Global Compact initiative. The first two principles of the Global Compact deal with upholding human rights and the exclusion of human rights abuses. Based on the first principle of the Global Compact "support for human rights" and the second principle "exclusion of human rights abuses", Siltronic implements the following measures in particular:

- Siltronic does not purchase materials, goods, or services from suppliers or service providers who do not undertake to uphold human rights. We implement this aim by requiring suppliers and service providers to accept our relevant purchasing principles.
- We train our employees at specific seminars to ensure compliance with internationally proclaimed human rights.
- If we become aware of potentially critical aspects with regard to human rights, we analyze them. Should a situation turn out to be critical in the face of analysis, we take action.
- In our dealings with customers, we commit to uphold human rights and exclude any abuses thereof.

Charitable causes

Employees within Germany participate in the cent donation program organized by the Wacker Relief Fund in which employees consent to having their monthly salary rounded downwards to the next lower amount in euros. These remaining cents are then donated to the Wacker Relief Fund.

Wacker Chemie AG's relief fund supported the people of Nepal following the devastating earthquakes of 2015 and helped them to build and maintain schools in Nepal in 2017 in particular.

Furthermore, in 2017, Siltronic AG donated EUR 100,000 to the Deutsches Museum in Munich, Germany.

Relationships with associations and with politics

We are committed to responsible behavior towards political parties and non-governmental organizations. We represent our political interests in accordance with the standpoints we have publicly expressed. Our approach to politics is based on factual considerations and we are open to dialogue with all democratic parties. Any donations made to political parties require the approval of the Executive Board of Siltronic AG.

We do not hold special positions in any association or organization in which we are a member. Siltronic has not participated in legislative procedures. [GRI 415-1](#)

Dialog at regional levels

At all locations, we maintain regular exchanges with the authorities in the field of environmental protection. For this commitment our manufacturing company in the United States has been awarded the "Gold Compliance Award for No Pretreatment Violations" and the "Gold Sustainability at Work Certification Bureau of Sustainability" from the city of Portland, Oregon.

United Nations Global Compact

Siltronic participates in this project and hereby reports on its progress.

GRI 102-12

Principles	Measures implemented (key examples)
<p>Human rights</p> <p>Principle 1: Support of human rights</p> <p>Principle 2: Exclusion of human rights abuses</p>	<ul style="list-style-type: none"> • Siltronic does not purchase materials, goods, or services from suppliers or service providers who do not undertake to uphold human rights. We implement this aim by requiring suppliers and service providers to accept our relevant purchasing principles. • We train our employees at corresponding meetings to ensure compliance with internationally proclaimed human rights. • In our Code of Conduct, we explicitly commit ourselves to all ten principles of the Global Compact. • In our dealings with customers, we undertake to uphold human rights and exclude any abuses thereof.
<p>Labor standards</p> <p>Principle 3: Uphold freedom of association</p> <p>Principle 4: Eliminate all forms of forced and compulsory labor</p> <p>Principle 5: Abolition of child labor</p> <p>Principle 6: Elimination of discrimination</p>	<ul style="list-style-type: none"> • We have taken steps to ensure that an employee can turn to various authorities for information on violations of labor standards. Apart from their managers, employees can report to compliance officers based at each location, the works council, the personnel department, and an external ombudsman. • We will punish proven misconduct according to its degree of severity. • Some 62 percent of employees work in units where there are independent employee representatives. • In our Code of Conduct, we explicitly commit ourselves to all ten principles of the Global Compact. • In our dealings with customers, we commit ourselves to respecting the freedom of association, to the abolition of all forms of forced labor, the abolition of child labor, and the elimination of discrimination.
<p>Environmental protection</p> <p>Principle 7: Precautionary environmental protection</p> <p>Principle 8: Initiatives for greater environmental responsibility</p> <p>Principle 9: Development and diffusion of environmentally friendly technologies</p>	<ul style="list-style-type: none"> • Worldwide certification of our environmental protection system in accordance with ISO 14001 and the certification of our energy management system in accordance with ISO 50001 at our sites in Germany. • Implementation of certain non-financial performance indicators aimed at reducing the specific use of raw materials, specific energy consumption, and increasing the utilization rate of reusable packaging that can be used to package wafers. • Annual preparation of a sustainability report that is subject to an external audit (non-financial report). • In our Code of Conduct, we explicitly commit ourselves to all ten principles of the Global Compact.
<p>Anti-corruption</p> <p>Principle 10: Measures to fight corruption</p>	<ul style="list-style-type: none"> • Training sessions • In representation letters to our customers, we are committed to taking action against corruption.