

**Environmental Report 2018**

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Sustainability and Durability = Commitment to the Environment

Communication overcomes thresholds and in a modern society is one of the prerequisites for everyday life to function. Information today has to be available quickly across all boundaries.

One way to achieve this is through communication systems. They permit a global exchange of information with the minimum use of resources, save time and conserve the environment.

Communication with products from Siedle has already been successfully taking place since 1885. However, the company's origins date back as far as the year 1750.

The skills acquired during the period as a supplier for watchmaking in the Black Forest were the basis for the successful entry into the development and production of electrical products.

Through the continued development of what were still new technologies at the time, Siedle was among the pioneers of telephony and telegraphy at the end of the 19<sup>th</sup> century.

With the introduction of the post office monopoly from the 1930s, business activities shifted to building and door communication for the private and commercial sectors.

Today the company develops, produces and markets a comprehensive product range in several design lines for door, house and office communication. This range meets all the requirements of sophisticated building communication. Complementing this range are integrated telecommunication devices as well as letterbox, guidance and lighting systems; in fact simply everything required for the purpose of communicating at the threshold while at the same time increasing security and comfort.

Our portfolio comprises the following product groups:

- Intercom units with audio systems
- Intercom units with video systems
- Interfaces for mobile device and IP networks
- Siedle Access IP communication system
- Electronic access controls
- Communication and signage system
- Spares and products for modernization

Within these product groups, there are just under 2,000 items listed in the main catalogue. A large number of customer wishes can be fulfilled on the basis of modular functional elements.

An extensive range of spare parts ensures the value retention of existing systems and guarantees the function of the systems over a lengthy period of time, even after production has been discontinued. Effective support for value retention comes from extensive service coverage.

The modular structure and backwards compatibility of the products mean that post-installation extension or retrofitting of energy-efficient components can be carried out with ease in most cases, and also where existing systems are involved. One main focus of our activity is on assuring a high level of product quality in an ergonomically, user-friendly and timeless design as well as the constant and systematic continued development of the products, systems and services.

Our guiding philosophy lays down the framework for our entrepreneurial activity.

- Uncompromising quality
- Modular systems technology
- Product design with a timeless, functional aesthetic
- Reliability and fairness in dealing with partners and customers
- Responsibility towards employees, the region and the environment

These maxims also contain the ideas on the environment, since products that are durable and reliable – and hence meet customers' requirements for quality and cost-effectiveness – do at the same time conserve resources.

A company's renown and acceptance not only depend on the quality of the products and the associated services, but also on its responsible and fair dealings with business partners, employees, the environment and resources.

From the outset, the company headquarters have been located in Furtwangen, a small industrial and university city in the Schwarzwald-Baar district, approx. 45 km from Freiburg im Breisgau and roughly 25 km from Villingen-Schwenningen. For reasons of space, the company is spread across three inner-city locations.

Plant I accommodates the management board, managerial staff, administration, development and the majority of production. Individual parts are produced for modules and end products by means of non-cutting and cutting production processes. Electronic module production is where all the essential electronic circuits required for our products are assembled, soldered and tested. Final assembly of our products using joint, screw and ultrasonic welding techniques takes place in product-specific departments.

Plant II houses the training department, exhibition stand construction and a department for the final assembly of devices.

The Logistics Centre combines all the logistics functions such as incoming goods, incoming goods inspection, production and distribution logistics as well as the plant service and the customer order centre.

Siedle maintains sales branches in Germany and Europe, which advise our customers in the wholesale and the electrical installation trades and communicate the proper use of our products and systems in training sessions. An extensive customer service network, supported by qualified electrical installation firms enables us to ensure that the function of our products is guaranteed over a long period of time. In addition, there are representatives worldwide in all important markets.

Today approx. 550 employees develop, produce and sell the systems of the company Siedle.

In order to guarantee the high quality of products continues into the future as well, we are permanently developing our environmental and quality management. This is reflected in our Organizational Manual with the underlying documentation in the form of the company structure as well as process descriptions, guidelines and work instructions. This documentation contains all the afore-mentioned aspects in order to ensure uniform management of the business processes. "The company Siedle bears a high level of social responsibility for its employees, its location and its environment. It is a champion of job security, location security and social equality."<sup>1</sup>

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<sup>1</sup> Quotation from the corporate mission statement

The company values together with the strategic targets give rise to the following guidelines for our management system.

The responsibility for quality, environmental protection and occupational safety begins with the management group.

Quality, environmental protection and occupational safety are placed on equal terms with other corporate objectives and demand responsible action from all employees.

The development, production and marketing of high-quality system products that are safe to handle has a long tradition at Siedle and is one that we will also adhere to in the future. Through the quality of our products and services as well as through qualified employees, we ensure satisfied customers. The importance of supreme quality continues to increase under the difficult conditions of global competition. It is part of the non-negotiable core of the Siedle brand and the essential conditions of our success.

High-quality design, durability, the absence of pollutants and recyclability are the main requirements in this field.

This is sustainably supported by the continuing further development of our integrated management systems.

We regularly examine their appropriateness and effectiveness by measures such as audits.

We inform and train our company employees and motivate them to adopt a safe conduct at the workplace that displays a consciousness of quality and the environment.

Through further technical and personal training, we encourage our employees to improve continuously in all areas.

Appropriate technical and organizational measures enable us to conserve resources. We minimize the occurrence of waste (avoidance before reduction before recycling before disposal), environmentally polluting emissions and effluents.

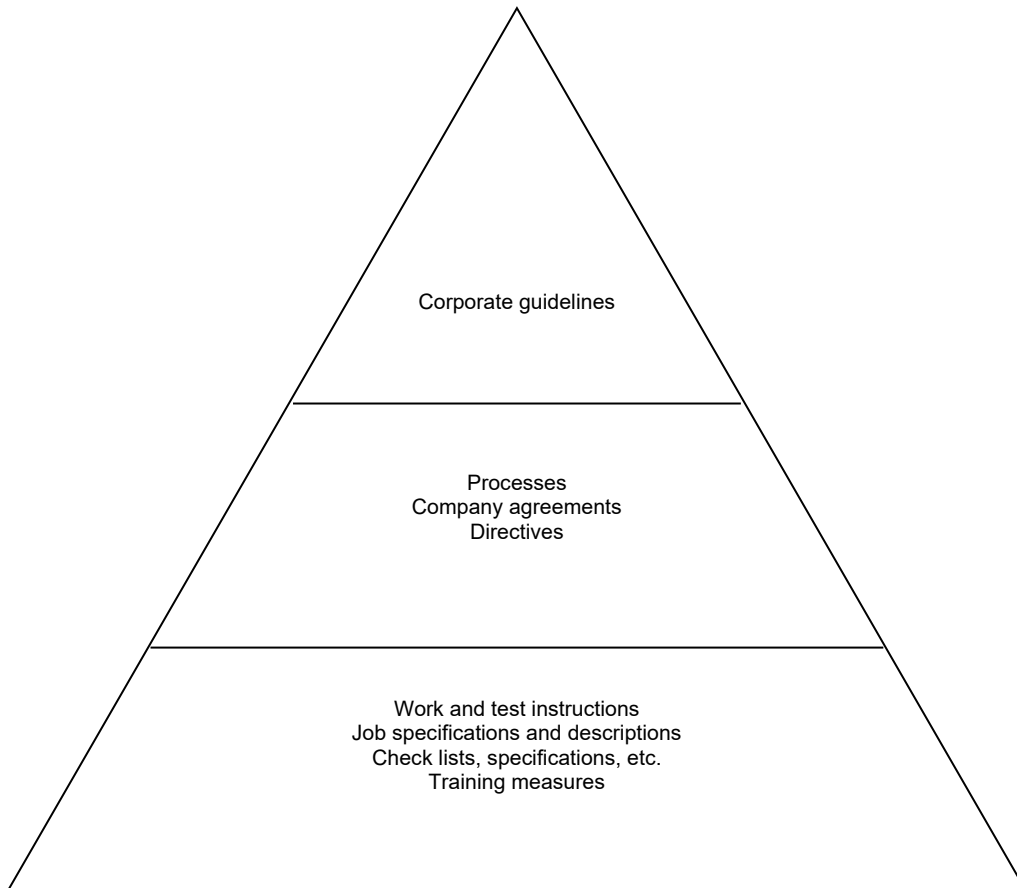
Responsibility for protecting the health of employees lies with the management board and the managerial staff. Occupational safety is a task for all employees. Every employee is obliged to report any hazards detected without delay.

We include our supplies and service providers in our efforts to achieve improved quality and enhanced environmental protection.

We work together with authorities, suppliers and customers in a spirit of trust.

The environmental management system is an integral constituent of our Integrated Management System (IMS).

Schematic representation of the three levels of the IMS:



### **Energy management system**

During the course of 2016, we introduced an energy management system pursuant to DIN EN ISO 50001 and successfully completed the certification in December 2016. The relevant recertification took place in 2019.

### **Efficient energy use**

The durability of our products is a very important criterion. The efficient use of energy (e.g. use of LEDs for the entire life cycle of a product) assumes a key role in product development.

In the heating plant, we very often use modern condenser boiling technology, which has a considerably higher efficiency.

### **Reduction of residual waste**

By continuously pursuing waste separation where it is generated, it has been possible to reduce our quantity of residual waste from more than 65 tonnes (1992) to 20.6 tonnes (2018), i.e. by 69%.

### **Increase in the recycling rate of the quantity for disposal**

Due to strict waste separation of the various materials, it has been possible to increase the recycling rate of our total quantity for disposal from just under 49% (1992) to more than 99% (2018). By additionally taking into account the disposed quantities of ferrous and non-ferrous metal waste, the recycling rate in 2018 was just under 100% (see also output data).

### **Energy saving through thermal insulation measures**

Various building activities in the past paid a great deal of attention to energy-saving thermal insulation measures. Thermally insulating materials have always been used in the redesigning of facades as well. In the Logistics Centre, the generous use of glass surfaces enables a large amount of solar energy and light to be captured, as is the case in the facade of Plant I, which was redesigned in 2013.

### **Electricity from renewable sources**

For a number of years, we have been obtaining CO<sub>2</sub>-free electricity.

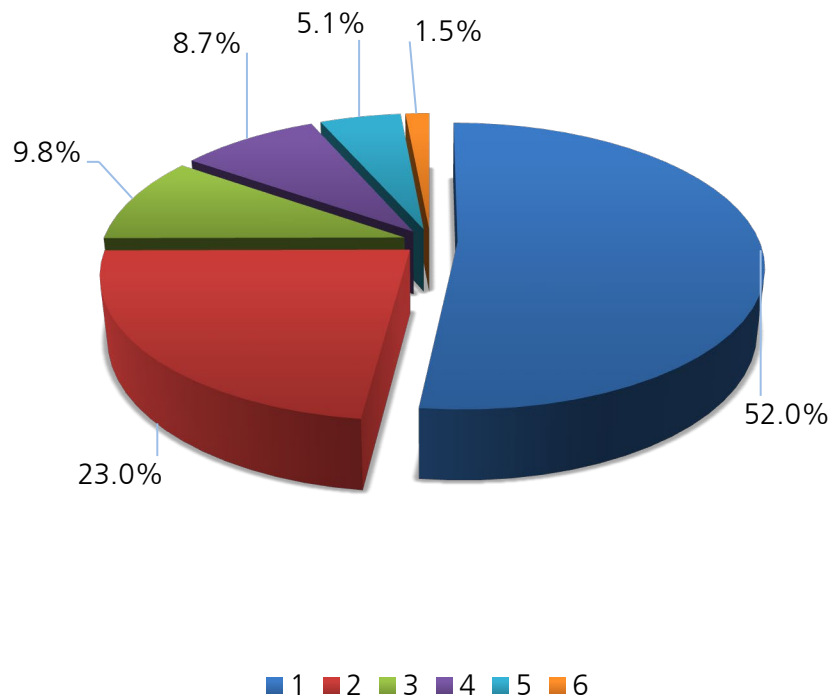
This short list contains only a few of the important environmental activities from our numerous measures over the last few years. It shows that environmental protection has been actively practised for years at Siedle.



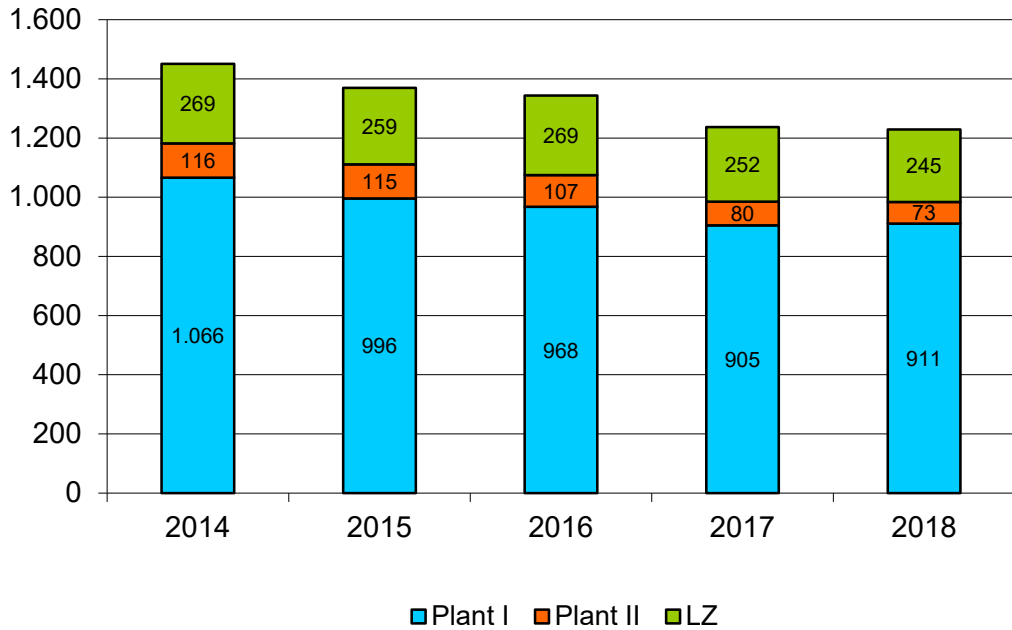
- Purchases of goods
- Energy (electricity, oil, gas)
- Water
- Compressed air
- Fuels

**Purchases (as per December 2018)**

1. Electrical components and modules with accessories	52.0 %
2. Mechanical components and modules	23.0 %
3. Video products	9.8 %
4. Packaging and printed matter	8.7 %
5. Surface treatment and other commissioned work	5.1 %
6. Auxiliary and operating materials and miscellaneous items	1.5 %



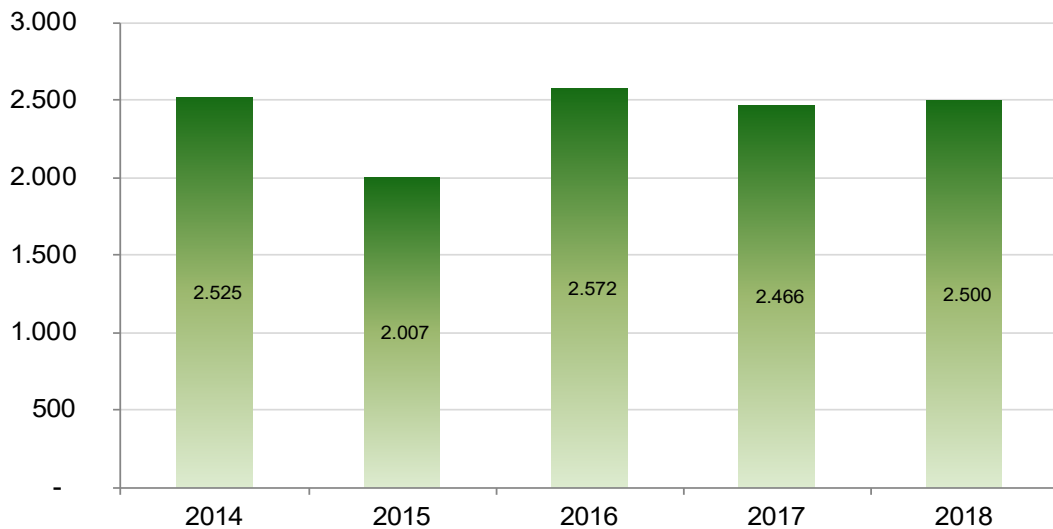
**Electricity consumption Plant I, Plant II, Logistics Centre (LZ) in 1,000 kWh**



Overall, the trend in electricity consumption can be viewed as positive. Various measures for energy saving have enabled consumption to be reduced in the last few years. Since 2013, we have been obtaining electricity from regenerative energy sources.

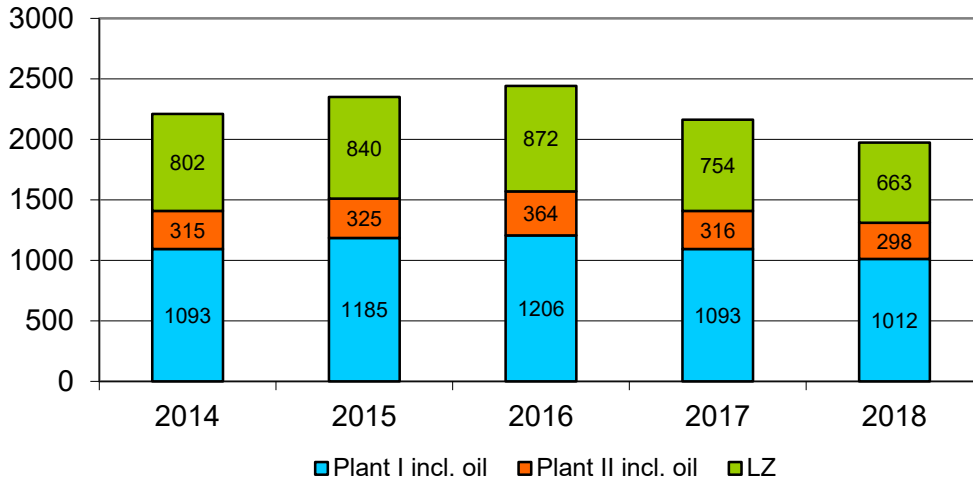
Reactive current is not included in the electricity consumption figures.

**Electricity consumption in kWh per tonne of product**



**Energy consumption of the heating systems in 1,000 kWh**

Conversion factor for light fuel oil: 10 kWh/l, from 2014 to 2018 no further oil was used

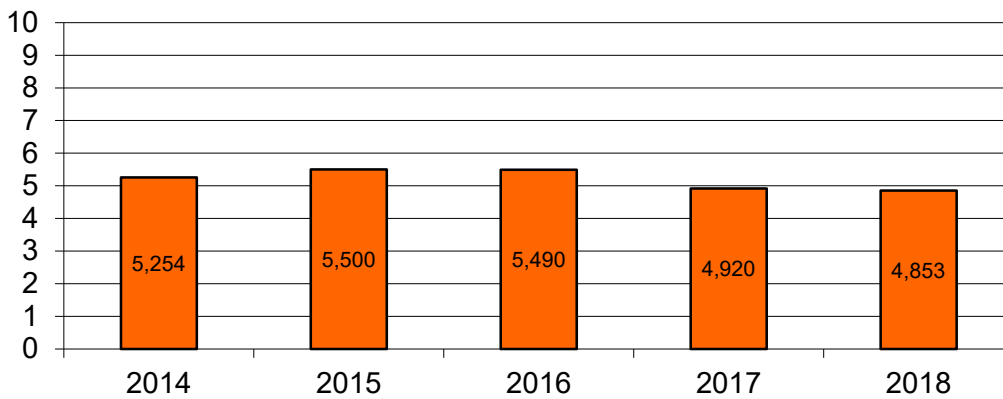


**Degree-day figures**

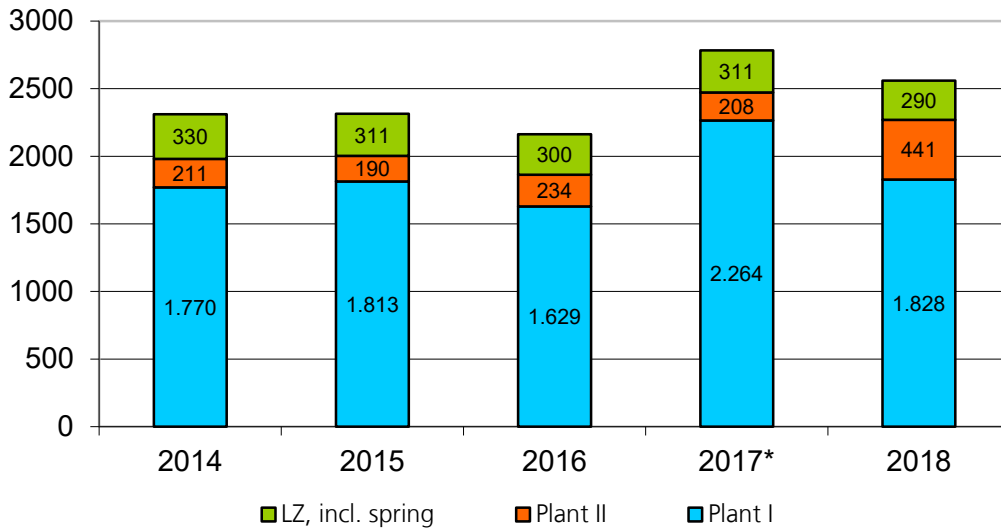
The degree-day figures from the Lenzkirch weather station of Germany's national meteorological service, Deutscher Wetterdienst, are used to correct weather-induced fluctuations and determine a specific consumption figure.

- 2014: 4,235
- 2015: 4,304
- 2016: 4,480
- 2017: 4,425
- 2018: 4,086

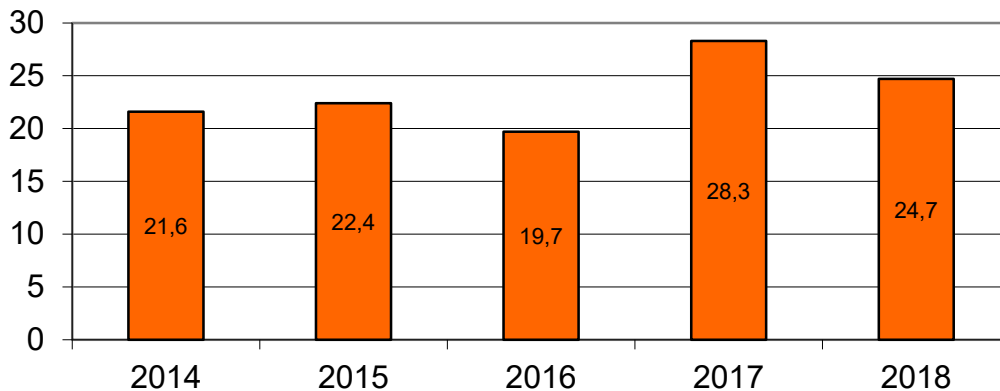
**Energy consumption of heating systems per m<sup>3</sup> of interior space in kWh per degree-day figure x 1,000**



**Water consumption (is almost equal to the quantity of effluent) in m<sup>3</sup>**



**Water consumption per employee in litres per working day without spring water**



In the Logistics Centre we use spring water.

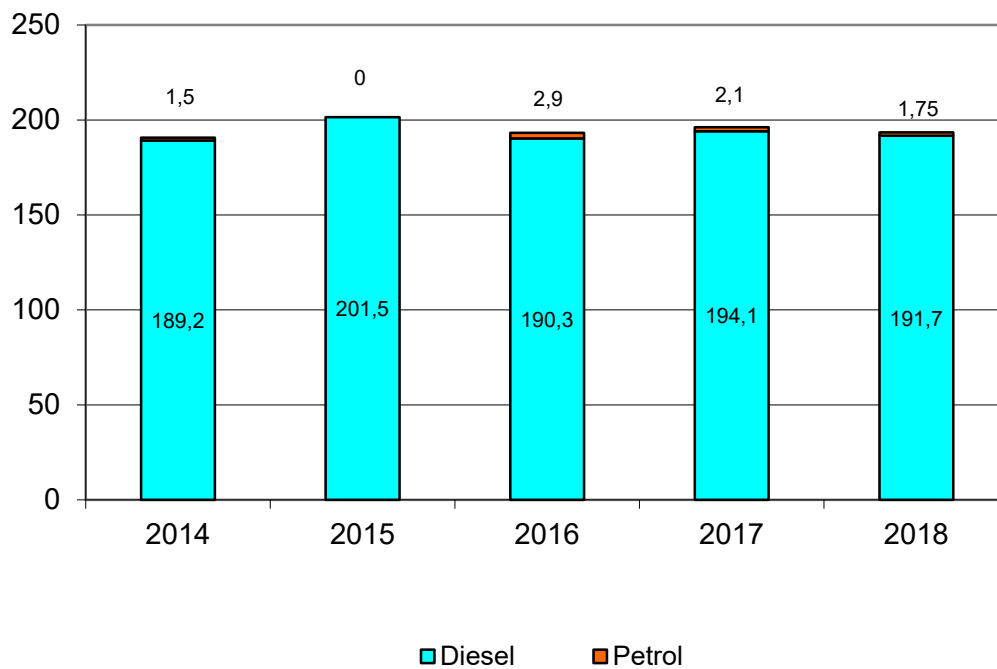
Since March 2013, the Electronic Assembly production has been additionally humidified due to the excessively low humidity of the air (annual consumption: approx. 55 m<sup>3</sup>).

Since mid-2016, we have had several drinking water stations in operation.

\* In 2017, more than 500 m<sup>3</sup> of water were lost when a pipe burst.

**Fuels**

Consumption in 1,000 l



**Fleet consumption**

	2014	2015	2016	2017	2018
km travelled/l diesel	14.12	12.22	14.12	13.44	13.76
Consumption diesel/100 km in l	7.10	8.19	7.08	7.44	7.27

Intensive distribution activity led to the increased acquisition of diesel-engine vehicles in the past.

The higher proportion of diesel has enabled the specific fleet consumption to be significantly reduced overall.

Products

- Waste  
(quantity for disposal, “hazardous wastes”, recycling rate, ferrous/  
non-ferrous metals)
  
- Waste water
  
- Noise and pollutant emissions
  
- Packaging

### Products

In 2018, the overall weight of products put onto the market – composed of eight product groups – was 491.5 t.

The production of our products mainly involves the machining and processing of the following materials:

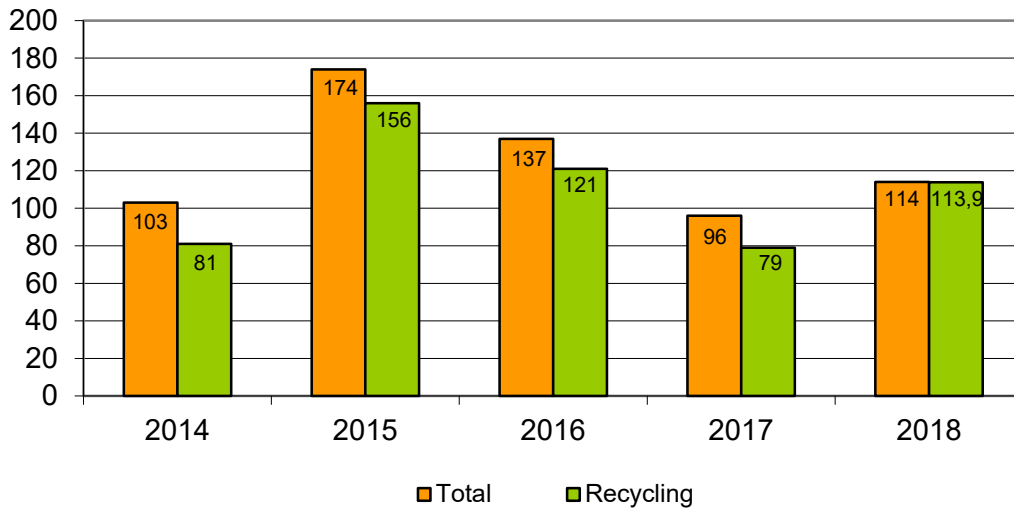
- Plastics (ABS, PC, PA)\*
- Stainless steel, steel (sheet metal)
- Aluminium (sheet metal, profiles)
- Zinc die casts
- Electronic components (active, passive components and printed circuit boards)
- Packaging materials (paper, cardboard)

The use of hazardous substances is largely avoided.

\* ABS = acrylonitrile butadiene styrene, PC = polycarbonate, PA = polyamide



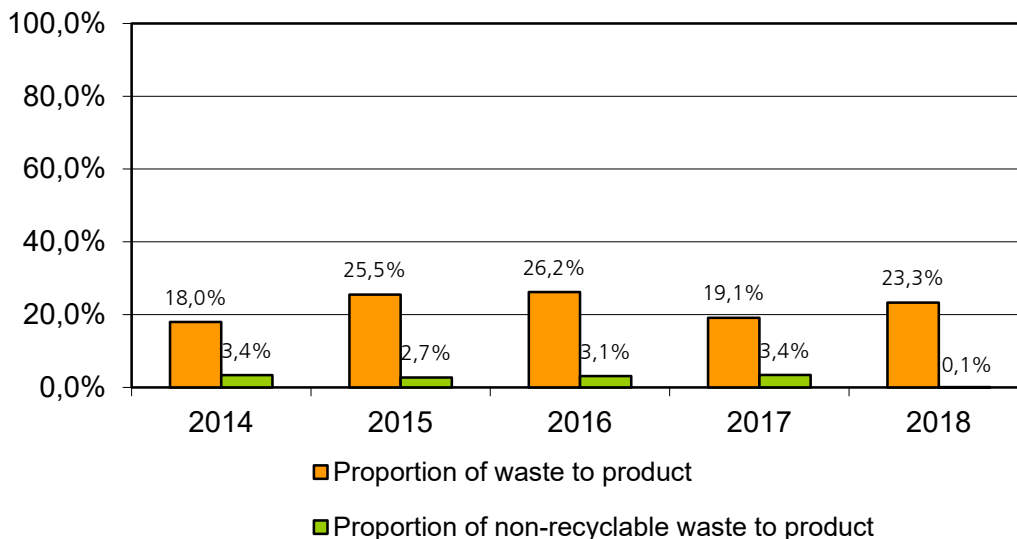
**Total quantities disposed of and quantities of waste materials fed to recycling, in tonnes**



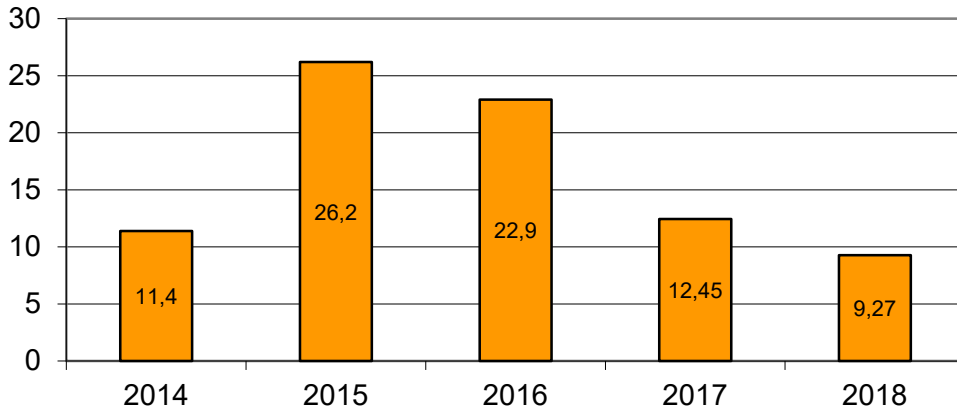
These data refer to all three plants in Furtwangen.

The waste materials of waste paper, cardboard and plastic film (mostly the packaging materials from our suppliers) have a major influence on the quantities for disposal – and hence on the waste balance as well. We will continue to take strict care that our suppliers avoid unnecessary packaging materials, catalogues and brochures. Not included in these amounts are the ferrous and non-ferrous metals for disposal, which are recorded separately. In 2015, some 50–60 t of waste had to be disposed of in a separate scrapping operation (warehouse clearance prior to the introduction of SAP).

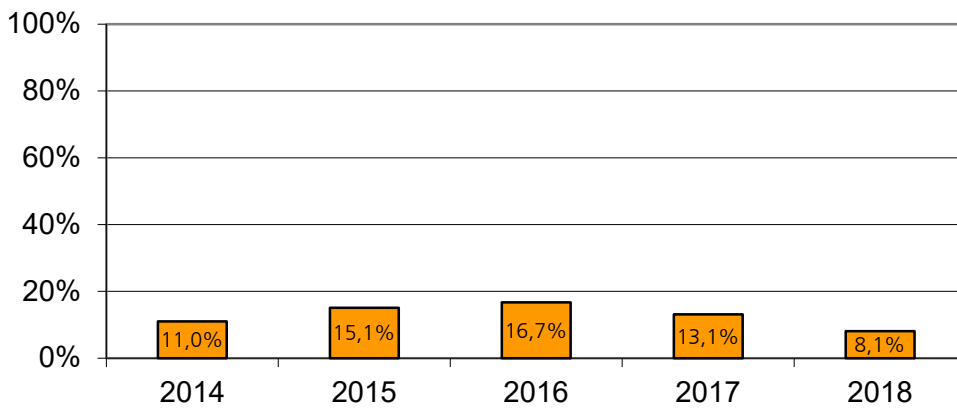
**Proportion of waste materials per quantity of product**



**Quantities of hazardous materials disposed of in tonnes**



**Proportion of hazardous waste materials in the total quantity for disposal**

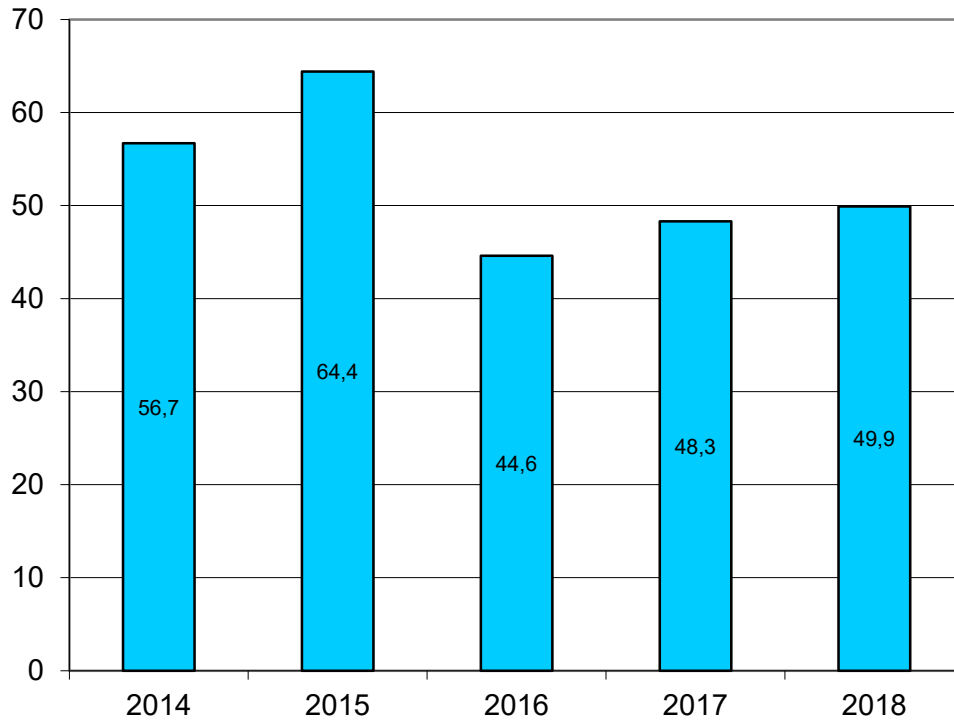


The proportion of hazardous waste materials in the total quantity for disposal is between 8 and 17%.

“Hazardous waste materials” are mainly:

- Waste from container washing plant and solder frame cleaning
- Operating materials contaminated with oil
- Since 2002 the “electronic scrap waste” (2018: 6.8 t)
- Waste from emptying the oil separation plant

Quantity of ferrous and non-ferrous metals in tonnes (2014–2018)



The ferrous and non-ferrous metals occurring are transferred to recycling when they have been machined or processed and thus increase the recycling rate.

**Waste water**

The quantity of waste water is almost equal to the quantity of water used, incl. the spring water used. The vast majority consists of sanitary waste. Since 2010, an additional fee has been payable for water from precipitation.

**Noise and pollutant emissions**

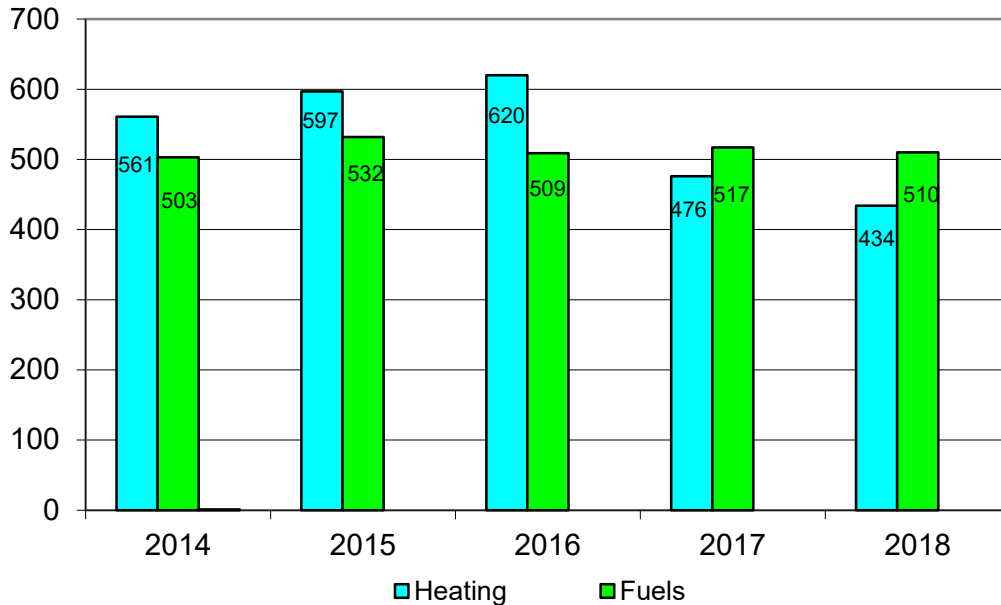
We currently have no plants subject to authorization under the German Federal Immission Control Act (BimSchG).

The pollutant emissions (CO<sub>2</sub>) from heating plants and fuel consumption are computed values.

Emission measurements taken on the soldering units by the employers' liability insurance association were below all threshold limit values.

At Siedle there is no noise pollution to the outside caused by production. Noise hazardous zones are regularly monitored by safety staff and the company doctor.

**CO<sub>2</sub> emission quantity from heating plants (gas + oil) and fuel consumption in tonnes**



Since September 2012, we have been obtaining green electricity from regenerative energy sources.

**Packaging**

Quantities: see Incoming goods packaging

Consignments of goods from suppliers primarily make use of returnable and multi-trip packaging.

Packaging materials from incoming goods are largely reused.

Our product packaging – primarily made of recyclable material – is disposed of via “Interseroh”.

Catalogues, brochures and product information are printed on recycled paper.

All product packaging materials are continuously recorded and notified annually to “Interseroh” for invoicing purposes.

In 2017, the recycling of product packaging in Germany by “Interseroh” enabled a computed quantity of more than 31.5 tonnes of greenhouse gases to be saved, for which we have received confirmatory certification.

Since 2013, our main supplier of corrugated cardboard packaging has been supplying a considerably more environment-friendly corrugated cardboard.

### **1. Introduction of the energy management system pursuant to DIN ISO 50001**

The building management department (BT) bore the responsibility for ensuring that all conditions were fulfilled on time for the successful execution of the certification procedure.

Certification was successfully completed at the beginning of December 2016.

Monitoring audits took place in 2017 and 2018.

### **2. Energy saving in plants and buildings**

BT continuously examines the opportunities and optimization potentials of the buildings and their technical systems in terms of energy efficiency.

For this purpose, consumption data are recorded, examined and evaluated. A concept for central digital capture of the values is still being planned.

Afterwards, appropriate measures will be defined and carried out within the scope of the approved budget.

### **3. Energy saving for products**

Under the responsibility of the executive board for innovation (GI) and the executive board for product management and business field development (GPM), work continuously takes place on additional energy-saving measures in the case of new developments. Modern IP devices, in particular, offer potential in this respect through the implementation of intelligent idle modes (standby operating modes). Consideration is also given to this aspect in the strategic objectives.

### **4. Waste management: quantification**

Our target is to maintain the level of residual waste achieved of less than 45 kg per employee/year.

The recycling rate of the total quantity for disposal is intended to remain at over 85%.

Responsibility for this lies with all managerial divisions. It was possible to achieve the target set in 2018.

### **5. Water consumption: quantification**

Our target is to maintain the level of water consumption achieved of less than 25 litres per employee and workday.

Responsibility for this lies with all managerial divisions. As a result of a burst water pipe, it was not possible to achieve the target in 2017. In 2018, the target was achieved once again.

### **6. Improvement in the infrastructure for employees who cycle to work**

The measures required for this are to be defined and executed under the responsibility of BT in 2016. These measures include the creation of suitable and secure facilities for parking bicycles. Consideration will also be given to the topic of e-bike charging stations in the process.

At the end of 2017, it was possible to commission the mobility station, and the charging stations were installed by mid-2018.

**Concluding Remarks**

This environmental report documents environment-oriented activities.

We do not wish to merely respond to critical environmental problems and legal regulations or public criticism, but instead to act preventively as an environmentally aware industrial business, from a sense of responsibility for the environment and to safeguard the company.

As a means of building confidence, we therefore present the facts identified in an open and realistic manner.

Through the environmental report, we wish to inform our employees and the public about our environmental protection measures.

Should you have any queries on this environmental report, please contact the environmental office, Mr Rolf Burger.

The Furtwangen location (Plant I, Bregstrasse 1; Plant II, Weiherstrasse 2; Logistics Centre, Salomon-Siedle-Strasse 14) of the company S. Siedle & Söhne Telefon- und Telegrafengeräte OHG was audited from 13 to 15 March 2019.

The environmental policy, the environmental targets, the environmental programme, the environmental management system and the environmental management system audit of the company S. Siedle & Söhne Telefon- und Telegrafengeräte OHG comply with the requirements of DIN EN ISO 14001:2015.

The data and information in this environmental report are reliable. They appropriately depict the environmental relevance of all the company's activities at the Furtwangen location (Plant I, Bregstrasse 1; Plant II, Weiherstrasse 2; Logistics Centre, Salomon-Siedle-Strasse 14).

L. Weitzer  
Environmental Auditor





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