

Sustainability Report



of the ZwickRoell Group 2021



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Legal Notice / Contact

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About This Report

Our intention

This report is the fifth sustainability report of the ZwickRoell Group. Each year, we use this report to inform the stakeholders in the company about sustainability aspects in our sphere of influence.

Report period and scope of validity

The 2021 sustainability report relates to the fiscal year January 2020 - December 2020. At ZwickRoell, the fiscal year begins on January 1 and ends on December 31. Unless otherwise stated, the provided information, numbers and facts apply to the ZwickRoell GmbH & Co. KG in Ulm-Eisingen (in short, ZwickRoell) location.

Acquisition of the data and information

The information was acquired through oral and written interviews with the appropriate responsible persons.

Future statements

We would like to point out that any statements for the future are based on the current data. Our forecasts and announcements may deviate from this on account of unforeseeable and unknown risks.

Other comments

In this report, we will refrain from using gender-specific duplications, in order to improve legibility. All the formulations are value neutral. The sustainability report is available in German and English. You can find more company information on our website www.zwickroell.com and in the ZwickRoell Consolidated Management Report.



Foreword

In our guidelines, we have declared "passionate commitment to our customers" to be one of our guiding principles. All of us consider passionate commitment to our customers to be a prerequisite for growth and profitability.

We wish to be economically successful as a company in the long term. This requires far-sightedness and forward-thinking, which means sustainable thinking and actions that must be deeply rooted in the company.

We consider the obligation regarding sustainable actions to be part of our business responsibility and a key prerequisite for developing our business successfully in the long term.

A key requirement for our success is our employees' understanding of what we want to achieve in the medium and long term.

Our sustainability performance can also be seen in our investment in research and development, which we increase annually. Through the high level of innovation in our products, we help our customers produce top quality products whilst conserving resources.

We are proud that, since 2014, we have offset CO₂ emissions determined at ZwickRoell GmbH & Co. KG with our project partner Klimaneutralitätsbündnisses 2025 (Climate Neutrality Alliance) in Vorarlberg, Austria.

Moving forward, we also intend to keep up our efforts to find the balance between economic success, environmental protection and social responsibility. We believe that: Sustainable action is the return on investment of the future.

Sincerely,

Klaus Cierocki
CEO ZwickRoell AG

Christine Dübler
CSO ZwickRoell AG

Roland Eisenlauer
CTO ZwickRoell AG



1. Sustainable Corporate Management

Sustainable corporate management and business operations are important to the ZwickRoell Group. We take full responsibility for our products and processes. We operate sustainably for the future of the world and new generations. Because: Sustainable action yields returns for our future and must be in harmony with business success, protection of the environment and social responsibility. Our risk management system serves as our control instrument. Here, risks are analyzed and controlled as a whole, thus making a forward-thinking contribution to sustainable business practices. Topics including occupational safety, health and environmental protection, natural events, epidemics, quality and customer satisfaction are monitored, and measures are taken to minimize risks.

1.1. Company culture

The ZwickRoell Group is a global leader in static materials testing and leading provider in dynamic materials testing and fatigue testing. We stand for excellent technical performance, innovation, quality and reliability.

The focus areas of our technological development are in the following five fields:

Drive technology, specimen grips/test tools, sensors, electronics and software We offer our *testXpert*® software in the most important world languages.

The ZwickRoell Group has undergone continuous growth through acquisitions of other companies in the field of materials testing, and we were therefore able to expand our product range and service offerings in key markets.

In addition to independent sales representatives, we established our own sales and service companies in the following markets:

ZwickRoell LP., responsible for the US and Canada; ZwickRoell S.a.r.l., and Centre de Verification de Metz, both in France; ZwickRoell Ltd., responsible for Great Britain and Ireland; ZwickRoell S.L, Spain; ZwickRoell Pte. Ltd., Singapore, with subsidiaries in India and Korea; ZwickRoell Ltda., Brazil, ZwickRoell S.A. de CV., Mexico, ZwickRoell Corporation in Japan.

The ZwickRoell Group has a global presence and employs approximately 1650 people. Thanks to our innovative strength and strong cooperation with customers, we were able to further expand our market position and generate a profit even in difficult times. In 2020, the Group achieved order entry of €214.5 million, and consolidated sales of €223.4 million.

Guidelines

As a central vision, our guidelines contain the following statement:

Through passionate customer commitment, we continue to achieve growth and profitability.

This vision is based on three core statements:

- **Passionate customer commitment** is the foundation of our success.
- With ZwickRoell Premium, we continuously set standards in our market.
- By practicing openness and accountability we create trusting relationships.

At ZwickRoell, these three core statements are supplemented by environmental policies. As a result, we follow the guiding principle:

"For us, it is an ethical obligation to harmonize the economy and ecology.

Through ongoing state-of-the-art improvements in development, manufacture and application of our products with consideration of the life cycle and through investments in our operating sites, we take the responsibility of our company into account for all interested parties—business partners, employees, public authorities, neighborhoods, and ultimately the environment."

Our values guide all our decisions, our interactions with each other, and our behavior toward employees, business partners and society:

We are open-minded. We are passionate about everything we do.

We use various metrics to assess whether we are consistently adhering to our values and guidelines. These metrics are:

Customer Satisfaction Index (CSI)	≤ 2 / ≥ 80%
Customer Loyalty Index (CLI)	≥ 85 %
Customer Recommendation Index (CRI)	≥ 90 %
Employee satisfaction Only the scale 1-6 (1= Best evaluation)	≤ 2.4
Employee turnover	≤ 2 % p.a.

Key indicators according to the guidelines

A Code of Conduct has also been developed on the basis of our guidelines, and will be revised in 2021. The Code of Conduct provides all of us with direction in everyday life and in critical situations and helps us make the right decisions.

Compliance

Besides the above-mentioned risk management, our Compliance System serves as the means of control. As a company that operates worldwide, we have a social responsibility toward our customers, suppliers, employees, investors and the public. This social responsibility requires us to uphold the law at all times and in all places, to respect ethical values and to act in a sustainable manner. We take responsibility for products and processes as a whole and wish to make an active contribution for a worthwhile future of the coming generations. Against this background, compliance is a fundamental part of the strategy and is intended to ensure adherence to all the statutory and internal regulations. It must be practiced by all divisions and subsidiaries in Germany and abroad and by all employees equally, i.e., including the Executive Board, the management and each individual employee.

1.2. Product responsibility

Testing machines and testing instruments do not have a particular sustainability character.

However, materials testing can be viewed under the premises of material efficiency and the conservation of resources. Thus, our products support the aims of our customers in this area, who come from many different industries, both in the fields of material research and industrial applications.

We place great emphasis on high quality and thus long-life products.

We have implemented a special After Sales product division, which deals with the sectors of modernization, accessories and used machines, as well as the value retention and adaptation of the latest technology for delivered products.

Thanks to our global customer support network and rapid procurement of spare parts, we can ensure the shortest possible downtimes if defects occur. At ZwickRoell, the availability of spare parts is guaranteed for at least 10 years after the discontinuation of the product series. Beyond that, ZwickRoell tries to maintain the supply for a goodwill phase of 5 years.



ZwickRoell servohydraulic testing machines

Modernizations of customer-owned machines carried out in ZwickRoell's production facilities and include the pre-owned machine business, include the following services:

- Overhaul and modernization of the load frame, including repainting
- Replacement of the wear parts
- Retrofit of the existing load cell
- Implementation of new measurement and control technology
- Update to the latest software
- Installation and training
- Packaging and transport
- A warranty of 12 months; optionally, if a preventive maintenance support and calibration contract is completed, the warranty extends to up to 60 months

2020 environmental aspects from the product development department:

- Development of an energy-optimized temperature chamber
This will replace previous products for purchase that, from an energy perspective, do not have the insulation quality of the new in-house design.
- Development of other testing machines with electric drive eliminates the need to use hydraulic oil.
- Development of modernization sets to retrofit existing testing machines.
Every modernization and delivered pre-owned machine supports our sustainability vision, since functional components are reused, and the service life of the testing machine is extended.

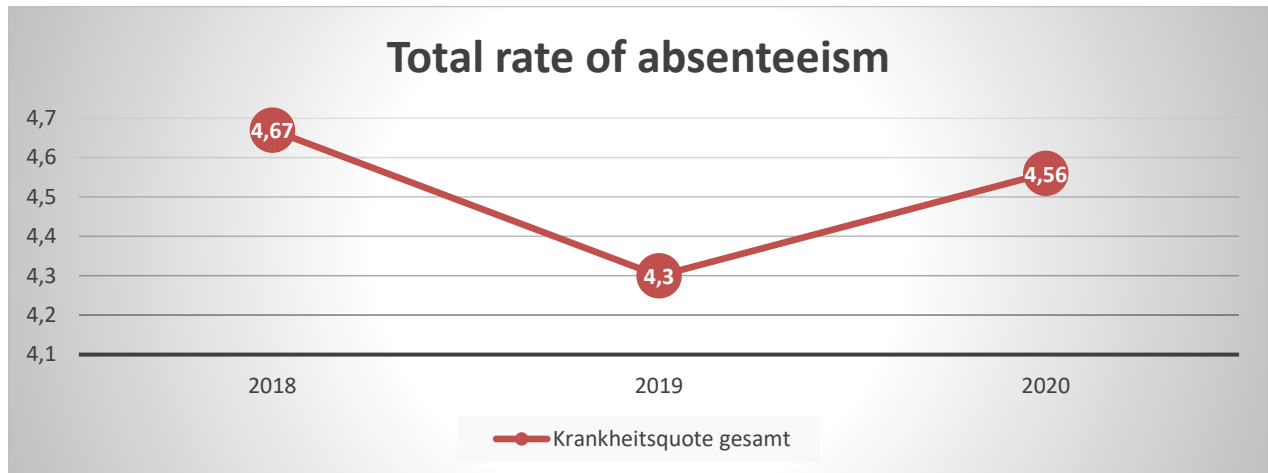
1.3. Workplace and health protection

Workplace safety and health protection are integrated in our quality and environmental management system, which has been established and certified for many years.

As qualification in the field of workplace protection, in 2018, we were again awarded the certificate for Security Safety Management (SeSaM) from VBG PowerTech.

Absenteeism

For many years now, the level of absenteeism (absenteeism in % = ratio of days absent to total days) at ZwickRoell has been relatively low. In 2020, the level of absenteeism in the company was 4.56 %.



Rate of absenteeism at ZwickRoell Ulm

Noise protection and indoor climate

If required, each employee receives individual hearing protection. The manufacturer checks these at regular intervals, meaning that safety is always guaranteed.

To reduce noise emissions in the production buildings, profile sawing work is always carried out elsewhere.

In 2020, an air vacuum system with heat recovery and oil separation was installed to improve the indoor climate.

Company health management

At ZwickRoell, health protection is also a high priority. This is reflected on the one hand, by the creation of safe and ergonomic workstations and, on the other, through a wide range of measures in the scope of company health management.

Health protection includes, among other things:

- Skin and colorectal cancer screening
- Inoculation against influenza
- Medical check including blood test
- Hearing and sight test
- Examination of the VDU workstation
- Noise and skin examination for production employees
- Prophylactic workplace medicine investigation G 25 for driving, control and monitoring activities
- General and employment commencement examinations
- Consultation meetings (allergies, depression, eye problems, etc.)
- Follow-up investigations (German youth employment protection act)
- Technical presentations during the training week
- Consultation regarding Covid vaccination
- Covid testing
- Health day (incl. digital options)

For cyclists, the company offers the option of a business bicycle. Covered parking with charging facilities are available.

And let us not forget our company restaurant, which offers a healthy range of food, including vegetarian meals. The meals are freshly prepared. Besides the two main meals, there is a wide range of side dishes, which can be selected individually. At the request of the employees, organic apples from the region are offered free of charge as a supplement. A new deposit system was introduced for the reusable "to go" tableware.

1.4. Outlook

Company culture

As a growth-oriented company, we want to continue to convince our customers on the basis of our ethical principles established in our Code of Conduct, and through our innovative strength and product quality, independent of the general trend.

Product responsibility

- Development of other testing machines with electric drive eliminates the need to use hydraulic oil.
- After Sales: Development of digital products and tools for customers (machine status) and of ZwickRoell Service (commissioning tool, calibration program, among others)
Benefit: Conservation of resources through early maintenance and service, as well as shortened commissioning lead times

Workplace and health protection

Implementation of a "Fit at Work" program with the following offers:

- Physiolates
- Nordic walking
- Relaxed body – Relaxed mind
- Active lunch break
- Fitness exercises
- Energetic exercises
- Training on the job (workstation program)
- Special company agreements with
 - Donaubad Ulm / Neu-Ulm
 - Kieser Training Studio - Ulm

However, this program was suspended during the Corona pandemic. Another health-related aspect for our employees are height-adjustable desks and ergonomic chairs, which are considered during investment planning. Our goal is for 20% of the desks to be height-adjustable in the medium term.

The recertification for the implemented Security Safety Management (SeSaM) qualification by VGB PowerTech e.V. is due in 2021.

Hazardous substance measurement

Hazardous substance measurements are commissioned from an external service provider if required.



2. Collaboration with Our Business Partners

For us, a solid, long-term relationship with our business partners is a matter of course. Interest and mutual trust are essential. We believe in working in partnership, which means we listen and seek to understand our partners' concerns. We use market trends and offer system solutions from continually improved products and services, creating a market advantage and earnings potential for us and our business partners. We achieve this objective with an open mind, transparency and passionate customer commitment.

In close collaboration with our business partners, we develop and perfect our products and our services, with the aim of the highest possible availability and quality of our testing systems and maximum reliability in the test results. We provide our customers with target-oriented advice, in order to find the right testing solution for them. Collaborations in research and development help us to implement ideas in customer-specific solutions for a long-term guarantee of joint success.

We stand for free and fair competition.

We strive to build and maintain long-term relationships with our business partners, where mutual trust and concern are essential prerequisites.

We advocate for basic rights to be upheld in the workplace. This particularly includes but is not limited to the prevention of discrimination in the course of hiring and during employment, and the rejection of forced labor and child labor.

We therefore reject any form of pricing agreements or the allocation of production and sales quotas just as resolutely as any other anti-competitive practices. In all our international dealings we follow the applicable import and export regulations.

2.1. Our markets

The fundamental objective of the collaboration with our partners is sustainable and profitable growth for ZwickRoell and our sales and service partners. This has resulted in the following secondary objectives:

- Long-term, close and loyal collaboration
- Agreement of long-term targets and milestones for further development and growth
- Standardization and decentralization → Reduction of tangential losses
- High quality and stable processes around the world
- High customer satisfaction and loyalty around the world

We want to achieve these objectives by using a support concept, which distinguishes between focus, operating and base countries. For the categorization of a country, we consider criteria that

take into account its economic importance, but also the support it requires. Criteria include the size of the industry GDP (gross domestic product), the actual and forecast future economic growth, and the order entry achieved to date for ZwickRoell. Additional representative-related factors such as a change of representative or changes in the representative structure are also included.

For countries and regions in which ZwickRoell does not have our own organization, Partner Management creates the framework for successful, smooth business relationships with our customers and partners on behalf of the ZwickRoell companies. Country support managers focus on the following:

- Centralized, overlapping coordination of sales and service activities.
- Partner support for the systematic sales and service tasks (information about the market, competition, customers, products, ZwickRoell guidelines), in individual cases on the basis of concrete customer projects.
- Ensure that the ZwickRoell systematic processes are adhered to (operational excellence, contracts, tools, processes, WIN 20xx, ...)
- Identification of possible new sales and service partners.
- Consultation and support for the ZwickRoell companies on international customer projects, taking cultural circumstances into account.
- Moderation in case of conflicts between partners, companies and divisions.
- Generate ideas for suggestions to improve processes (standardized procedures).

Joint annual targets are agreed upon with the focus countries and recorded in target agreements, which include, for example, order entry, quality of the CRM data, support from ZwickRoell, or the number of testXpo visitors. Regular contact remains with operating countries, support for base countries is need based.

2.2. Customer satisfaction

With the Customer Care Management International project, we want to deal with errors, complaints and quality defects openly and with transparency. We must gather information, carefully analyze it and derive appropriate measures. With their implementation, we want to improve our processes and products and sustainably raise the level of customer satisfaction. Key points include:

- After installing a machine, we gather feedback from our customers and ask for an evaluation of our products and services.
- With the introduction of the international Complaints Management in 2020, complaints are recorded uniformly on a worldwide basis and processed systematically. The development of this process is reported on a quarterly basis during the management meeting.
- Within the scope of our quality management services, we gather systematic errors, develop sustainable solutions and remedy deficiencies in a timely manner. The management team is updated regularly on the current status and progress.

Within the scope of the Global Transparency initiative, we want to further develop these activities and continuously improve customer satisfaction.

Through the design of our organization, our products and services, we intend to create and

maintain a long-term, trust-based customer relationship. We perform satisfaction surveys, in order to evaluate whether our measures for customer responsibility are successful.

Here, after the installation of a new testing machine, we ask our customers about their satisfaction with our consulting services, the quality of our documents and products, delivery, installation and training.

In the 2020 reporting year, 99.1% of return customers in the ZwickRoell home market (Germany and neighboring countries) confirmed that they would continue to use ZwickRoell's services in the future. The recommendation/referral rate was 96.1%. All the evaluations requiring follow-up are processed by the appropriate sales managers.

Customer satisfaction with our calibration service is surveyed separately.

Overall satisfaction in terms of school grades is at 1.52 (on a scale of 1 to 6, with 1 being excellent).

Independent from our surveys, we receive positive supplier evaluations from numerous customers that relate to the products we supply or the services we provide and to the feedback on completed questionnaires.

2.3. Marketing and digital events

At ZwickRoell, we want to maintain a sustainable dialog with our customers. On the one hand, the company wishes to use various digital communication channels to inform its customers and interested parties about new products and applications. On the other hand, a digital event is intended to give customers the opportunity to experience products "live" and personally speak to ZwickRoell experts.

Digital communication

With our digital communication channels, ZwickRoell wants to reach customers/potential customers around the world and offer them a digital experience. For this reason, ZwickRoell invests in the translation of our website contents (currently in ten languages) and in responsive design, so that the website is optimally displayed on any end user device.

The company also uses social media channels (YouTube, LinkedIn, Instagram and Xing) to provide customers and potential customers with appropriate content, as well as an opportunity to interact. Our digital communication is continually developed and expanded.

Digital Events

In 2020/2021, the focus was and is primarily on digital events. With around 200 digital events (webinars, live demos, expert discussions, ...) we were able to share information about current topics with well over 10,000 customers and potential customers and give them the opportunity to ask questions. In the future, digital and hybrid events will play an important role in ZwickRoell communications.

ZwickRoell Runs the World

In 2020, under the slogan "ZwickRoell Runs the World", we completed our fourth annual running challenge. Participants ran a record distance of over 106,000 km during the 60-day event. In response, we are donating €50,000 to charitable organizations and initiatives.

Exactly 106,576.2 km were covered by 850 participants over the course of the challenge. Kilometers earned from jogging, Nordic walking, or hiking were recorded and transmitted via an app. Employees, customers, and friends of ZwickRoell from over 42 countries took part in the

worldwide campaign. The goal for the runners was to accumulate as many kilometers as possible for a good cause. The best individual runners managed to run well over 900 km in 60 days.

ZwickRoell is now honoring the impressive efforts of all the participants by donating a total amount of €50,000, which will be distributed to 20 different organizations across seven countries. Donation recipients are determined from suggestions made by our employees and customers, who were able to recommend charity projects in which they are actively involved. For example, among this year's selected organizations are many that work with disadvantaged children.

2.4. Outlook

Our markets

We intend to continue implementing the ZwickRoell Partner Program in the coming year, thus further developing the partners and ZwickRoell. This will help us to fulfill the above customer expectations.

Customer satisfaction

Our long-term aim is to establish customer satisfaction around the world. We want to include yet more countries in 2015 and make the questionnaire available in additional languages. To ensure a uniform approach, we will compile a ZwickRoell customer satisfaction survey manual, which our sales partners will also use. The results from the survey are reported quarterly to the management.



3. Collaboration Within the Company

Our employees are competent and professional and work as a team. In so doing, the commitment, motivation and qualification of our employees are decisive for corporate success. We operate our personnel policies against this background. As an attractive employer with high performance standards, we wish to create working conditions that contribute to satisfaction and loyalty amongst the employees.

3.1. Training

Very well-trained and motivated employees form the basis for the successful expansion of our national and international activities. For this reason, training of the next generation is very important for ZwickRoell. In addition to vocational training, we offer technical and commercial courses with cooperative state universities and the Ulm University of Applied Sciences.

The great value placed on training is also reflected in the high number of training and study openings provided each year. According to section 4.2.1 of the collective bargaining agreement on safeguarding employment, there is an obligation to employ 60% of the apprentices. However, even without relevant regulation, it has been possible in the past to offer an appropriate job to almost every apprentice. This shall continue to be our aim in the future.

With an average of 70 apprentices, they make up around 8% of the total number of employees.

Year	2018	2019	2020
Commercial training	3	4	3
Technical/mechanical training	15	12	10
State University, technical and commercial studies	9	13	8
Total apprentices	27	29	21

New apprentices 2018 to 2020

Due to demographic trends, the number of applications has declined slightly, dropping to an average of about 450 applications instead of 600. In addition, we can offer students the option for internships, Bachelor's and Master's courses and are available as an employer to the graduates after their studies. A wide range of offers makes training at ZwickRoell an attractive opportunity.

Some examples include:

- Training in our own teaching workshops
- A stay in other German and international ZwickRoell locations
- Theory semesters abroad

- Special ongoing education offers for apprentices
- Reimbursement of travel costs for public transport

Social week: an intensive week that makes all the difference

In many cases, young people do not yet have the social skills that are expected of them. Not infrequently, there is a lack of behavior and manners appropriate for the situation. Yet, especially today, this is an important skill in school, university and professionally. Learning in other spheres of life strengthens these critical skills. For a full week, the apprentices leave their typical daily routine and experience another aspect of life. They learn about the lives of people facing disabilities, that of seniors and people undergoing illnesses, they meet young people and children in difficult situations, and homeless people, providing them with experiences about things that really matter.

Team development days for apprentices: incorporating ZwickRoell values

The will to change, transparency, a dynamic environment, honesty and reliability are all aspects that are addressed in detail. In three days together, ZwickRoell guidelines and values are developed and internalized.



Apprentices at team development days

Active participation in the ZwickRoell junior company

The idea for a junior company was formed in 1994 to create attractive training content at ZwickRoell. All the apprentices are involved in the various divisions, such as finance, marketing, production, etc. The aims of the junior company are the learning effect, an improved overview of the company interdependencies, obtaining of qualification characteristics, independent problem-solving and decision-making and acceptance of responsibility and teamwork. Presenting themselves at career fairs and taking on responsibility for special activities including the distribution of gifts, e.g., during Christmas and Easter, and providing employees with masks and rapid tests during times of the Corona pandemic, contribute to the integration of the junior company within ZwickRoell.



School partnerships

To discover young talent, ZwickRoell works as a cooperation partner with all three types of school. Firm partnerships with the Johann-Vanotti-Gymnasium, the Technisches Gymnasium Ehingen (secondary technical school), the Realschule in Erbach are part of this cooperation. The primary and secondary school in Einsingen and the International School in Ulm/Neu-Ulm are also supported by ZwickRoell. The content of these cooperations are company tours, research, internships for students and teachers, applicant training, material support for technology lessons, financial support of the Johann-Vanotti-Gymnasium for their school partnership with Nanjing (China), financial donations to support pupils in the procurement of language certificates, and

much more. We have been carrying out development projects in the field of computer science with the technical high school since 2020.

The technical summer program at ZwickRoell: technology made fun

In 2019, the technical summer program, which was created in 2012, was also an established component of ZwickRoell’s social and corporate responsibility efforts. In the first week of the summer vacation, 20 young people between the ages of 12 and 15 again came to our premises and participated in the program. At the heart of their activities was the construction of a solar-powered helicopter. The young people were able to show or discover their technical abilities while sawing, filing, bending and soldering. In addition, they learned more about our materials testing machines and carried out a variety of materials tests in the Application Technology Laboratory. This year, we took an excursion to Hochschule Aalen, where the young students carried out an energy simulation on PCs. The objective was to provide a sustainable power supply for the next 40 years within the scope of energy ministers. Then it was off to the Explorinho Science Center, where they could explore and learn about exciting phenomena from the fields of science, mathematics and technology. Unfortunately, due to the Corona pandemic, we were not able to offer the summer program in 2020.



Summer program 2019

3.2. Employee development

Besides the training of young people, ZwickRoell is also investing in the **continuing education** and personnel development of our employees. Technical and personal development play a major role. A comprehensive continuing education budget is planned and made available every year.

The following budgets were planned for 2019 and 2020.

2019	€573,000
2020	€500,000

Central continued education program 2019 - 2020

The central continuing education program was revised on a rotational basis for 2019 / 2020. It again comprised a wide range of continuing education measures, for which managers can register their employees, as necessary. Here too, it was compiled in a demand-oriented manner, in close cooperation with the Academy of the Bildungswerk der Baden-Württembergischen Wirtschaft e.V. and the company divisions. Due to the Corona pandemic, we were able to conduct very few in-person seminars in 2020, postponing them in large part until 2021.



Learning Week 2019 and 2020

Our Learning Week, established in 2010, was held in 2019 for the tenth year in a row, and once again well received by our employees. They took advantage of the numerous continuing education opportunities during a total of five afternoons, as well as Saturday. Employees took advantage of topics covered by internal and external speakers to gain new insights or to refresh existing knowledge.

The eleventh Learning Week took place in 2020 under the necessary guidance of Corona requirements. In place of our usual in-person events, we offered a wide range of e-learning courses for self-paced learning and selected online training courses on predominantly health-related topics. Learning Week 2020 was therefore exclusively in digital format.

Year	Filled spots	Employees	Training courses / employee	With external trainers	With internal trainers	Presentations of BG and BAD	Total costs
2019	1907	481	3	51	51	6	€51,455
2020	1252*	330	3	13	/	11	€10,590

ZwickRoell Learning Week overview – 2019 - 2020

*Participation in online training courses and use of e-learning licenses due to the digital format of Learning Week 2020

In addition, a wide range of individual and subject-specific continuing education options were provided for employees in 2019. Field service technicians also undergo a number of continuing education courses distributed throughout the year. In 2020, of course, many planned training opportunities had to be postponed due to Corona.

3.3. Employee satisfaction

Employee satisfaction is determined through regular employee surveys, in cooperation with an external consulting partner, every four to five years. We use this opportunity to set a benchmark. In so doing, all the employees are asked about their current level of satisfaction. The results of the employee survey form the basis for the implementation of company improvements and are also intended to show development trends over recent years. The last employee survey took place in 2017. Overall satisfaction at the time was 2.30 on a scale of 1 to 6 (1 $\hat{=}$ best score), and thereby better than the benchmark average. Especially exciting for us was the consistently above-average performance in the salary, collaboration with co-workers, communication, continuing education/development opportunities, and connection with the company and company culture categories. This shows us that our employees are happy to be part of the

team.

Company measures taken for protection against the Corona virus (regular information, availability of disinfectants, safety masks, tests and vaccination options) were well received by employees.

The **company continuous improvement process, CIP**, which was introduced in 2007, is easy to use and promotes suggestions that can be implemented quickly. Two CIP Masters ensure sustainable processing of the suggestions.

Year	Number of submitted suggestions
2018	205
2019	182
2020	123

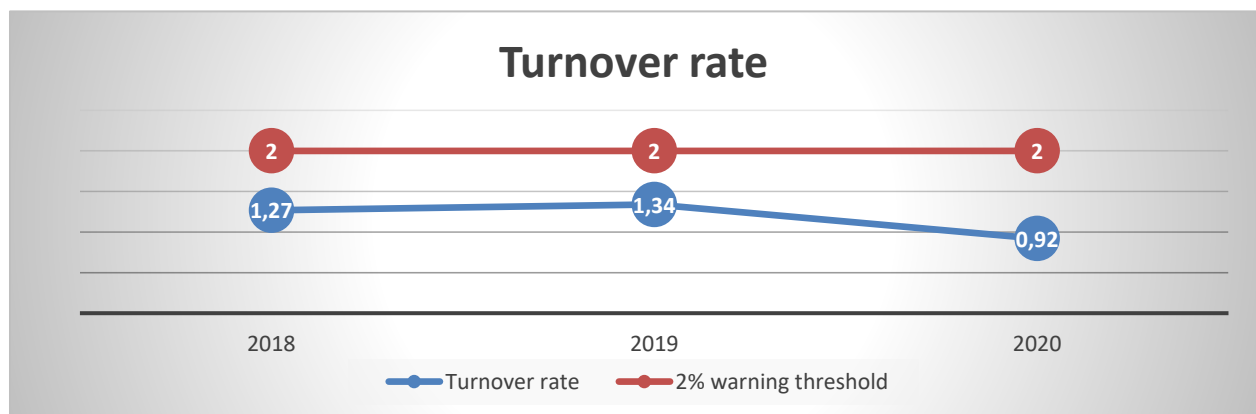
Submitted CIPs 2018 - 2020

A further instrument to promote motivation and employee participation is our **Wincentive** system, which was introduced in 2005.

In the context of this system, managers award Wincentive points to employees and teams to reward above-average performance. In addition, employees can award points to teams. The employees/teams can then convert the collected points into various rewards.

Turnover rate

We determine turnover rates using the BDA formula (BDA is the Bundesvereinigung der Deutschen Arbeitgeberverbände or Confederation of German Employers' Associations). Among other things, we take into account retirement, departures for continuing education opportunities and departures due to the end of fixed-term contracts, we do not take into account changes in temporary employees.



Turnover rate 2018 - 2020

- At 0.92%, the 2020 turnover rate was again pleasantly low and well below the set 2% threshold mark (overall for more than 10 years now). Of the approximately 50 departures, only 9 were turnover related.

3.4. Outlook

Training

- Heavy focus in 2021 will be on providing all trainees and students with increased knowledge

of the ZwickRoell product portfolio and strengthen and deepen the technical knowhow required for their profession.

- The implementation of development projects with the Technischen Gymnasium Ehingen (technical secondary school) is again part of the program.
- To increase the number of girls in technical occupations, we will increase our involvement with the Girls' Day Akademie. The objective of this project is to strengthen the career focus for girls in the technical field. The Girls' Day Akademie promotes a deeper career focus of young women and equal opportunity in career choices. A special feature of the academy is the combination of knowledge transfer, practical work and training for interdisciplinary qualifications.
- In addition, we want to again try to offer a summer program for young students, ages 12-15. The construction of a solar-powered helicopter would be the focus for this program.

Employee development

- A further continued education budget of €300,000 is planned for 2021.
- The 12th Learning Week will again take place from 05/04/2021-05/11/2021 in digital format. Our Learning Week continues to be a fixed component of the training program and thus employee development at ZwickRoell. In 2021, for the first time, international companies of the the ZwickRoell Group will also take part in Learning Week and be able to use select content.

Employee satisfaction

- The next employee satisfaction survey is planned for spring 2021.
- The CIP process is under revision and will be revitalized. We created a new project team intended to plan and prepare a process restart project. Current tools for editing and tracking are no longer up to date and need to be reconsidered.
- In addition, we consider a transition to remote work as another important step in the direction of digitalization and employer attractiveness. A company agreement will be drawn up for this purpose.

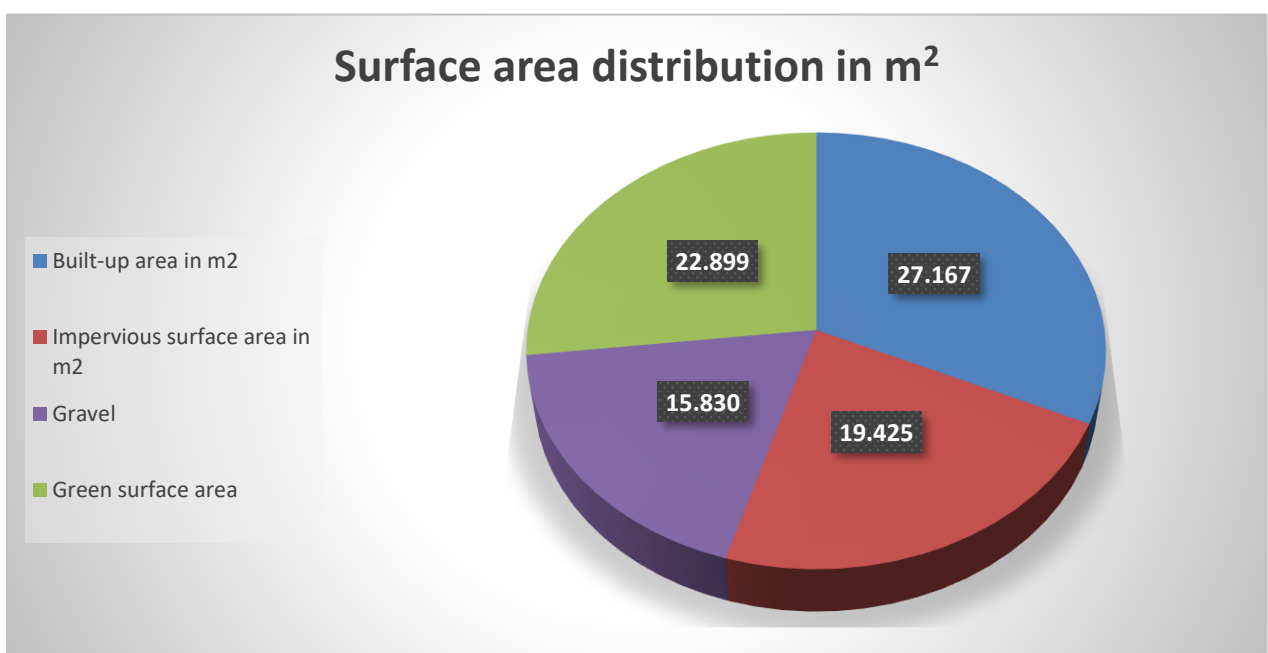


4. Environmental Protection in our Company

Starting with the introduction of a quality management system in 1993, which was expanded over time to include the topics of environmental and workplace protection, we now have a comprehensive management system in place, which views the requirements as a whole. This applies both to our manufacturing process at the Ulm-Eisingen site and also to our products with a claim of top quality, customer benefits and application safety. Our quality and environmental management system is audited by the TÜV SÜD Management Service GmbH on an annual basis. In addition, we conduct our own internal audits and site inspections. This helps us ensure that our management system is continually developed. We attach great value to a pleasant and safe working environment in our company. The division of the site reflects the suitable external framework, characterized by a large amount of green spaces.

In total, the company site in Ulm-Eisingen covers an area of 85,321 m².

Plot No.	Built-up area in m ²	Impervious surface area in m ²	Gravel in m ²	Green area in m ²	Total plot area in m ²
Total	27,167	19,425	15,830	22,899	85,321
Percent	31.84%	22.77%	18.55%	26.84%	100%



In past years, Learning Week also included environmental projects with representation of the local BUND branch—in 2014, a planting campaign with native perennials and shrubs, and in 2018, the construction of a wild bee hotel with appropriate plants.

The following section provides insights into the corporate environmental protection involvement of ZwickRoell GmbH & Co. KG in Ulm-Einsingen using characteristic figures and targets.

4.1. Material efficiency and conservation of resources

Material efficiency and the conservation of resources are defined as an aim in our environmental policy as follows:

- Responsible and considerate interaction with our environment and its resources in the entire process chain of operations through application of the best available technology within the scope of our business possibilities. Through participation in particular projects, it is our goal to be CO₂ neutral after the conclusion of a fiscal year.
- Before introduction, materials, methods, and products are carefully and critically tested for their environmental compatibility. Depending on requirements, customers will be informed of environmentally relevant aspects with regard to our products.
- Our production methods, systems and activities are checked for risk potential with the aim of avoiding, reducing or eliminating environmental loads in normal operation and, in exceptional situations, in the local environment.
- We participate in recycling practices.

One example of the implementation of this aim is our **machine park** in parts production. We consistently consider modernization in our annual investment planning, so that our parts production is high-quality, efficient and at the same time environmentally compatible. There is a checklist for the evaluation of safety and environmental aspects in the procurement of fixed assets and for construction measures.

Examples for modernizations in manufacturing in 2020:

- Replacement of the existing wet paint box
This project was supported by a BAFA grant (Federal Office for Economic Affairs and Export Control) due to the savings in electrical and thermal energy. In addition, we were able to significantly improve the quality, ergonomics and the efficiency in our painting processes.
- The indoor climate was also improved through an air extraction system with heat recovery and oil separation—also supported by a BAFA grant due to energy optimization of the systems and processes. Concept: Extraction of the coolant vapors at the point of origin via pipes to a central system to the outside; fresh air flows in from the outside.

A further example is **waste disposal**.

We have had an effective waste separation system in place for some time now, which is being expanded according to need and possibilities.

4.2. Energy and climate protection

For a production company, corporate growth produces increasing energy requirements. Set against this background, we feel obliged to concentrate on new technologies for improving energy efficiency and climate protection.

The main **energy sources** at the site are electricity and gas (for heating, combined heat and power plant and paint shop). After commissioning a photovoltaic system with 30 kWp in 2008 and the combined heat and power station (run on gas) in 2010, we expanded our contribution to the generation of renewable energy (power) in the following years with two additional photovoltaic systems to a total of 95 kWp nominal output (photovoltaic only).

The development of the amount of electricity generated is shown in the following overview.

Year	Total generated [kWh]
2018	635,740
2019	707,881
2020	800,759

Electricity generated in 2018-2020

Of note is the energy-efficient **air-conditioning system** installed in our server room. Special features: freecooling technology: the compressor only responds when recooling via the external temperature is insufficient. It is controlled via two heat exchangers, one on the roof and one in the server room. Efficient airflow in the server room: cold air is blown into the server cabinets and the warm air is fed to the compressor for cooling.

Our company premises include charging options for e-bikes and a charging station for electric vehicles (for customers and company cars).

In 2019, the energy audit in accordance with the Energy Services Act was again performed in the form of a comprehensive energy analysis at our location in Ulm-Einsingen.

Furthermore, additional consultation takes place in relation to energy.

Emissions

How ZwickRoell contributes to CO₂ compensation:

As a special sustainability project, we have been compensating CO₂ emissions since 2014, through the purchase of high-quality climate protection certificates.

Here, we participate in project suggestion from the Vorarlberg Klimaneutralitätsbündnisses 2025 (Climate Neutrality Alliance). Compensation in the last three years:

Year	CO ₂ compensation in tons
2018	4,888
2019	5,149
2020	5,136

Furthermore, our partners AfB gemeinnützige GmbH, a recognized non-profit inclusion company, issues us a certificate for social-ecological commitment for the disposal of IT equipment that is no longer needed. Decommissioned or discarded IT and mobile devices are professionally restored, to the extent possible, and resold.

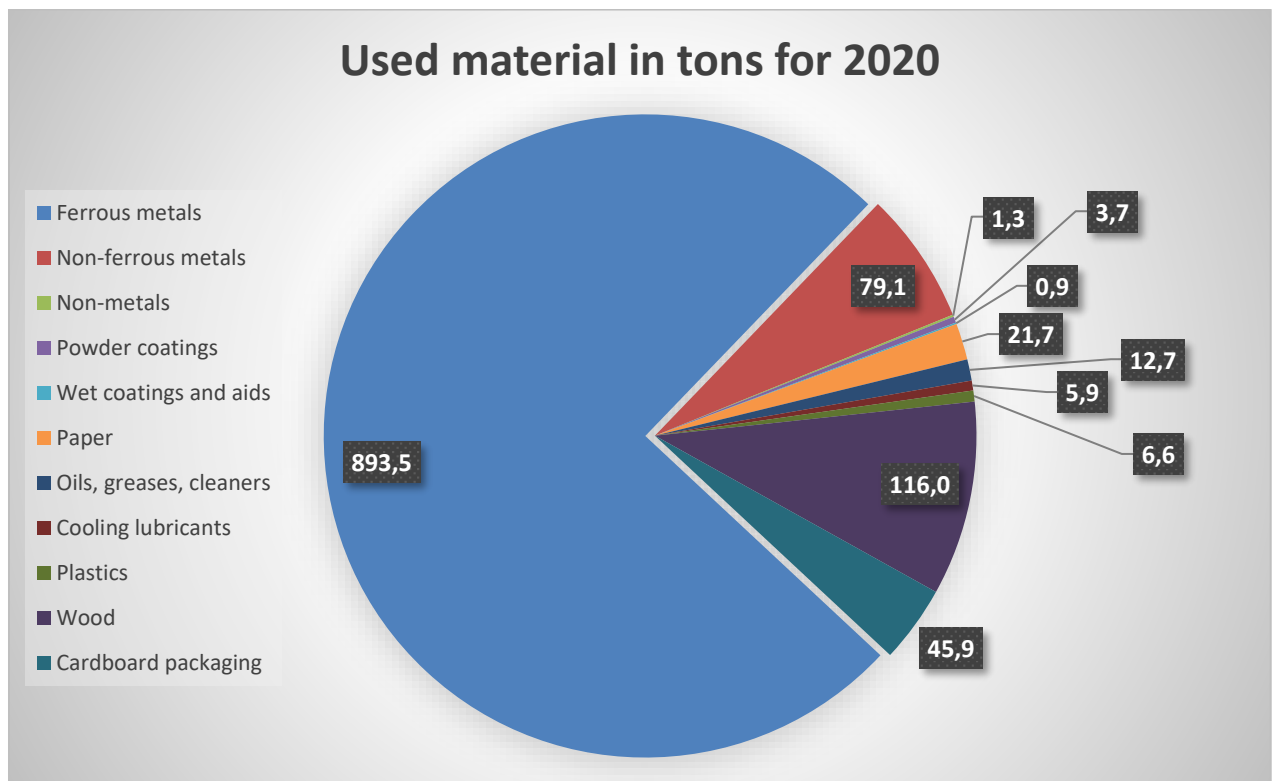
Year	Saved CO ₂ equivalent in kg
2018	12,209
2019	8,772
2020	24,058

In addition, since the end of 2010 ZwickRoell has been offsetting the CO₂ emissions generated by the management's charter flights by making a corresponding donation to atmosfair gGmbH.

4.3. Environmental statistics

The key environmental data have been compiled and internally published since 1998 in the form of an "ecological balance sheet". Below is an insight into the individual areas.

Raw materials and resources

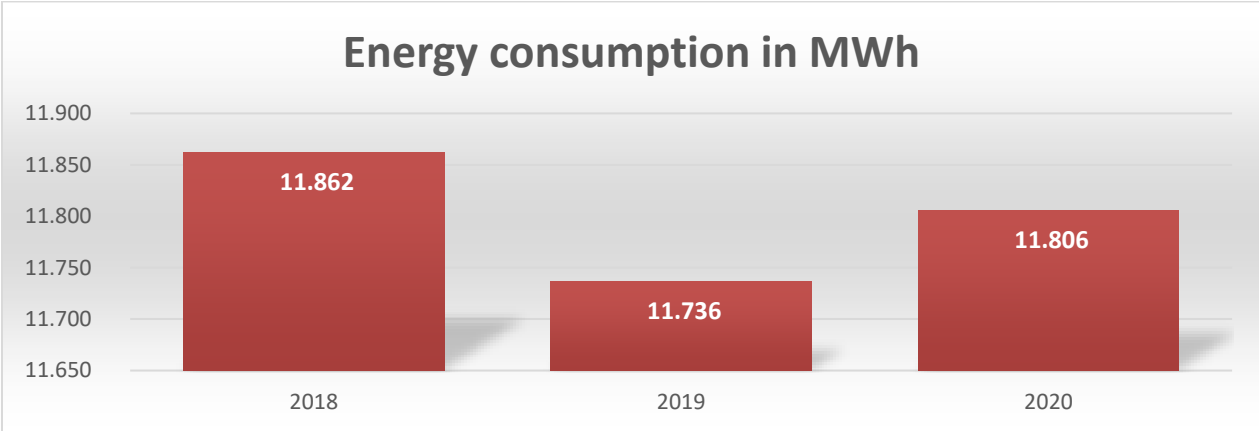


Raw materials, resources, packaging materials in tons for 2020

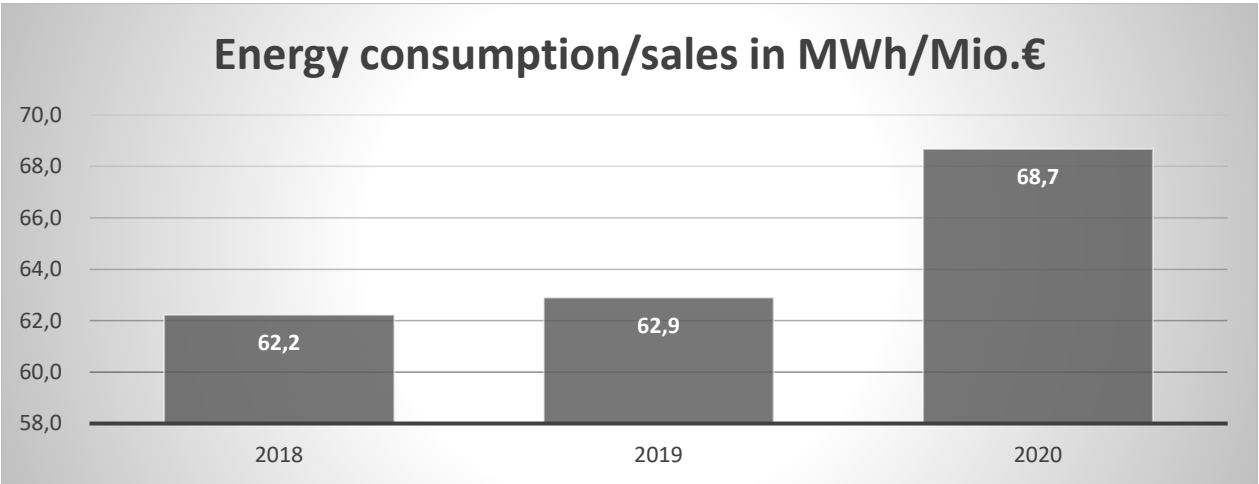
Metals represent the largest components of purchased materials.

Energy and emissions

The absolute energy consumption increases relative to company growth. In 2020, the absolute energy consumption was between the two previous year's figures.

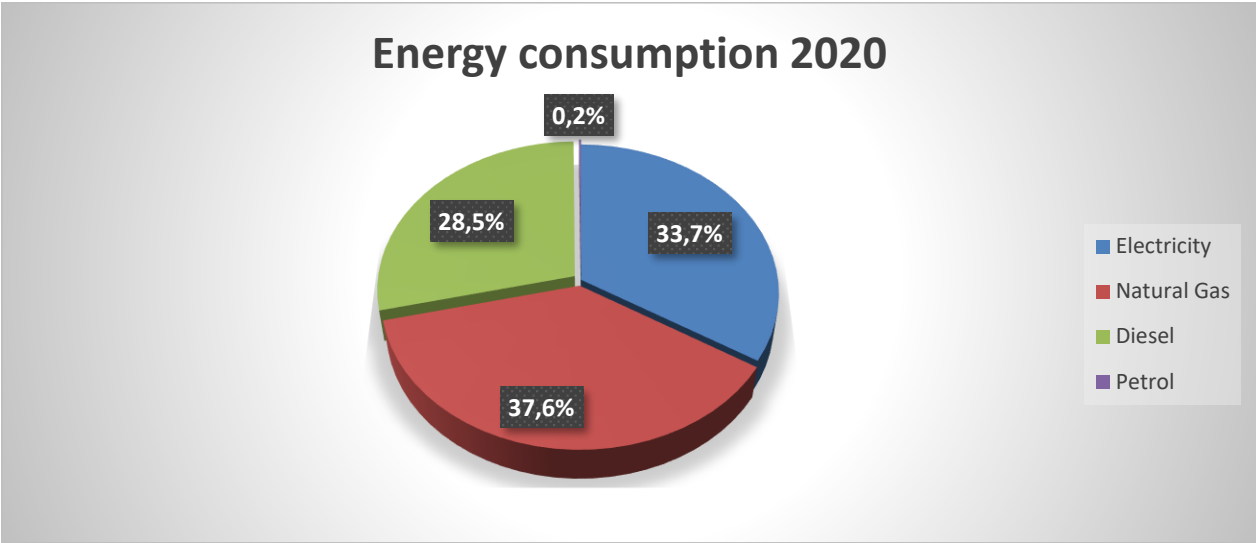


Development of absolute energy consumption 2018-2020

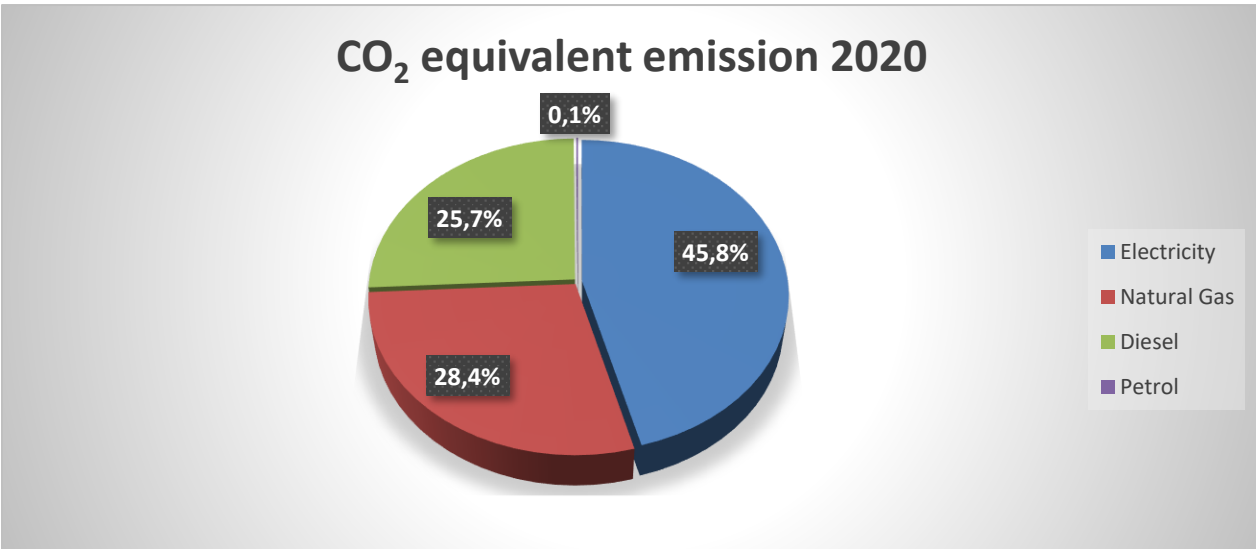


Development of energy consumption/sales 2018-2020

Energy consumption can be subdivided into three main subareas: Electricity, natural gas and diesel. Note in this regard: In terms of diesel, the entire ZwickRoell vehicle fleet is taken into account, minus estimated private trips.



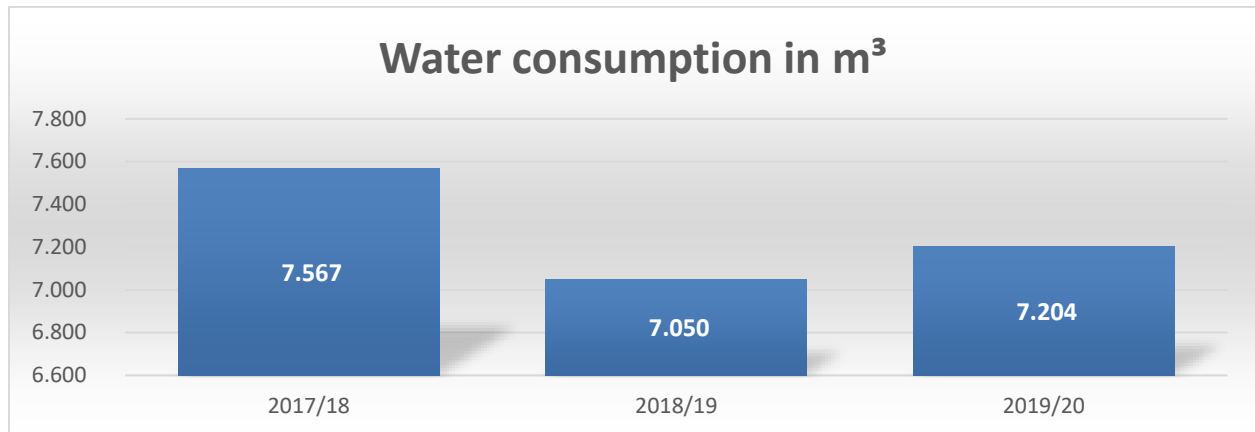
Breakdown of the energy consumption 2020



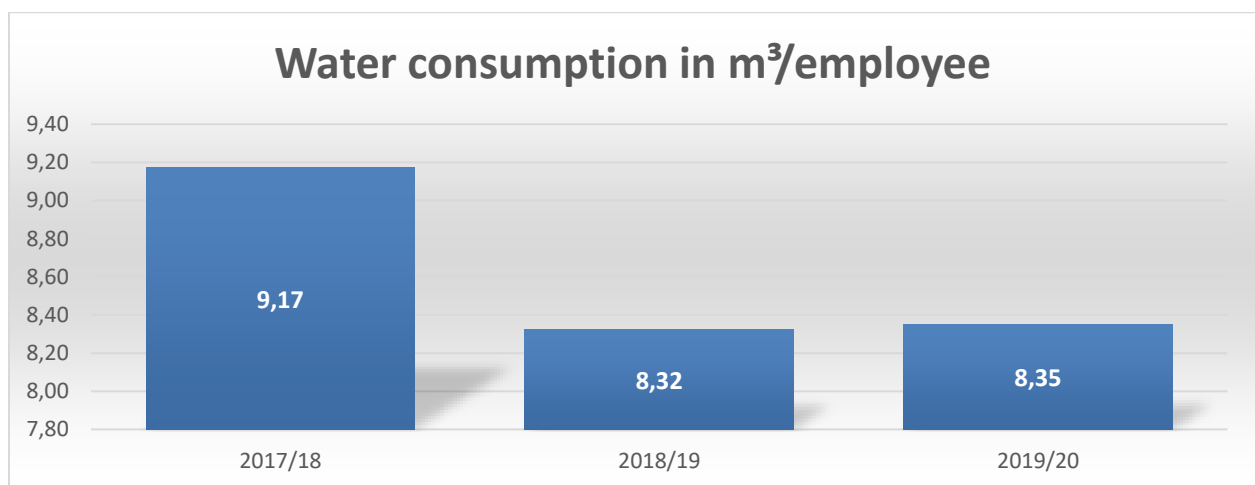
Breakdown of CO₂ emissions 2020

The largest component of **greenhouse gas emissions** is made up of the field of purchased secondary energy in the form of power. The emissions are shown in the CO₂ unit equivalents. The basis for calculation is the data of the GEMIS database, Version 4.95, of the Ökoinstitut Freiburg.

Water consumption



Development of absolute water consumption



Development of water consumption per employee

The absolute and relative water consumption show a similar course.

4.4. Outlook

Material efficiency and conservation of resources

Investment in modernization of the machine park continues to be part of the plan.

By using state-of-the-art machines and equipment, current safety and environmental standards are combined with improvements in quality and efficiency.

Waste disposal

Acquisition of further waste containers according to the Green Dot system, as required.

Energy and climate protection

- Tracking goals from the 2019 energy audit:
 - Further expansion of energy-saving LED technology in conversions or replacements
 - Further expansion of photovoltaic technology
 - Verify if implementation of energy monitoring makes sense.
- As we did in past years, we want to continue compensating the determined corporate carbon footprint through high-quality climate projects.
- Conversion to natural power from local suppliers

Nature project

We want to have bees at ZwickRoell. We chose a location on our company premises, where bee colonies will be set up and looked after by beekeepers working at ZwickRoell.

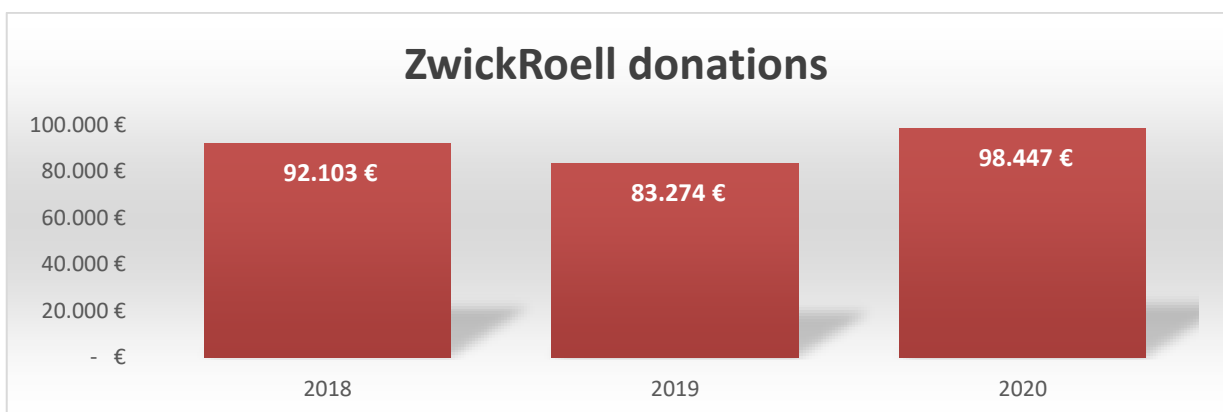


5. Social Commitment

Corporate success leads to obligations. This does not only apply with regard to our employees and customers, but also toward society. As a family-owned company with strong regional roots, ZwickRoell has worked for many years to make a positive contribution by helping people in need and encouraging young people.

5.1. Social commitment

Besides our personnel commitment to research and development, ZwickRoell supports education institutions, as well as various social projects, also in a financial manner. In 2020, donations totaled €98,446.50.



The annual donations for social facilities or projects are the result of various campaigns. With the ZwickRoell Runs the World challenge, we accumulated enough miles to donate €50,000 in 2020. An additional donation is the result of our annual Christmas raffle. The company doubles this donation.

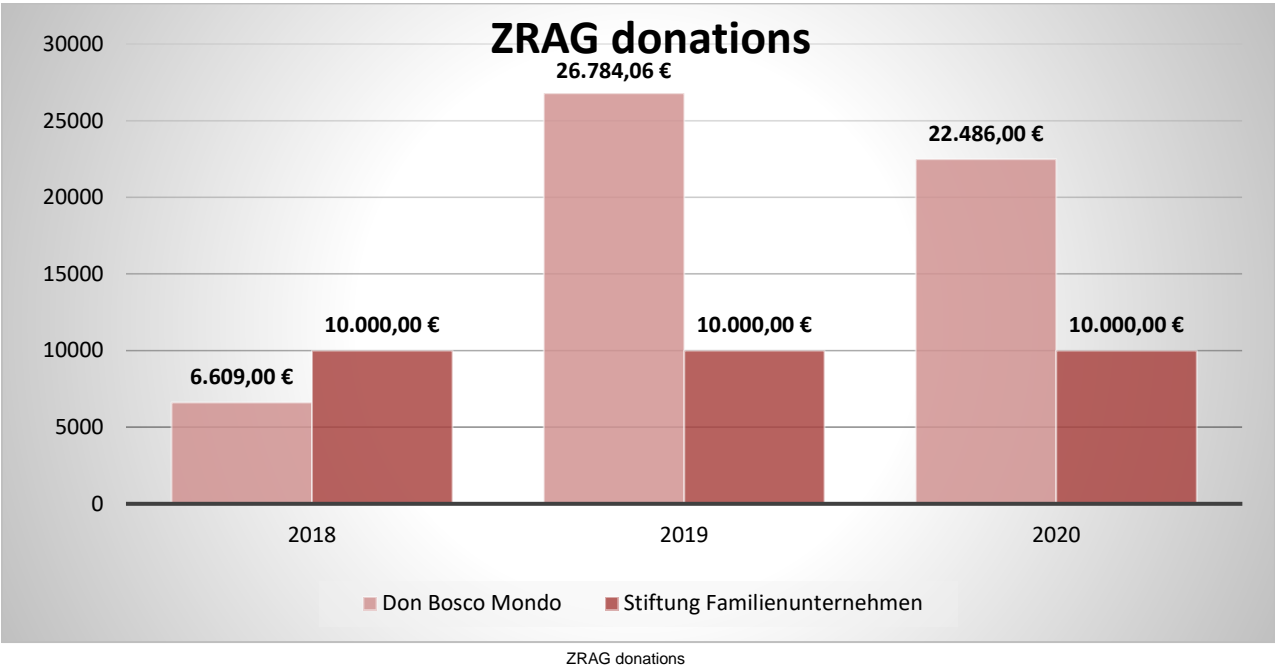
In addition, €5 is donated for every customer who participates in the ZwickRoell satisfaction survey.

ZwickRoell's social commitment is also documented by its membership in various industry associations. For example, ZwickRoell is an active member of the Ulm Chamber of Industry and Commerce.

The commitment of the ZwickRoell Group subsidiaries should also be mentioned in this context. In India, for example, ZwickRoell has played a key role in supporting the training program of the ZwickRoell Academy in Chennai since it began in 2016. The producing subsidiary ZwickRoell in Fürstenfeld, Austria, similar to ZwickRoell in Ulm, also donates €5 for every customer satisfaction survey response to the Sterntalerhof Children's Hospice. Since 2020, ZwickRoell in Spain has

been donating €3 for for each calibration survey response to the Fundación de Amigos de los Mayores organization, which works for emotional support and social participation. EMCO TEST in Kuchl, Austria donated €5,000 to the Licht ins Dunkel organization in 2014 and €1,000 to the Volksschule Golling in 2019 as part of the initiative Salzburg Begreifen. At ZwickRoell in Great Britain, a charity event is held every year for the St. Michaels Hospice for cancer patients.

ZwickRoell AG regularly donates to the “Stiftung deutsches Familienunternehmen” and to Don Bosco Mondo, the ZwickRoell Academy in India. These recipients have been supported with a total amount of €251,383.63 during a time span from 2014 to 2020.



5.2. Education and research

University sponsorships

ZwickRoell supports educational institutions to the extent possible. Model examples can be found in the home market and in ZwickRoell regions and partner sales companies worldwide. Depending on the level of collaboration, an annual calibration for ZwickRoell materials testing machines may be agreed upon at no cost, rental machines are provided for a limited (project) duration, or software upgrades are implemented at a special price. In special cases, the All-in-Suite education software is included in an upgrade at a special price. University discounts for machine purchases are considered as an active contribution to the promotion of research and science as well as of young scientists.

Around the world, there are quite a few collaboration laboratories (joint labs) at different universities. For several years, there has been a ZwickRoell Center at the IIT Delhi, which was equipped with 6 machines for special university requirements.

But also in the home market, there are many, now traditional collaboration projects, such as at the TU Munich, HS Merseburg, HS Kempten, RWTH Aachen, and more. The support of scientific projects at project-related committees and the participation in trend-setting large-scale research projects (e.g. OHLF, MaterialDigital) serve to make a social contribution to sustainable, technological developments and to adapt our own portfolio to future requirements. This is how we are currently supporting more than 10 scientific research projects in the home market alone.

Joint thematically challenging digital teaching events (e.g., McMasters Composite educational series) and active project participation in research projects round off ZwickRoell's commitment (e.g. ProFeLi or EURCAT)

Sponsorships are not limited to universities and institutions of higher learning: A Mflow loaner device was provided at no cost to the KATZ center (Kunststoff Ausbildungs Technologie Zentrum in Aarau, Switzerland) to support their training efforts. ZwickRoell machines are also promoted at other professional training centers/schools at special prices.

With some institutes, ZwickRoell also collaborates in intensive research projects that span over many years, such as with utg at the Technical University of Munich.

In addition, ZwickRoell supports students and their apprenticeships with the supervision of qualification theses (Bachelor/Master/Diploma) and with digital illustrative material in the form of webinars.

Electrification

Within the scope of our collaborations, our machines are used to support research projects on lithium-ion battery technology, with the goal of increasing the aging resistance of battery cells. The intention is to increase the service life so long that the cells do not have to be replaced or renewed throughout the service life of the vehicle (service life of up to 15 years). In addition, longer second-life operation is also expected.

Fuel cells

We are working with an industry partner on testing solutions and methods that support a ten-fold increase of the service life of fuel cells. This is intended to increase the service life up to 30,000h in commercial vehicles (today approx. 3,000h) For this, the mechanical strength of fuel cell components (gas diffusion layers, bipolar plate) must be permanently increased.

Determination of the edge tear strength of high-strength vehicle sheet metals

With a new test method for the determination of the edge tear strength, the time and effort needed for specimen preparation can be significantly reduced. The goal is to machine less specimens and spend less time and effort on the crack introduction and the test. This method is to be standardized as a CEN standard in the foreseeable future and can thus reduce raw material and energy requirements in sheet metal processing in a broad industrial application.

ZwickRoell forums

ZwickRoell hosts information events at universities in collaboration with the corresponding faculties, at regular intervals. The aim of these events is to present current developments in materials testing and research to a wide audience.

5.3. ZwickRoell Science Award

Since 2009, ZwickRoell GmbH & Co. KG has presented the ZwickRoell Science Award to young scientists for outstanding, quality-assured publications on innovations in materials testing. These are related to new test methods, clever analyses or virtual testing concepts. The winner is awarded a prize of €8,000 and the Paul Roell medal.

A three-person international jury of scientists chooses the top three publications from the works submitted, all of which were pre-screened and shortlisted by the respective industry managers according to SAE Guidelines for the Journal Paper Review.

In the following year, the winners are awarded their prizes in the context of Academia Day organized by ZwickRoell. During this conference, the prize winners are given the opportunity to present their scientific discoveries to an international audience in the context of a technical symposium with other scientists. In 2021, more than 270 publications from 24 different countries were submitted for the ZwickRoell Science Award.

Past venue locations for the prize award ceremony include the RWTH Aachen, the TU Munich, Manchester University, Universidad Rey Juan Carlos de Madrid and the Tongji University Shanghai.

5.4. ZwickRoell Academy in Chennai

Under the slogan "New perspectives for Young People in Chennai", we have been offering a special program in collaboration with Don Bosco Mondo e.V. (a non-governmental organization) since 2016. The objective is to help young people with very limited opportunity to a good education, learn a helpful skill that will allow them to change their own lives. With the support of two trainers, up to 12 students a year are trained at the ZwickRoell Academy to become successful machine operators. Once the training is complete, they are supported in finding a corresponding job.

5.5 Outlook

Education and research

In 2021, we will open the University of Zhejiang & ZwickRoell Advanced Materials Lab, another collaboration project with a university.

ZwickRoell will continue to support current research projects with our materials testing expertise.

Standard-related involvement

ZwickRoell employees are represented in numerous national and international standards committees around the world and in some cases assume responsibility for management tasks within the working groups. We consider our contribution a sustainable advocacy for reliable test results worldwide. In this sense, we are providing a service for the improvement of the measurability and comparability of mechanical values. With that, we support the maintenance of international quality standards in an ever-increasing global market.

ZwickRoell Science Award

For 2022, the TU Vienna will be the next host for the symposium entitled “Linking microstructure to macroscopic properties”. Seven renowned international scientists have been invited to speak on this topic, which is particularly relevant to additive manufacturing. Each of them will present a paper on the topic from their own perspective. The event, which will take place in Vienna in June 2022, will be framed by the ZwickRoell Industry Day and the High Temperature Days events, and therefore, there are high expectations regarding the arrival of an international audience, and rightly so.

ZwickRoell Academy in Chennai

Moving forward, the training program at the ZwickRoell Academy in Chennai will continue to be implemented with 12 students per year. We will continue to invest in equipment at the academy, to keep it in state-of-the-art condition.