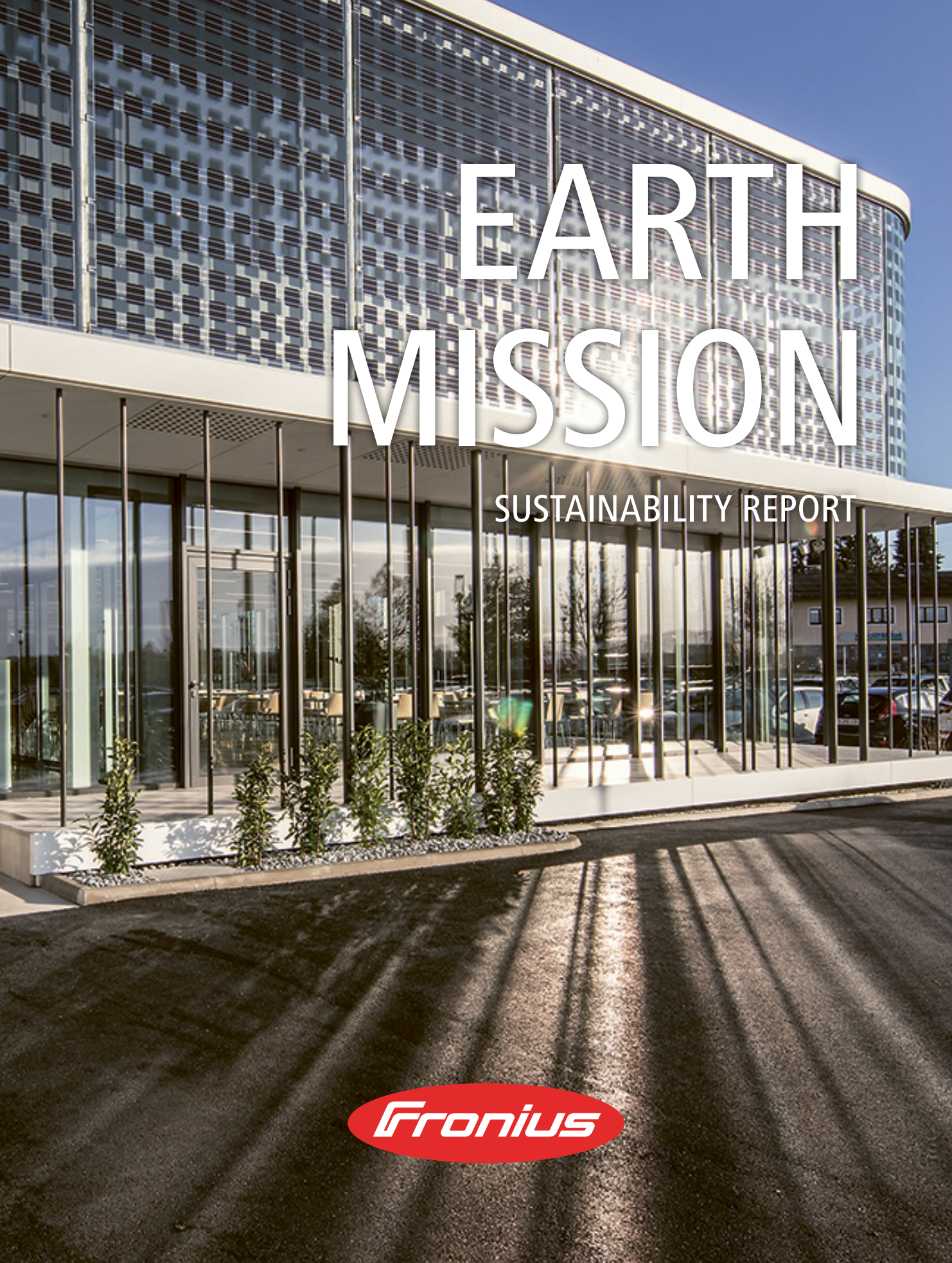


EARTH MISSION

SUSTAINABILITY REPORT

Fronius

© Fronius International GmbH

Version 6 (04/2021)
Corporate Sustainability – Facility Safety
Prepared by: Linette Viertelhauzen, Katrin Helmberger

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Content orientation:
Based on GRI standards

Reporting period: 2020
The sustainability report is published once a year.
Date of last sustainability report: 04/2020

/ For the sake of legibility, the male form is used throughout this text.
Of course, this always refers to persons of all genders.

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Dear Readers,

The Corona pandemic has brought about a global transformation that has affected the three pillars of sustainability – namely social, ecology, and economy – to an equal extent. Reduced travel has indeed had a positive impact on the climate but has changed the personal relationships with our business partners. It is not up to us to analyze this in greater detail; all we can do is look after our employees and provide the best possible support in shaping the changes we are experiencing.

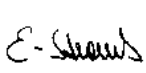
One of these changes is the increase in digital networking, which we are approaching in two ways. Firstly, we have created an additional platform on our website under the menu item "Sustainability" and programmed a dedicated microsite for this key corporate value. Here you will find all the information relating to our sustainability concept, the framework for which is provided by our FRONIUS EARTH MISSION. Secondly, you can now click your way through the latest edition of our sustainability report, which we have published for the first time in digital form only and which can therefore also be accessed via your smartphone at any time.

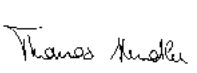
The crisis has again demonstrated that we are on the right path in terms of our strategy and that it is vital that we maintain the strong solidarity within our family company. We are also absolutely convinced that responsible development is far more important than short-term gain. After all, we want our world to be a good place to live, with an intact social, ecological, and economic network, both for us and for future generations.

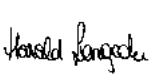
> The sustainability report examines all of these aspects in detail and provides an insight into our environmentally friendly, social, customer-focused, and health-promoting activities and projects.

While the new microsite provides a basis for this, the report is intended as a reference work that provides specific figures, data, and facts relating to the last fiscal year. It is worth taking a closer look.

On that note, we hope you enjoy the read!


Elisabeth Engelbrechtsmüller-Strauß


Thomas Herndler


Harald Langeder


Volker Lenzeder



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PASSION FOR NEW TECHNOLOGIES, INTENSIVE RESEARCH, AND REVOLUTIONARY SOLUTIONS: THE ETHOS OF FRONIUS SINCE 1945.



FORWARD-LOOKING FOR MORE THAN 75 YEARS

When Günter Fronius developed the first battery charger in 1945, he laid the foundation on which Fronius stands: the continuous search for forward-looking solutions to the technical challenges of our time. Since then, we at Fronius have been continuously researching new technologies for converting and controlling electrical energy for welding technology, photovoltaics, and battery charging technology.

Exclusive look behind the scenes with owner families Strauß and Fronius.

IN PROFILE:
OUR BRAND

Fronius stands for new technologies, intensive research, and revolutionary solutions. With a tireless inventive spirit and deep-rooted quality awareness, we are always pushing the boundaries of what is possible in the fields of welding technology, photovoltaics, and battery charging technology, and setting trends that change the market. We combine the values of a truly local family company with the visions of an international high-tech enterprise.

COMPANY FIGURES AS AT DECEMBER 31, 2020

36
international Fronius companies

Sales partners/ representatives in more than
60
countries

5,660
employees in the Group

137
trainees

1,321
active patents

849
million euros Group sales

92 %
export rate

THE BUSINESS UNITS

The focus of the Business Unit Perfect Welding is on producing the perfect arc for a consistently high welding quality. Our Business Unit Solar Energy is tasked with the reliable and extensive supply of energy from renewable sources. And the Business Unit Perfect Charging is responsible for the intelligent and cost-effective charging of drive and starter batteries.

THE PRODUCTS

The innovative products from Fronius are characterized by sustainability, increase both productivity and energy yield, and reduce operating costs. This allows our customers to make huge technological advances, thereby creating the foundations for trust and satisfaction for many generations to come.



/ Harald Langeder / Elisabeth Engelbrechtsmüller-Strauß / Volker Lenzeder / Thomas Herndler

Fronius is divided into company-wide areas of responsibility, which are headed by the four members of the management board. CEO Elisabeth Engelbrechtsmüller-Strauß holds the highest position within the company. She is the granddaughter of the company's founder and is the third generation to take up the reigns.

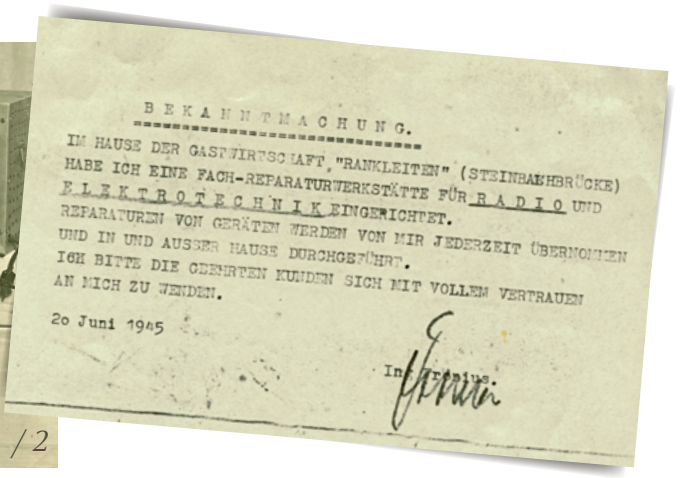
FINANCE	HUMAN RESOURCES	BUSINESS UNITS	CORPORATE COMMUNICATIONS

Elisabeth Engelbrechtsmüller-Strauß (CEO / CFO / CSO)

OPERATIONS	RESEARCH & DEVELOPMENT	CORPORATE SERVICES
Thomas Herndler (COO)	Harald Langeder (CTO)	Volker Lenzeder (CIO)


/ 1


/ 2


BEKANNTMACHUNG.

IM HAUSE DER GASTWIRTSCHAFT "RANKLEITEN" (STEINBACHBRÜCKE)
HABE ICH EINE FACH-REPARATURWERKSTÄTTE FÜR RADIO UND
ELEKTROTECHNIK EINGERICHTET.
REPARATUREN VON GERÄTEN WERDEN VON MIR JEDERZEIT ÜBERNOMMEN
UND IN UND AUSSER HAUSE DURCHGEFÜHRT.
ICH BITTE DIE GEEHRTEN KUNDEN SICH MIT VOLLEM VERTRAUEN
AN MICH ZU WENDEN.

20 Juni 1945

In

FRONIUS:
A HISTORY OF SUCCESS

FIRST STEPS

The history of Fronius began in 1945. In those days, charging vehicle batteries was not a simple matter - something that Günter Fronius was unable to accept. He began by repairing electrical appliances and built his first battery charger with 50 Hertz technology. The first company headquarters of the “Specialist repair shop for radios and electrical equipment” was an old military shed in Ranklleiten, Pettenbach. This was also where the Fronius family lived. With a small workshop next to the living room and his first employee, Andreas Schinker, Günter Fronius laid the foundations for an international enterprise.

YEARS OF GROWTH

In 1950, Günter Fronius expanded his product range to include welding transformers. Building on this technological basis, over the following decades Fronius grew into a substantial medium-sized company, which Günter Fronius sold to his children, Brigitte Strauß and Klaus Fronius, in the early 1980s. They launched a program of growth and international expansion that led to the founding of subsidiaries all over the world. In 1992, the decision was also made to focus on solar energy as a “technology of the future”. And so, today, Fronius stands on three solid pillars: Perfect Welding, Solar Energy, and Perfect Charging.


/ 3



/ 4


/ 5

1 / The first company headquarters of the "Specialist repair shop for radios and electrical equipment" was an old military shed.
2 , 4 / The first Fronius products 3 / Master Schinker with the Express battery service 5 / Günter Fronius developing the company single-handedly

SHAPING THE FUTURE



Photos from top: Founders Friedl and Günter Fronius, Elisabeth Engelbrechtsmüller-Strauß, Brigitte Strauß & Klaus Fronius

The program of geographical and technological growth introduced by Brigitte Strauß and Klaus Fronius has continued to this day. Fronius is already represented in more than 36 countries with subsidiaries and in more than 60 countries with sales partners and representatives and is widely recognized as an innovation and technology leader. The granddaughter of the company's founder, Elisabeth Engelbrechtsmüller-Strauß, has managed the company since 2012. For all these years, however, the goal has remained the same:

TO BUILD A SUSTAINABLE FUTURE THROUGH INNOVATION, TOP-QUALITY PRODUCTS, AND EXCEPTIONAL SERVICE.

SUSTAINABLE SITE DEVELOPMENT

The fact that we are continuously growing means that we need more space. To ensure that we use this space as effectively as possible while protecting the environment, we consistently use alternative energy, heating, and cooling systems. We also make use of existing resources when it comes to site development.

STEINHAUS

With the purchase of an additional production hall in Steinhaus, we have expanded our operating area by 6,500 m². The heating system at the new site has been renovated and the building now features pellet heating, a photovoltaic system, and state-of-the-art LED lighting. It recently became home to the Automation division of the Business Unit Perfect Welding.

Fronius is now using the building previously occupied by the Automation division to bring together all activities relating to hydrogen technology under one roof. Following minor renovations, we are making use of existing resources as well as environmentally friendly technology in the form of a photovoltaic system and pellet heating and we even reuse the waste heat from the laboratories. The new Hydrogen Competence Center will also soon feature an improved version of the Fronius Solhub.
This is a decentralized hub for solar energy that is able to generate, store, and provide green hydrogen for mobile applications or to convert it back into electricity and heat.



Steinhaus



Thalheim bei Wels



Pettenbach /
The energy supply to the company headquarters is provided by regenerative energy sources.

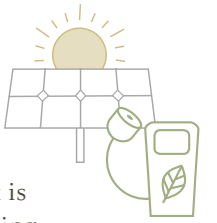
PETTENBACH



In Pettenbach – the market town where our success story began more than 75 years ago – renovation work on the oldest existing Fronius facility is further proof of our commitment to sustainable investments. Once home to a copper smithy, it is the place where our first series products were produced many years ago. Having remained unused for a long time, state-of-the-art flooring and sanitary facilities, freshly painted walls and windows, and additional lighting and cabling have brought the building out of the 1960s and created a fresh new home for process technology.

State-of-the-art, environmentally friendly technology is also used at the company headquarters in Pettenbach, where the Accounting and Controlling departments are also based. The office building is clad with pre-fixed, rear-ventilated, and semi-transparent photovoltaic modules, which reduce direct sunlight and thereby decrease the cooling load. Any unnecessary energy consumption is also counteracted by the automatic regulation of shading, cooling, heating, and lighting in the seminar rooms.

THALHEIM BEI WELS



The Fronius R&D site: This is where innovations are born, software solutions are put through their paces, and every product is thoroughly tested. All of the energy required for heating and cooling the building is provided by regenerative energy sources and is therefore CO_2-neutral. Thalheim is also home to one of the largest geothermal fields in Europe with a total probe length of 41 kilometers. This is connected to heat pumps, which are of course operated with PV power we have generated ourselves.



Sattledt / Manufacturing and logistics facility with a roof-mounted photovoltaic system that generated more than 1,000 MWh in 2020.



Wels / The historic brick buildings have been renovated to the highest standards of energy efficiency and can therefore remain in use.







SATTLEDT

Sattledt is home to the 45,000 m^2 Fronius production and logistics site. The roof of the building supports a large photovoltaic system. In 2020, this generated more than 1,000 MWh of electricity, enough to cover the energy requirements of around 250 households. Heating requirements are also covered by a biomass power station as well as two geothermal systems, thereby guaranteeing CO_2 neutrality.

WELS

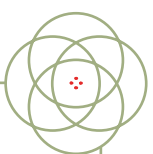
We oversee all of our international marketing and sales activities from our site in Wels. In the late 1980s, we restored a former company site and gradually designed it to be more sustainable. The active energy construction, a photovoltaic system, and the use of geothermal energy for CO_2-free cooling and heating produces the necessary energy.
One section of the facade has also been designed as a green vertical garden. What's more, the lights in Wels all go out at a set time.
This creates an energy saving potential of 10,000 kWh per year.
Thanks to these and various other measures, we are able to reduce our basic power consumption (adjusted to reflect increasing production quantities). In 2020 this reduction amounted to around 4 %.

OUR CORE VALUES:
FRONIUS WAY 4.1

What distinguishes Fronius? Around 30 employees tackle this question regularly in cooperation with the management board. They work together and on behalf of everyone to adapt the "Fronius Way" – our corporate philosophy – to the latest developments.

The editorial teams focus on the core values of the company as well as relevant developments in society as a whole. Working together with the management board, they adapt the content of the Fronius Way. This ongoing process materializes in the form of regular updates.

The members of the editorial teams also act as master trainers. As the carriers of knowledge and culture, they instill the Fronius values and philosophy in new employees as part of their induction into the company. This immerses new colleagues into the corporate culture from day one.



IKIGAI (JAPANESE):
THE MEANING OF LIFE.
The feeling that describes why we get up in the morning.

THE FOUNDATIONS FOR THE WAY WE WORK

Our corporate philosophy is based on the Japanese principle of Ikigai. During its development, the company asked itself four central questions:

- / WHAT DOES THE WORLD NEED FROM US?
- / WHAT ARE WE ESPECIALLY GOOD AT?
- / WHAT DO WE GET PAID FOR?
- / WHAT MAKES OUR HEART BEAT?

The answers to the above questions form the basis for our "company spirit", in other words the philosophy according to which we operate.

WHERE IS THE FRONIUS WAY TAKING US?

The latest version of our philosophy – Version 4.1 – has been expanded to include, among other things, environmental changes that will affect Fronius in future.
These include the use of hydrogen as an energy carrier as well as the globalization of goods flows and value creation chains and the use of artificial intelligence.

WHILE THE DETAILS ARE CHANGING ALL THE TIME, THE CORE VALUES OF THE FRONIUS WAY REMAIN THE SAME.

These corporate values have been shaped throughout the company's 75-year existence and form the basis for our everyday work:



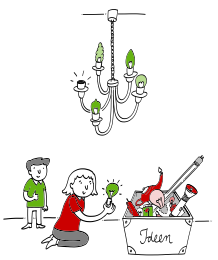
SUSTAINABILITY

... is at the heart of what we do. We make socially, ecologically, and economically responsible decisions that will have the best possible impact on everyone involved and the environment in the long term.



QUALITY AWARENESS

... shapes our attitude. We are not satisfied until every screw fits properly. We are continuously striving to optimize our processes, skills, and products.



INNOVATION & CREATIVITY

... are what drive us. Whether the ideas are grand or small, we move forward together and promote the development of new solutions every day.



COST EFFECTIVENESS

... pays off. The conscious use of funds means we can invest our resources with future use in mind.



COMMUNITY

... connects us. Fronius is a family company. Every employee is a valued member of that family. We follow the Fronius Way together.

The Fronius Way 4.1 is not only our foundation; it is also the starting point for the further development of the entire company at both strategic and operational level: our Fronius vision of the future.

SUSTAINABILITY STRATEGY

Sustainability is one of our corporate values. We develop sustainable and innovative solutions for our customers while striving to make a positive contribution to the environment and society. This is how we can guarantee long-term economic success.

Our sustainability management is led centrally by the Corporate Sustainability team in close consultation with the management board. The interdisciplinary further development of sustainability matters and the distribution of activities takes place in the Fronius Corporate Sustainability Desk network. To ensure that sustainability is firmly anchored in all areas of the company, Fronius decided to introduce a Corporate Social Responsibility (CSR) management system in accordance with ISO 26000. The company-wide sustainability strategy is based on the materiality matrix as well as the issues that make the greatest contribution to sustainable development. We have identified the following fields of action:

DECARBONIZATION

Climate change continues, the average global temperature is increasing, and extreme weather events are becoming more frequent. The Paris Agreement was adopted during the 2015 UN Climate Change Conference with the objective of mitigating climate change. Its goal is to keep the increase in global warming to below 2°C. To achieve this, CO_2 emissions caused by humans must be reduced. Fronius takes its responsibility seriously and has made the reduction in direct and indirect CO_2 emissions a priority in order to make a clear contribution and counteract climate change. *(For more details, refer to the chapter "Ecological responsibility" on page 66.)*



SUSTAINABLE PRODUCTS AND SERVICES



Our innovation and research activities enable us to develop sustainable solutions for our customers. As a production company, we must take into account the entire value creation chain if we are to improve our sustainability performance. *(For more details, refer to the chapter on "Research & Development" on page 34)* The social conditions our suppliers are operating in have a huge impact on both society and the local economy. We have strict requirements and work closely with our partners. *(See also "Upstream value creation" on page 41)*



CREATING AWARENESS

Fronius' contribution to sustainability can only be as great as the sum of the contributions of all our employees. We therefore have many ways of creating awareness to ensure we are working together to consciously make a difference. *(For more details, refer to the chapter on "Employee development" on page 60.)*

INFRASTRUCTURE DEVELOPMENT AND INVESTMENTS

When making decisions, we need to take all three dimensions of sustainability into account in order to ensure that these are made responsibly and with foresight. Defined processes support us in understanding the social, ecological, and economic impacts of infrastructure development and investments and enable us to act accordingly.



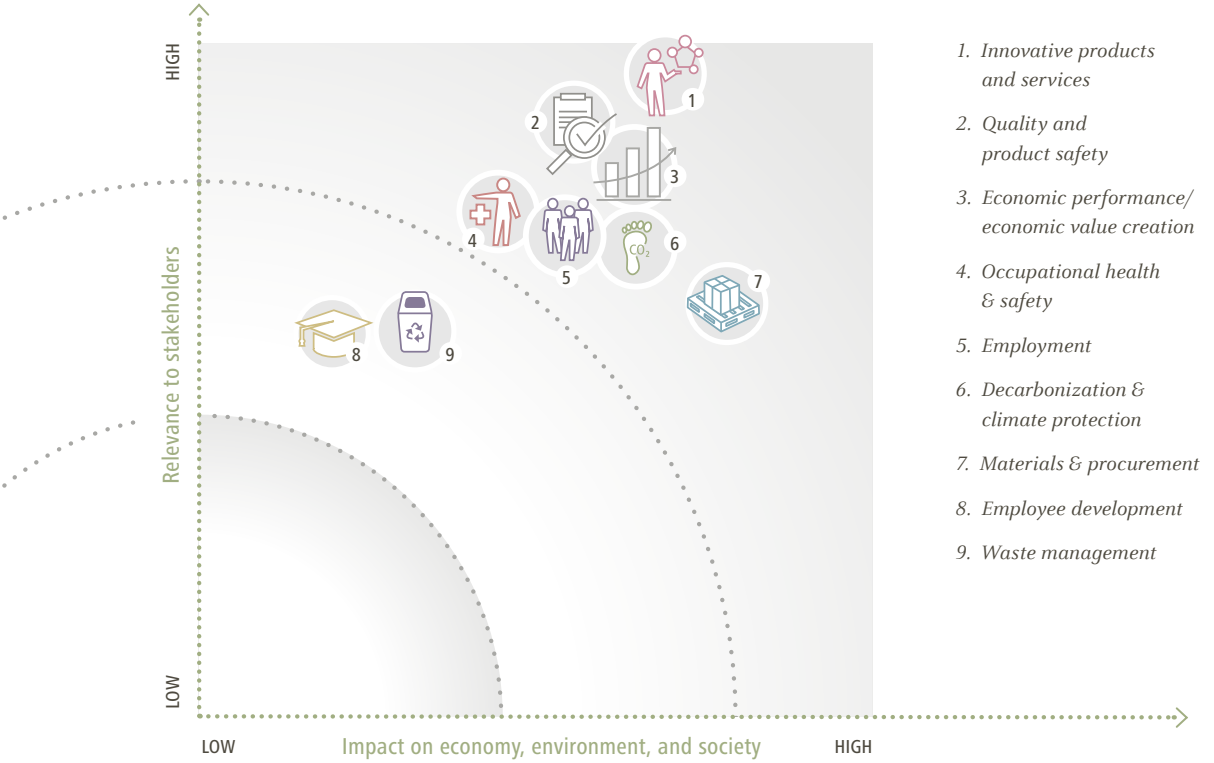
MATERIALITY MATRIX

To enable us to identify issues relevant to Fronius, we have critically reviewed our materiality matrix through internal workshops. The dimensions of the materiality matrix were updated in 2020 in accordance with the GRI standards. The materiality matrix illustrates the effects on the environment, society, and economy *(see x-axis),* and the relevance to stakeholders *(see y-axis)*. The weighting of the sustainability issues has been updated in accordance with their impact on the environment, society, and economy. In comparison with the materiality analysis of 2019, no issues have been eliminated, but simply renamed/summarized differently to reflect the current internal and external situation.

THE MAIN CHANGES INCLUDE:

/ The issues of energy and emissions are now summarized under decarbonization & climate protection.
/ The subject of waste management is considered as a separate issue in order to underline the relevance to Fronius.

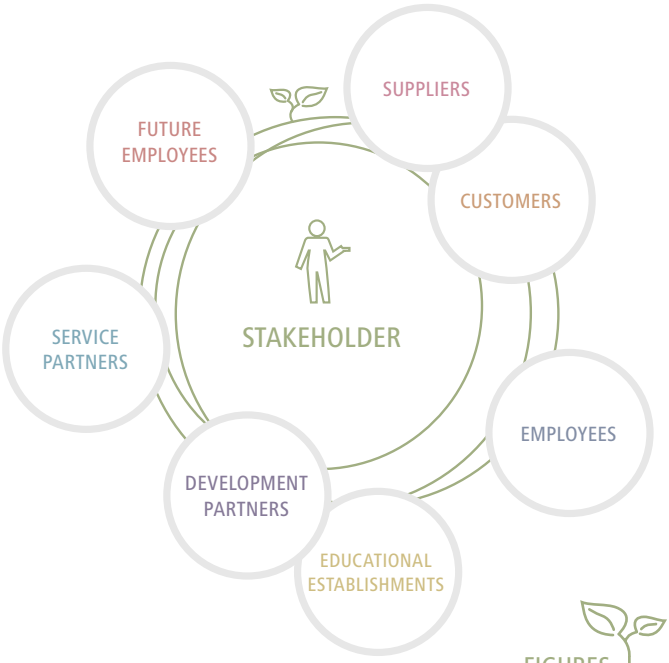
The impact on the assessments and decisions made by our stakeholders is based on regular dialog and exchange via various communication channels, at events, and in other settings. Our most important stakeholders include employees, the management board, customers and suppliers, development and sales partners, and public authorities.



1. *Innovative products and services*
2. *Quality and product safety*
3. *Economic performance/ economic value creation*
4. *Occupational health & safety*
5. *Employment*
6. *Decarbonization & climate protection*
7. *Materials & procurement*
8. *Employee development*
9. *Waste management*

IN DIALOG WITH OUR STAKEHOLDERS

Open and constructive exchange with key stakeholders is extremely important to Fronius. By engaging in dialog, we can identify relevant and sensitive topics from which we can draw important conclusions as to how we should operate. We use workshops, surveys, expert consultations, and participation in initiatives to involve our stakeholders as much as possible.



VIRTUAL TRADE FAIR

With the introduction of a virtual trade fair, the Business Unit Solar Energy is breaking new ground when it comes to engaging in dialog with customers, installers, journalists, and other interested parties. A virtual stand provided insights into the comprehensive solutions portfolio from Fronius. Each visitor was personally shown around the exhibition, just as if they had been there in person. The information was presented by means of interactive panels and ranged from technical presentations through to press conferences. The stand was available in a total of eight languages.



FIGURES

approx. **9,000** VISITORS from 91 countries

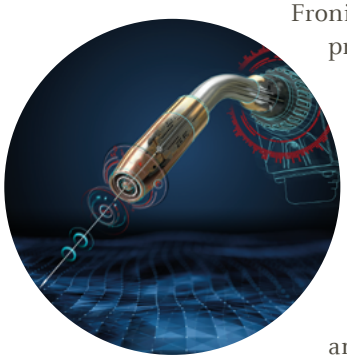
30 KEYNOTE SPEECHES in 7 languages

85 GUIDED TOURS in 19 languages

4 PRESS CONFERENCES

JOINT FURTHER DEVELOPMENT

Intensive cooperation between global enterprise Magna Steyr and Fronius Perfect Welding has resulted in the market launch of WireSense. The automotive supplier was faced with a specific welding challenge that involved a considerable amount of additional work. With the development of the WireSense robotic assistance system, Fronius has revolutionized production technology. Once we had been able to test the prototype of a welding wire sensor in Magna's production facilities, we could optimize the production processes on site and launch WireSense on the market in 2020.





Another example of joint further development comes from the Fronius Perfect Charging series. Working in close partnership, we implemented a new charging solution in the central warehouse of wood wholesaler Behrens Group. We found an innovative solution to the regular power failures caused by unwanted load spikes, which has considerably reduced costs while guaranteeing a longer service life of the drive batteries. This was also tested in combination with a photovoltaic system containing Fronius inverters. The self-generated solar power can now be used directly at source to operate the company's forklift fleet.



1,409

webinars with over 100,000 registrations in the Business Unit Solar Energy



DIGITAL COMMUNICATION

The widespread travel restrictions throughout 2020 made it extremely challenging for us to stay in contact with our stakeholders throughout the world and share our expertise. Many in-person events have moved to online webinars, which has actually been beneficial in many ways. The reduction in business travel has reduced our CO_2 emissions significantly and extended our reach massively. The Business Unit Solar Energy saw record figures of more than 100,000 registrations for a total of 1,409 webinars. The efficiency of training provided by the Business Unit Perfect Welding has also increased dramatically. Instead of six participants at an on-site training event, some virtual courses were attended by up to 150 participants.



COOPERATION WITH EDUCATIONAL ESTABLISHMENTS

Fronius maintains various different relationships with a number of Austrian educational establishments. Encouraging and supporting pupils and students, building an extensive network, and engaging young people in our company at an early stage are extremely important to us. We want to build a bridge between theory and practice and make an active contribution to the future of the younger generation.

In 2020, we were unable to hold our events in the usual manner due to the Corona restrictions. In spite of this, we were able to host an “Expert Lounge” with the Uni Management Club Linz, to name one example. Here, students from an university in Linz met Fronius experts online to discuss the subject of “Gamechanger Sustainability”.

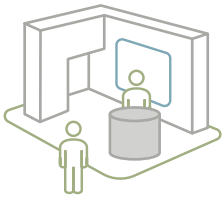
Fronius is also the sponsor of a business IT class at the technical colleges in Vöcklabruck and Grieskirchen. We support the students all the way through to their final exams and help identify joint priorities to prepare the next generation for the needs of the economy.





Coding
Contest trophy



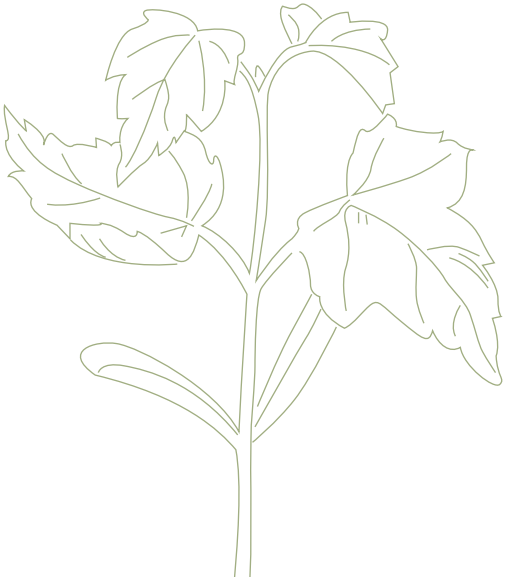


"JUGEND & BERUF" TRADE FAIR

In 2020, our initial contact with potential apprentices took place exclusively online. The "Jugend & Beruf" trade fair provided the perfect framework for this, whereby the young visitors were guided through the various info stands virtually for the first time. Specially created videos, the live chat with members of the apprentice training team, and an extensive range of information drew large numbers of future specialists to the digital Fronius stand. And the best thing of all: all of the content is still available at digi.jugendundberuf.info.

CODING CONTEST

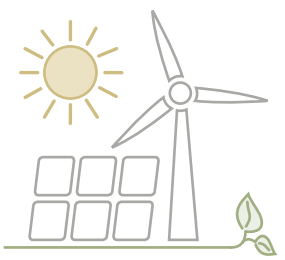
The Cloudflight Coding Contest, which usually takes place on our premises, also moved online this year, and Fronius was there as the digital host. Our objective: to inspire new talent from the local community. The victory went to an experienced expert who, among other things, teaches programming to young people in the so-called CoderDojo. He surprised us not only by taking 56th place out of a total of 1,419 participants from around the world, but also by donating his prize of 300 euros to aspiring programming professionals.



GOALS FOR SUSTAINABLE DEVELOPMENT

On September 25th, 2015, the "Agenda 2030 for Sustainable Development" was adopted by all 193 member states at the United Nations Summit in New York. The agenda, with its 17 Sustainable Development Goals (SDGs), is a universal call for action to combat poverty, inequality, and climate change.

Fronius has recognized the ecological and social impacts of its business operations. We are working on prioritizing our contribution to the SDGs based on direct and indirect impacts.



FRONIUS IS AWARE OF ITS CORPORATE RESPONSIBILITY AND IS MAKING A PROACTIVE CONTRIBUTION TO THE FOLLOWING GOALS:



SDG 7: AFFORDABLE AND CLEAN ENERGY

Fronius is in a position to make a particularly positive contribution to this goal. The Business Unit Solar Energy develops solutions for generating and using solar energy both efficiently and intelligently. Covering 100 % of the entire energy demand using renewable sources around the clock and throughout the year requires an efficient interplay between the different energy sectors of power, heat, and mobility. Hydrogen will play an important role in this, which is why Fronius is researching various applications and components to generate and store green hydrogen from PV power.





SDG 9: INDUSTRY, INNOVATION AND INFRASTRUCTURE

Our continuous growth is evidenced by increasing production volumes, the ongoing expansion of production facilities, and the growing number of employees. We play a huge role in the local economy and procure most of our goods from Austria and Europe. Innovation is an important source of motivation for Fronius to offer even more efficient and resource-conserving products and solutions to our customers.



SDG 13: CLIMATE ACTION

At Fronius, we are continuously striving to increase the energy efficiency of our buildings and processes. By using renewable energy sources such as geothermal energy, biomass, and photovoltaics for heat and power, Fronius is making an important contribution to Goal 13 “Climate Action”.



SDG 12: RESPONSIBLE CONSUMPTION AND PRODUCTION

Our products are durable, repairable, and resource-conserving throughout their total life cycle. We make conscious decisions with regard to origin, environmental sustainability, and recyclability when selecting materials and components. The devices undergo a series of tests to ensure that they have a long service life, even under harsh conditions.

SDG 8: DECENT WORK AND ECONOMIC GROWTH

The health of all employees is paramount to Fronius. All employees have access to medical examinations and advice from occupational physicians. Various campaigns and info materials make an important contribution to creating awareness and thereby ensuring long-term good health at the workplace. We pay particular attention to the supply chain. New suppliers are reviewed based on social and environmental criteria and existing suppliers are subject to continuous monitoring.



SDG 4: QUALITY EDUCATION

Education plays an essential role at Fronius. A wide range of careers are covered by our apprentice training and the number of apprentices is growing continuously. Every employee is given the opportunity to undertake training and further training. The Fronius education program, which is relaunched every year, is extensive and varied, from specialist training and online courses through to character-building seminars and fascinating keynotes on current issues.


Fronius
Fronius
Fronius

RESPONSIBLE MANAGEMENT
– FOR A SUSTAINABLE FUTURE

Whether it's custom battery chargers, revolutionary welding processes, or complete solutions for solar energy, there is one thing we are always striving to do:
USE ENERGY TO CREATE A BETTER WORLD.

THE PHILOSOPHY BEHIND THE FRONIUS WAY 4.1

"With our spirit, enthusiasm for innovation, and our expertise in energy conversion, we create sustainable, innovative solutions. They offer our customers value, and convey safety, independence, sustainability, and modernity. This, together with our readiness to perform and to change, makes us a successful business and helps make the world a good place to live."



SUSTAINABLE COMPANY GROWTH

Fronius assumes responsibility for the impact of our decisions and activities on society, the economy, and environment. Honesty, fairness, and integrity form the foundation on which we operate. The fact that we manage our risks with foresight and take a holistic view of the effects on humans and the environment makes us more resilient in times of crisis. Although 2020 was a challenging year, Fronius proved itself to be a stable and reliable partner to its customers and suppliers.

We promote innovation with sustainability in mind. This makes our high-quality products and services even more cost-efficient. The fact that they have a long service life and can be repaired not only protects the environment but also benefits our customers. This increases both our performance and our competitive advantage – the prerequisites for the future success of our company.

We are making numerous investments to ensure we can cover the increasing demand for our products over the coming years. With more than 5,660 employees worldwide, around 3,776 of which work in Upper Austria alone, we are a major employer and investor in the region.

PERFECT WELDING

For more than 70 years, Fronius has been working on innovative system solutions for welding technology. The company has proven time and time again that welding processes and sustainable approaches do not have to compete with one another.

ECOLOGICAL SUSTAINABILITY

Our welding systems are of an impressively high quality and can be dismantled, repaired, and recycled as necessary. Fronius power sources also boast a particularly high energy efficiency; we are the first manufacturer to integrate inverter technology based on transistors. This reduces power consumption by around a third and results in a raw materials saving of approx. 80 %.



With the introduction of the TransSteel 2200 in 2017, we added this sustainable basic technology to the last device in the product range. Fronius is the only manufacturer in the world to market welding technology purely on the basis of inverter technology. This also puts Fronius ahead of the EU Directives. These call for a minimum energy efficiency of power sources as of 2023 that can only realistically be achieved using inverter devices.

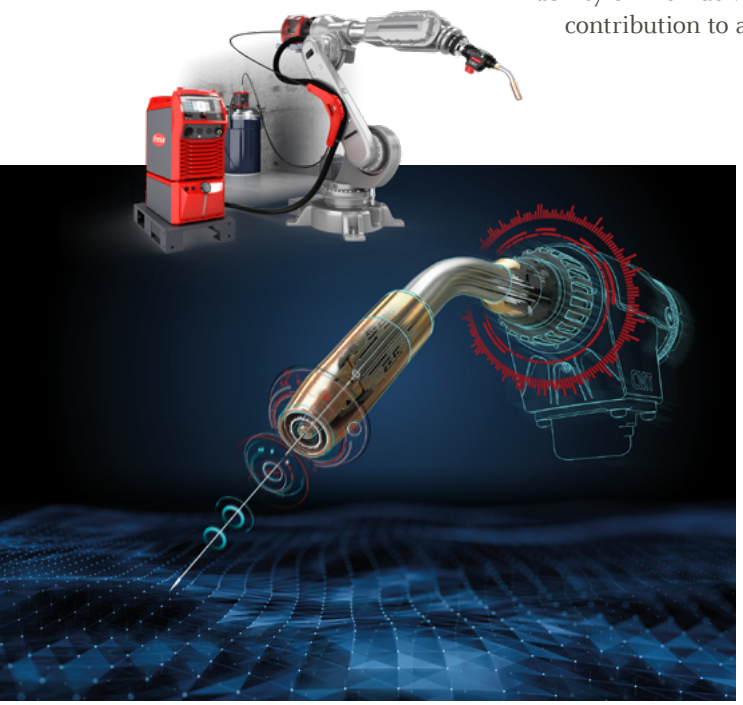
TECHNICAL PROGRESS AS A GUARANTEE OF INCREASED SUSTAINABILITY

Fronius has a reputation for breaking new ground in welding technology, for example with Cold Metal Transfer. This process makes it possible to thermally join galvanized steel and aluminum sheets. Even wafer-thin aluminum sheets from a thickness of 0.3 millimeters can be joined with this process. With its TPS/i modular power source platform, Fronius also offers an intelligent welding system that permits process upgrades at any time. This increases flexibility for both manual and robot-assisted welding applications as it is no longer necessary to change over the machines.

ALWAYS FOCUSING ON THE CUSTOMER

When it comes to technical progress, cooperation with our customers is also vital. We work in close partnership to identify their requirements in as much detail as possible so as to gain a deep understanding of their welding challenges. These challenges are echoed across various industries – from the automotive and supply industry to construction machinery all the way through to SME workshops.

In 2020, for example, Fronius worked with automotive supplier Magna Steyr to bring a groundbreaking robot assistance system to market maturity. With WireSense – based on the high-tech TPS/i power source platform and the corresponding CMT hardware – component scrap and reworking within the Magna Group dropped to zero. This again underlines the sustainability of Fronius welding systems, which can make a valuable contribution to autonomous production.





THE HUMAN ASPECT

Welding helmets with a fresh air supply, extraction hoods, and extraction tables reduce exposure to smoke. With a special fume extraction torch, we also neutralize the welding fumes directly at the point at which they are generated: the arc. This protects the welder as well as any personnel in the vicinity.



SOLAR ENERGY

A world with 100 % renewable energy is possible. The technology required for this already exists. How are we contributing? In the Fronius Business Unit Solar Energy, we draw on decades of experience to develop solutions for the efficient and intelligent generation, storage, distribution, and consumption of solar energy. This makes us experts in solar power and ecologically generated green hydrogen.

Solar energy plays a key role in sustainable energy supply and in the fight against climate change. Of this we are certain. We are motivated by a vision of 24 hours of sun, a world in which 100 % of the entire energy demand is covered by renewable sources around the clock and throughout the year. This may be ambitious, but it is achievable. At Fronius, we develop solutions for the intelligent production and use of solar energy for applications both at home and in commerce, industry, and large solar power plants.

Turning our vision into a reality requires an interplay between the different energy sectors of power, heat, and mobility. An important step is to identify, analyze, and optimize one's own energy consumption behavior. This applies to households as well as companies. We draw on our core expertise, efficient energy generation combined with holistic energy management, to develop smart products and solutions that control flows of energy intelligently and provide solar energy for a wide range of different applications.



SOLHUB

To achieve 24 hours of sun, we need green hydrogen. As an emissions-free energy carrier with a high power density, this plays a vital role. But it is only hydrogen that has been generated with renewable energy that can pave the way for decarbonization during the energy revolution. With the Solhub, Fronius is presenting a sophisticated all-in-one system that generates, stores, distributes, and reconverts green hydrogen. This package of scalable modules is a sustainable mobility and energy solution for commerce, local authorities, and agriculture.

SOLAR ENERGY FACTS & FIGURES

2020

3.657
Delivered
MEGAWATT
AC nominal capacity

29,4
Amount of energy generated yearly in
TERAWATT HOURS

21,0
Total output of previously installed
GIGAWATT
AC nominal capacity

2019

3.400
Delivered
MEGAWATT
AC nominal capacity

17,3
Total output of previously installed GIGAWATT
AC nominal capacity

24,2
Amount of energy generated yearly in
TERAWATT HOURS

ECONOMICAL SOLUTIONS

During the development of our high-quality products, the complete solution is always at the forefront of our minds. Our inverters are not only the intelligent control center for generating solar energy, but are also responsible for controlling this energy and for the holistic optimization of energy flows. They open up a wide range of application possibilities for achieving 24 hours of sun and maximum self-sufficiency.



TAKING E-MOBILITY ONE STEP FURTHER

Travel powered by solar energy produces zero emissions and little noise. This is why we develop PV-optimized solutions for electric vehicles using green hydrogen that we generate and store entirely from solar power. Fronius is already providing the smart infrastructure for tomorrow's CO_2-free mobility today - whether for private transport, company fleets, logistics, or heavy trucks.





PERFECT CHARGING

More than 75 years ago, Fronius entered the field of battery charging technology. Even then, the concept of sustainability was in the foreground, and this continues to this day in the development of charging technology for electrically powered forklift trucks as well as workshops and showrooms.

The original idea of our company's founder, Günter Fronius, became a reality. To overcome the short service life of car batteries in 1945, he began by constructing the first battery charger. Today, renowned automotive and forklift truck manufacturers as well as users across all industries rely on our high-quality products.

SUSTAINABILITY AS A STRATEGIC GOAL: EFFICIENT TECHNOLOGY WITH A LONG SERVICE LIFE

In 2020, over 40,000 battery chargers from the Selectiva and Acctiva series were supplied to customers from the intralogistics and automotive industry. An average failure rate of less than 0.3 % is impressive proof of the high production quality and long service life of our products. The proprietary Ri charging process of our Selectiva battery chargers guarantees particularly cool and efficient charging and extends the battery life by up to 15 %. The amount of power consumed by the charging process is also up to 30 % lower. This ensures optimum energy efficiency, maximum safety, and a particularly long service life.

CUSTOMIZED SOLUTIONS – OUR SUSTAINABLE CHARGING SOLUTIONS ARE TAILORED TO OUR CUSTOMERS AND THEIR NEEDS

For Perfect Charging, sustainability not only means offering efficient and durable charging solutions; we are a solution provider for intralogistics. From consultation and planning through to the implementation of a customized charging infrastructure, we offer our customers everything from a single source. Our experienced employees analyze the current situation and identify potential savings and optimizations.



PATRICK GOJER
Global Director Sales and Marketing Perfect Charging

"This is how we find the optimum solution for our customers. They might, for example, use their existing warehouse and production facilities more efficiently thanks to our space-saving charging technology, significantly lower their day-to-day operating costs, reduce handling times, or work with us to set new standards in sustainable charging".



Our flexible solutions also grow with the needs of our customers. They are easy to assemble and disassemble and are therefore both a sustainable and future-proof investment.

SUSTAINABLE BATTERY CHARGING TECHNOLOGY IN COMBINATION WITH SOLAR ENERGY

Perfect Charging creates further added value by providing sustainable systems from a single source. As a result, more and more companies are relying on the intelligent combination of solar energy and battery charging technology. The interaction with the innovative battery charging technology also holds further potential for optimization and savings. By using renewable solar energy, users reduce their energy costs, are more independent from the grid, and at the same time improve their CO_2 and environmental footprint.

THE NEW SELECTIVA 4.0 BATTERY CHARGER SERIES

/ Compact design
/ Ri charging process for particularly gentle and energy-efficient charging of lead/acid batteries
/ Up to 30 % lower energy consumption
/ Up to 15 % longer battery life

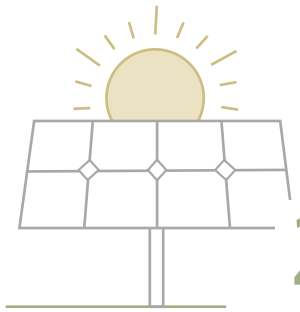
I-SPOT CALCULATOR AND VIEWER

/ I-SPoT Calculator: For calculating savings with regard to investment and operating costs
/ I-SPoT Viewer: Reporting tool for data analysis and evaluation as well as operating cost optimization



BUSINESS UNIT

SOLAR ENERGY



Previously installed

21 GIGAWATT

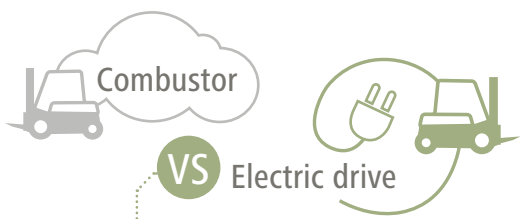
29,400

GIGAWATT HOURS
of energy generated yearly.

= The energy consumption of 7.4 million 4-person households (at 4,000 kWh a year).

BUSINESS UNIT

PERFECT CHARGING





/ In contrast to solutions with combustion engines, electrically powered forklift trucks can be used in a wide range of applications both indoors and outdoors, are extremely low-maintenance, and reduce noise exposure significantly.

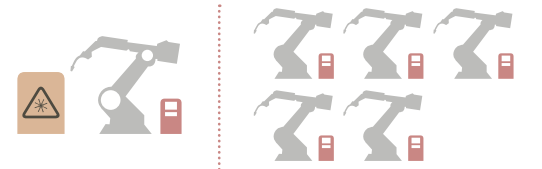
BUSINESS UNIT

PERFECT WELDING

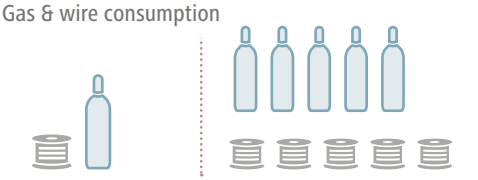
/ State-of-the-art, high-performance system solutions reduce the use of energy and production resources and it may even be possible to dispense with entire production cells.

LaserHybrid welding VS MIG / MAG welding

/ Number of system solutions



/ Gas & wire consumption



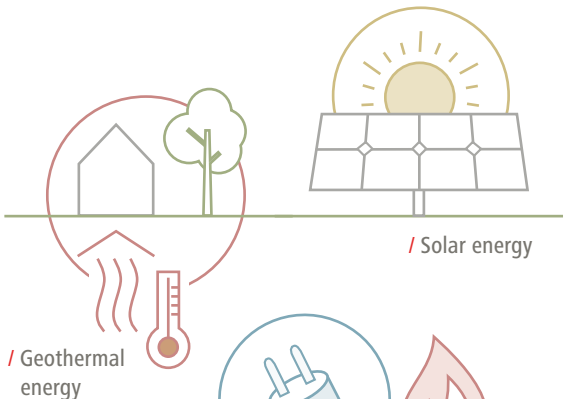
/ Energy consumption



/ REQUIREMENT: Production of 3,000 axle components per day; 200 days per year; two 8-hour shifts per day; weld seam length 12 m; comparison of two possible solutions with a useful life of seven years.

The innovative Ri charging process of the Selectiva battery chargers increases the service life of a battery by approx. 20 - 25 %.





86 %

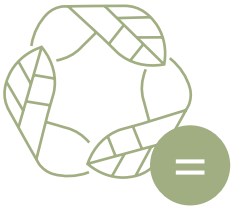
of the energy used comes from sustainable sources.



7,746 participants have undertaken training and further training.

Of these, **1,447** participants completed a total of 112 courses from the Fronius education program.

Average of **12.82** hours invested in training and further training per employee.



3,062 t of waste **recycled**

= **87 %** of total waste

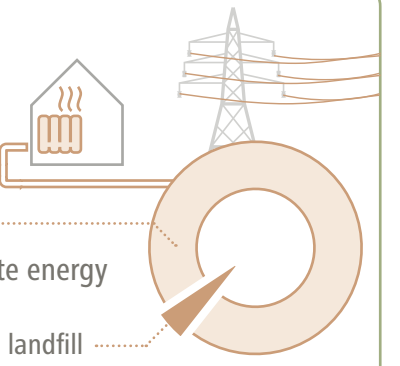


81 % / Recycled

17 % / Reused

2 % / Composted

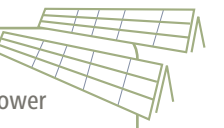
460 t
of waste disposed



95 % used to generate energy

5 % taken to landfill

/ USED TO GENERATE HEAT: State-of-the-art procedures are implemented to make use of the energy produced during the combustion process.



1.865 GWh from self-generated power

with the expansion of the photovoltaic systems in Sattledt, Pettenbach, Steinhaus, Vienna, and Salzburg. Increase of 54 % compared to 2019

= more than **7 %** of the entire power demand

RESEARCH & DEVELOPMENT

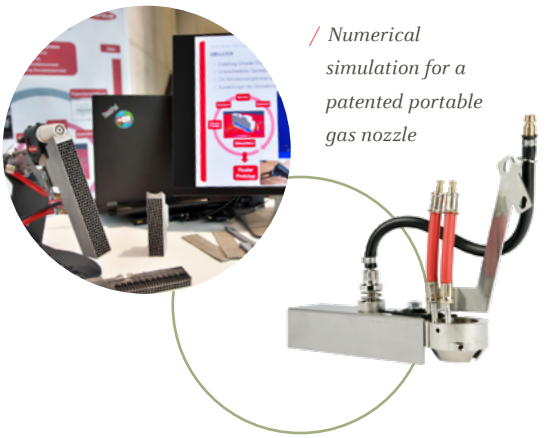
At Fronius, we develop solutions for tomorrow and beyond. Innovation and creativity are therefore core corporate values that we bring to life in our extensive research and development work: from the initial idea, to development, all the way through to series production.

The innovative spirit of Fronius is reflected not only in the 1,321 patents, but also in the number of R&D employees. At the end of December 2020, 710 members of staff were employed by the Fronius Research and Development department.

SUSTAINABILITY AS A DRIVER OF INNOVATION

Developing sustainable products and services is an important part of our sustainability strategy. *(See Sustainability strategy, page 16.)* During the product development process, we tackle very specific requirements. We place particular emphasis on the long service life, efficiency & effectiveness of the products, as well as their ability to be repaired and recycled. The result is more efficient electronic equipment, which benefits not only our customers but also the environment. In order to further reduce the ecological footprint of the devices and at the same time enable sustainable production, material and energy efficiency during production and the use of sustainable products and recycled materials are essential.

We also benefit from simulations that save on raw materials and use additive production technologies such as plastic 3D printing and Selective Laser Melting (SLM) for low-waste and low-energy prototyping.



/ *Numerical simulation for a patented portable gas nozzle*

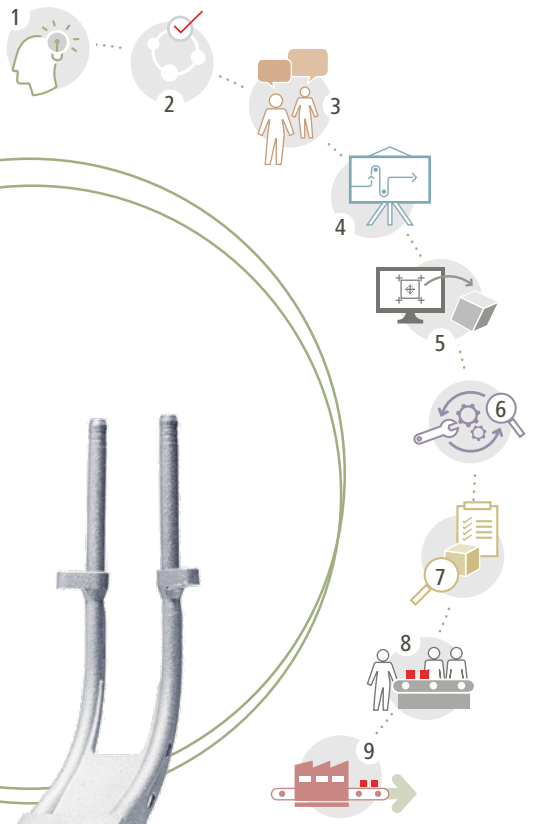
SUSTAINABILITY BY DESIGN

We then subject the products we have developed to rigorous testing with our Fronius Robustness Tests *(see page 38)* before starting series production. As there is still scope for us to do more, we have introduced the "Sustainability by Design" program with the objective of advancing an evidence-based, sustainable circular economy.

Additive production processes such as Selective Laser Melting enable waste-free prototyping with minimal energy usage.







/ *The graphic (1-9) shows the individual elements of the product development process.*

1. *Idea*
2. *Idea selection*
3. *Requirements phase*
4. *Concept phase*
5. *Detail phase*
6. *Pilot phase*
7. *Zero series*
8. *Test phase*
9. *Start of production*



DAVID SCHÖNMAYR
Program Lead
Sustainability by Design

"With ‚Sustainability by Design', we take product sustainability one step further. The goal is evidence-based device development with optimized sustainability throughout the total life cycle – from the raw material to production, right through to transport and ‚end of life'. This ‚life cycle approach' – where do the products come from, where do they go when they are no longer being used – can be adopted by us all as individuals to make sure we are making future-conscious decisions."

GEN24 PLUS



Sustainable responsibility throughout the entire product life cycle.



SUSTAINABLE PRODUCTION

Fronius is committed to not only observe but to go beyond environmental standards.

/ All production sites have an environmental management system that is certified according to ISO 14001.
/ 100 % green power on site incl. own 6,070 m² photovoltaic system with a generator output of more than 1,000 kWp and a yield of over 1,000 MWh in 2020
/ 86 % of the entire direct energy consumption comes from renewable sources.

LONG SERVICE LIFE

Our customers and partners know that they can rely on the quality of our products.



/ The active cooling technology significantly extends the service life of the power electronics in comparison with passively cooled devices.
/ The impressive endurance – one of the most important factors regarding the sustainability of products – goes way beyond market standards and the prescribed limit values.
/ Innovative service concept with part replacements for quick and easy repairs.



USAGE

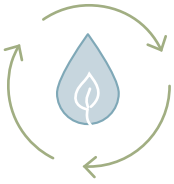
/ Extremely low energy loss thanks to maximum system efficiency of 94 % with home storage from BYD (Energy Storage Inspection 2020 by the HTW Berlin University of Applied Sciences).
/ Product with a large number of functions incl. energy sector integration
/ State-of-the-art digital tools replace screens and sensitive components and can be used anywhere.



TRANSPORT ROUTES

We are aware of our carbon footprint and keep our transport routes as short as possible.

- 90 % of metal production takes place in Austria.
- 100 % assembling in Austria
- 35 % CO_2 reduction in logistics between 2017 and 2020
- 0 % use of air freight within Europe; sea freight and pre-carriage by railroad are the preferred means of intercontinental transport



RAW MATERIALS & RECYCLING

In order to preserve our planet's limited resources, we place great emphasis on the use of recycled materials and the ease of repair of our products.

- 90 % recycled aluminum is used in the aluminum cooling element.
- > 90 % of the packaging (cardboard and plastic) and of the aluminum cooling element can be recycled.
- Replaced or defective devices can be repaired by us, e.g., in our 4,000 m² Repair Center International in Austria.
- 100 % compliance with the WEEE Directive (Waste of Electrical and Electronic Equipment in the EU)



QUALITY AWARENESS

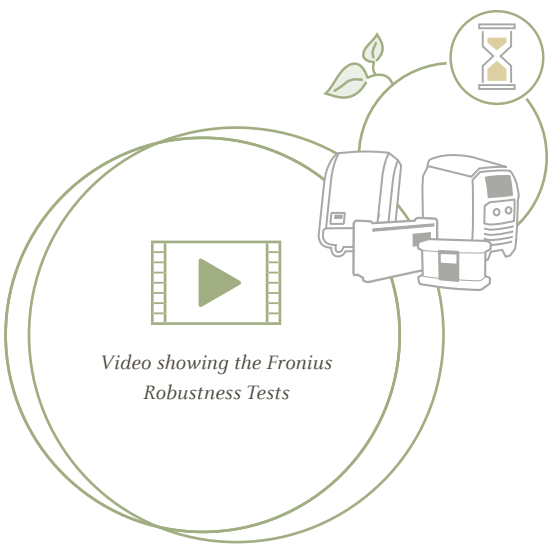
At Fronius, quality is not just a word, it's a corporate value that we live by. We don't just test our products two or three times; during the development phase we subject them to a total of 13 different robustness tests. This is the only way to guarantee a long service life under harsh conditions. What's more, the products are easy to repair and the individual products are easy to replace.

PUT THROUGH THEIR PACES

It's not only garages where welding is carried out, but also the freezing cold of Alaska or the salty air of an offshore platform. Our inverters run in the cellars of private households, in hot and humid jungle climates, and in photovoltaic systems in the desert. Our battery charging systems are also frequently subjected to dust, dirt, and moisture, or a fluctuating grid quality with little or no respite.

When you put it like that, it's obvious why we subject our products to rigorous testing: impact and drop withstand, low temperature performance and service life, dust and salt spray test are but a few of the 13 testing processes carried out during the development phase.

All of these tests go far beyond the specifications laid down in standards. It is no coincidence that our solutions impress with their quality and long service life.

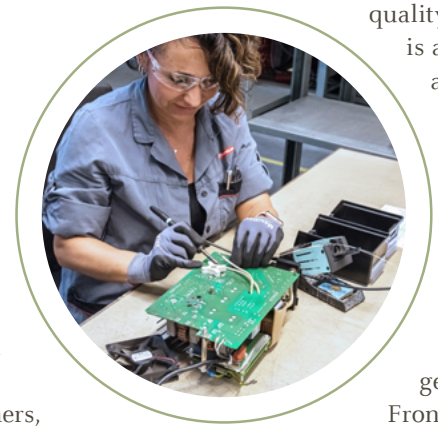


Video showing the Fronius Robustness Tests



STREAMLINED FOR A LONG SERVICE LIFE

Nothing lasts forever – even the very best products are susceptible to a certain degree of wear. We are therefore developing service concepts to guarantee the future reparability of our products. Thanks to our global network of repair centers and certified Fronius Service Partners, we are able to avoid long travel and transport routes and guarantee rapid repairs. Our 4,000 m² Service Center in Steinhaus provides the perfect conditions for professional and high-quality repairs with original spare parts.



FOCUS ON QUALITY

For almost 30 years, Fronius has been using a quality management system, certified according to ISO 9001, to guarantee the highest possible quality of its products. This standard defines the minimum requirements for a quality management system, which is at the same time subject to a continuous improvement process. Quality awareness lies with the employees themselves – an awareness that we instill in dedicated training courses. This is the only way to build up customer trust and satisfaction, ideally for generations to come. We want Fronius customers to recognize that our products are characterized by sustainability, increase productivity, maximize the energy yield, and lower operating costs.



OPERATIONS
SUSTAINABLE VALUE CREATION AT FRONIUS

Where do the parts for our products come from – where exactly are our suppliers based? How can we improve our manufacturing processes – how can we achieve energy savings during production within the context of climate protection? And how do we rate our ecological balance in downstream value creation, in the reparability of our products? Answers to these questions are provided by "Operations".

OPERATIONS

Operations is responsible for building and managing an integrated production and logistics network throughout the entire value creation process, starting from the production of raw materials, through various refinement stages, all the way to the end user. Operations actively maintains mechanisms, organizational units, and processes to sustainably supply customers and markets with products and services.





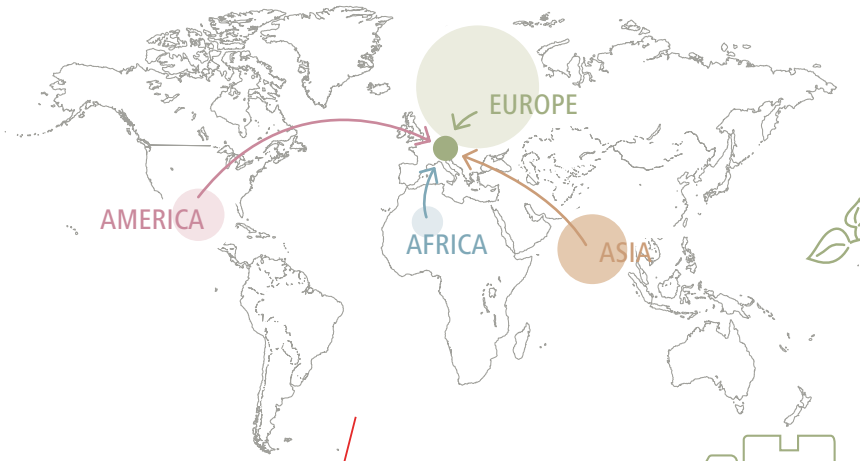
Sustainability is an integral component of our value creation network. In accordance with our strategic alignment, economic, ecological, and social factors are taken into account in the way we organize our activities.

UPSTREAM VALUE CREATION

Throughout their life cycle, our products have an impact on the environment and society – not just after they have been produced but even within the upstream value creation chain. We take this responsibility seriously and so, as well as complying with environmental and social standards, we maintain respectful and appreciative communication with our suppliers and partners. As we maintain a locally managed production structure with factories in Austria and the Czech Republic, we procure all direct materials from these two countries.

GLOBAL SUPPLY CHAIN

Our global supply chain for direct materials currently comprises around 1,000 active suppliers from 25 countries, whereby more than 95 % of the sales partners are based in Europe. In addition to the Country of Delivery (CoD), the Country of Origin (CoO) of the goods also plays an important role. We collect all data centrally in order to ensure the greatest possible transparency of the supply chains. In terms of the Country of Origin (CoO) of the goods, approx. 70 % of all services were procured from Europe, approx. 20 % of which directly from Austria.



Distribution of Countries of Origin of direct materials

25
NUMBER OF PROCUREMENT COUNTRIES

1,000
ACTIVE SUPPLIERS

70 %
of services from EUROPE

We also work intensively with suppliers who provide us with products for internal use, in particular for equipment, software, building, and infrastructure investments. It goes without saying that the same stringent criteria with regard to supplier selection and management apply in these areas too. Individual consumables are also procured locally within the respective subsidiaries.

THIS ENABLES US TO GUARANTEE SHORT TRANSPORT ROUTES AND PROMOTE LOCAL VALUE CREATION.

New and existing suppliers alike undergo continuous further development through our established supplier management. By focusing on European markets and the prevailing stable political conditions, we also reduce the risk of social and environmental offenses.

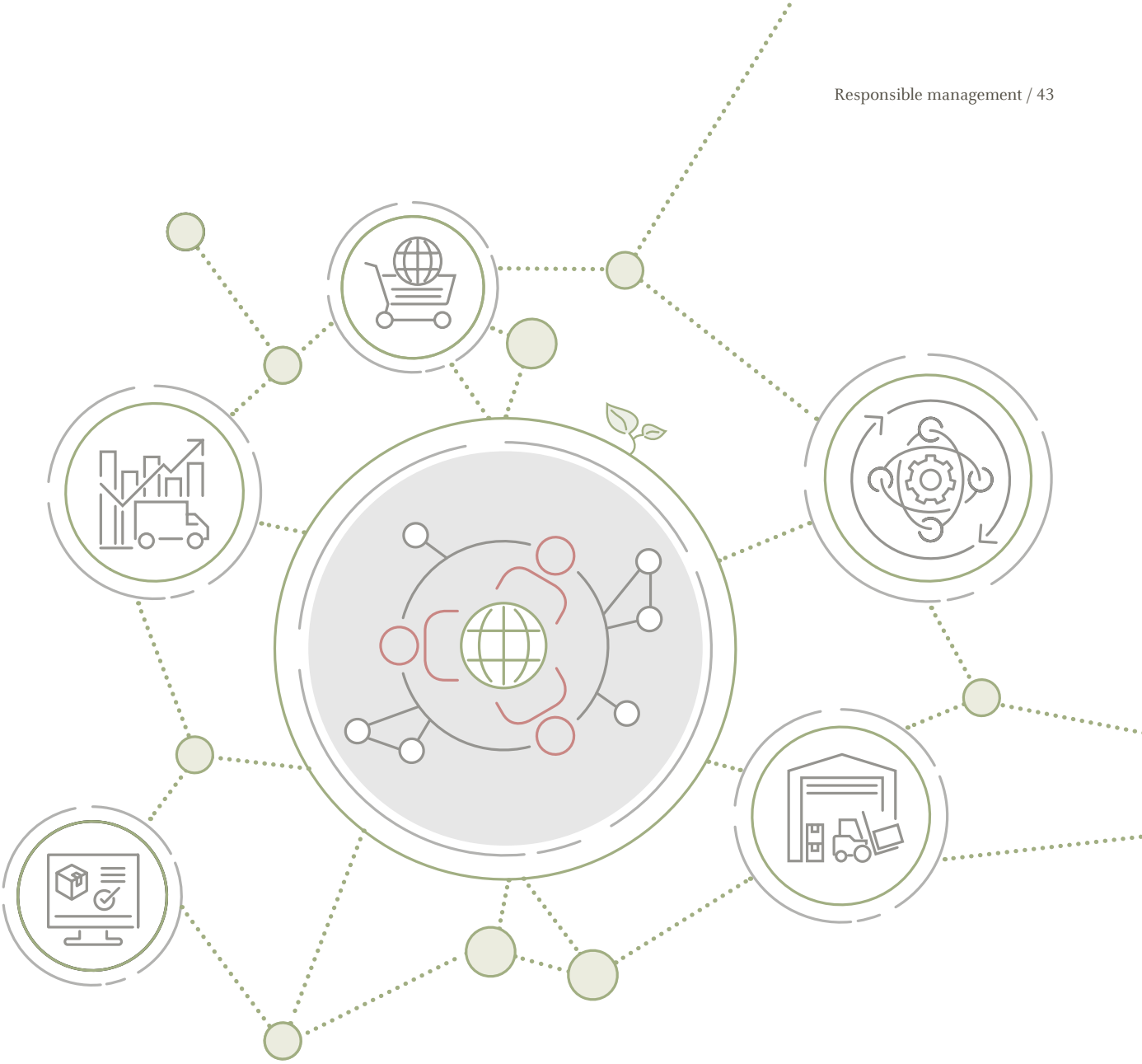
SUPPLIER MANAGEMENT TOOLS



- Supplier evaluation
- Supplier audit
- Supplier rating
- External platforms
- Supplier self-service
- Code of conduct for business partners
- Material compliance processes

Over half of our suppliers (i.e., those who share more than 80 % of the procurement volume for direct materials) have already implemented certified management systems (e.g., ISO 14001) that promote environmentally and socially responsible production. We take this into account in all of our activities and intend to expand on it in future.






MÅKENS





INTERNAL VALUE CREATION

Maximum efficiency and sustainable solutions are at the heart of our internal value creation processes, all of which we design and optimize ourselves. As such, we need to keep a close eye on external influences such as the impending scarcity of resources and limited opportunities for growth. This is why we are developing our sites with sales, job, and procurement markets as well as logistics in mind. By bundling our production activities in Austria and the Czech Republic and implementing our integrated management system, we can also guarantee compliance with the highest social, environmental, and quality standards.

MANUFACTURING TRANSITION PROCESS

At Fronius, product development and manufacturing go hand in hand. The most diverse range of parameters regarding size and modularity are defined at an early stage in order to subsequently enable the sustainable and efficient design and planning of the necessary manufacturing systems. This intensive collaboration between several departments gives us a competitive advantage in terms of quality, adherence to schedules, and cost reduction, and shortens the time between development and the start of series production significantly.

NEW PICKLING WASHING SYSTEM

A new pickling washing system in our welding torch production facility is shortening the lead time and reducing the number of work steps while creating a better working environment, which is reflected in the following examples:

/ Fewer manual activities, greater degree of automation
/ Handling of pickling agents reduced to a minimum for improved occupational safety
/ No contamination of or damage to equipment or premises due to handling of pickling agents or pickled parts, therefore greater process reliability
/ Resource-conserving use and environmentally friendly disposal of pickling agents
/ Reduced reworking and rejects due to improved and consistent cleaning results



LEBENSHILFE

For around 20 years, Fronius has been working with the Austrian Lebenshilfe (Life Aid organization) and has outsourced certain activities to its workshops. Since February 2020, six people have been working with a supervisor directly in our production department, which allows for greater integration. Among other things, the Lebenshilfe employees support Fronius in the picking, packaging, and assembly of welding torch components. While planning this specially designed unit, particular emphasis was placed on ensuring the full integration of these team members with physical or mental disabilities. And this has more than paid off; today the Lebenshilfe employees walk proudly through the aisles of our production facilities in their Fronius jackets.

IMPROVED WORKS TRANSPORT

Our subsidiary in Český Krumlov (Czech Republic) sends several pallets of semi-finished products to our production site in Sattledt (Austria) every day. In the past, the shipments were wrapped in film to protect the load, primarily to prevent damage and contamination. The plastic film would then have to be disposed of after a single use. Today we use pallet covers as an alternative, which can be reused again and again. This means that we are saving a huge amount of plastic film and therefore waste with every shipment. This type of packaging is also more cost-effective and has resulted in significant savings in internal transport.

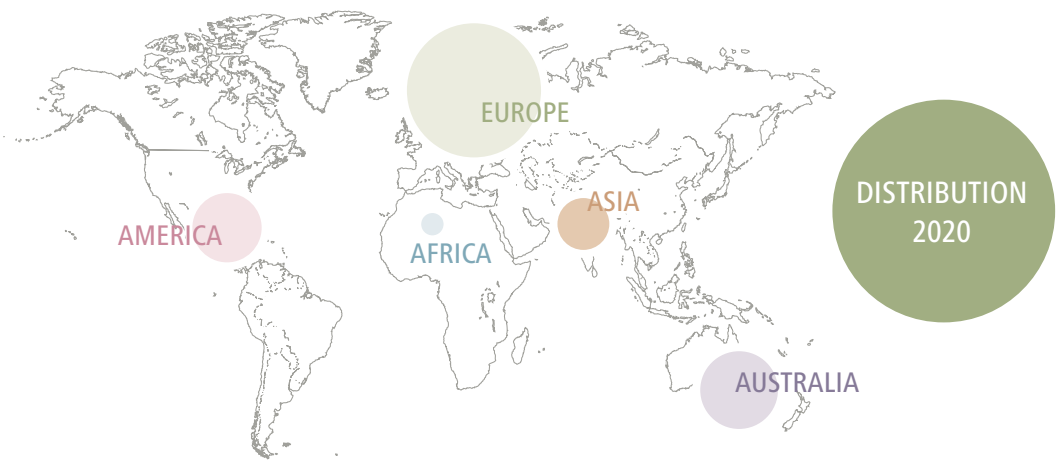
DOWNSTREAM VALUE CREATION

Our locally managed production structure also plays an important role in downstream value creation for our production sites in Austria and the Czech Republic. This consolidated approach combined with central coordination enables us to guarantee and continuously optimize the supply to our global markets by means of efficient and sustainable logistics and transport processes. A global network of local subsidiaries and partners provides the foundation for further distributed logistics, which allows us to serve markets and customers directly and sustainably. We take all possible measures to avoid transport by air.

FREIGHT FORWARDER ASSESSMENT

Since 2020, we have subjected our logistics partners to a structured, regular assessment process based on defined criteria. In addition to measuring general performance, their approaches to sustainability are also assessed. Should these deviate from the high standards expected by Fronius, we work with the affected partners to introduce improvement measures.

THIS ENABLES US TO CONTINUOUSLY FURTHER DEVELOP OUR TRANSPORT PROCESSES WITH SUSTAINABILITY IN MIND.



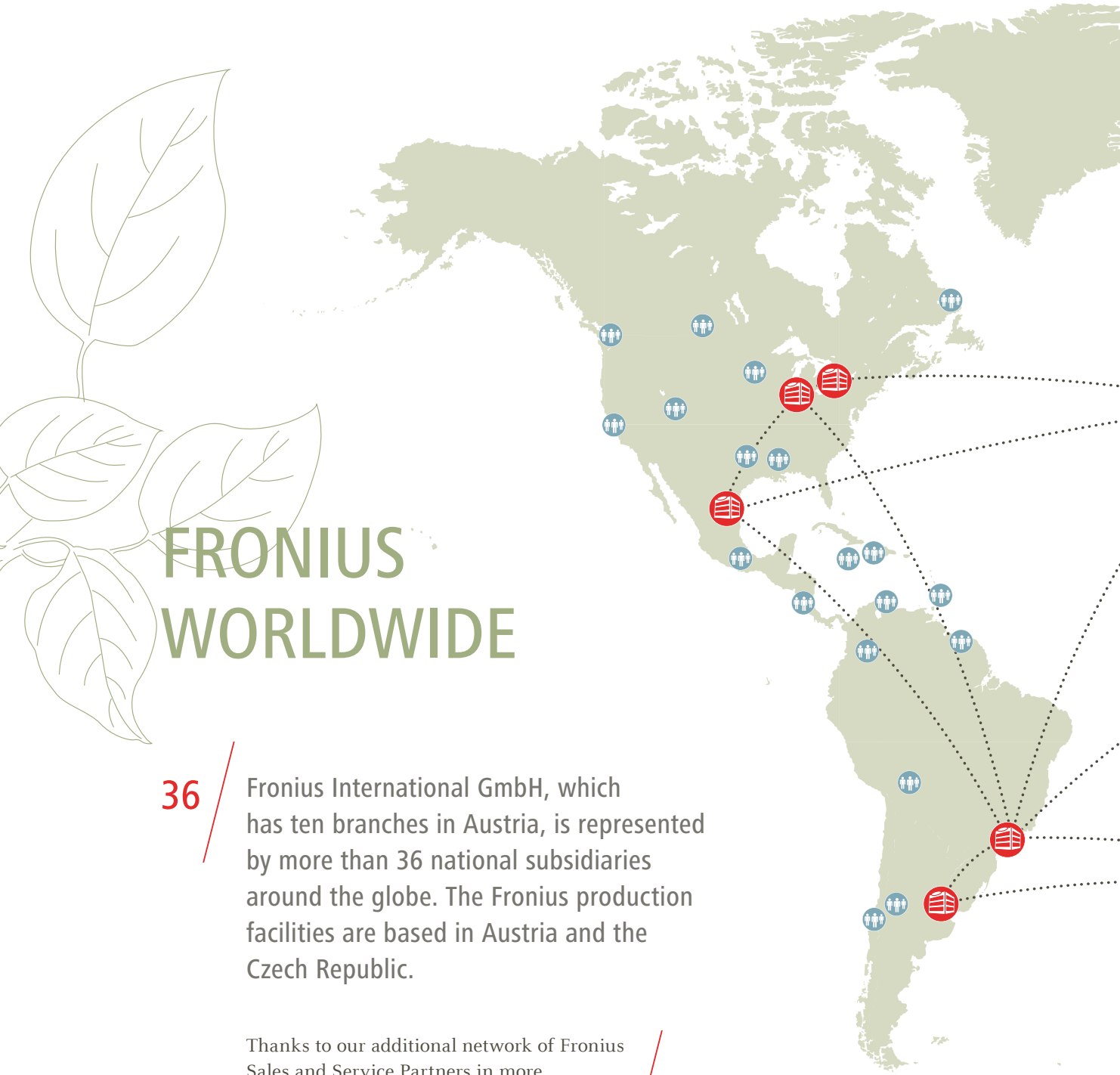
UPSTREAM & DOWNSTREAM GOODS TRANSPORT		2018	2019	2020
Total volume of transported products and materials	t	25,436	26,746	25,871
			Shares in t	
Truck		18,441	19,719	17,833
Air freight		1,017	882	535
Sea freight		5,087	5,371	6,262
Rail freight		890	775	1,240

LONG SERVICE LIFE & EASE OF REPAIR

A long service life and the ability to repair a product if necessary are decisive factors when it comes to downstream value creation *(see also the chapter on "Quality awareness", page 38)*. This is also something that is valued by our customers, as was demonstrated in 2020 when a Fronius Primus 200 welding system that was produced in 1978 was successfully repaired by the specialists in our Service Center.



FRONIUS WORLDWIDE

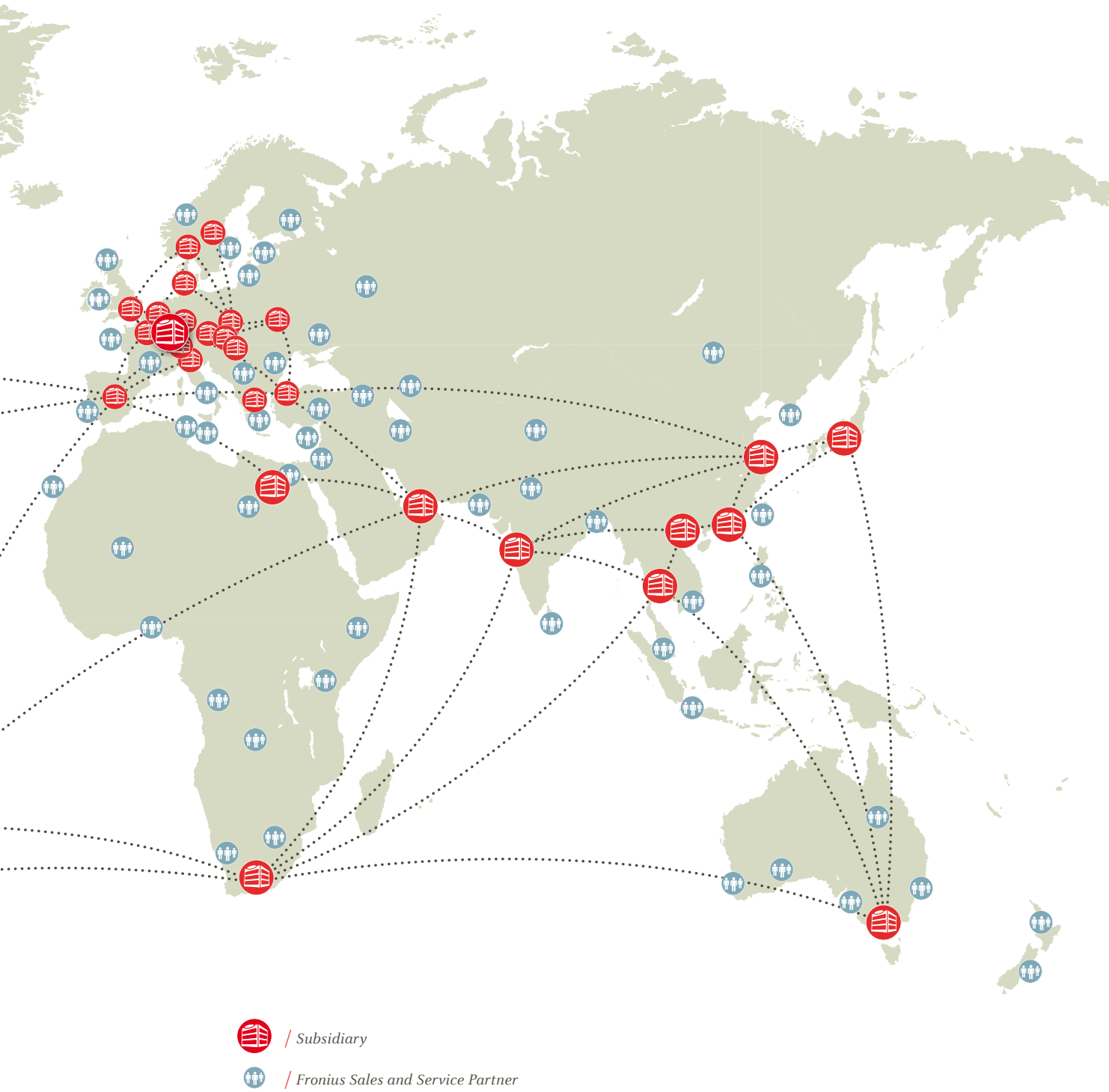


36

Fronius International GmbH, which has ten branches in Austria, is represented by more than 36 national subsidiaries around the globe. The Fronius production facilities are based in Austria and the Czech Republic.

Thanks to our additional network of Fronius Sales and Service Partners in more than 60 countries, we can respond to the specific needs of our customers.

60


/ Subsidiary
/ Fronius Sales and Service Partner

SUSTAINABLE COMMITMENT WORLDWIDE

Responsible management also plays an important role for Fronius at international level. Many of the subsidiaries are committed to making a contribution to a more sustainable future. Every contribution counts.

THE PHOTOVOLTAIC SYSTEM AT THE HEART OF THE ENERGY SUPPLY

FRONIUS GERMANY

The new Fronius Germany national headquarters in Neuhof-Dorfborn in Hesse were constructed with sustainable building technology and intelligent energy generation in mind. At its heart is the photovoltaic system, which covers a third of the yearly power demand.
The air conditioning system used is up to four times more efficient than conventional systems. The energy used to operate the site comes predominantly from a 296 kWp photovoltaic system with eleven Fronius Symo 20.0-3-M inverters and one Fronius Symo 15.0-3-M inverter. The system is oriented East-West in order to catch the first rays of sunlight in the morning and to benefit from the solar irradiance well into the afternoon. More than half of the power produced by the photovoltaic system is used in the subsidiary, giving it a self-sufficiency level of around 35 %.

A TOTAL OF **16** SUBSIDIARIES have a photovoltaic system

Total power of **705** MEGAWATT HOURS (MWh) produced each year



EWALD EISNER
Managing Director
Fronius Germany

"These concepts for environmentally friendly energy generation and efficient energy management clearly reflect our company's strategy and responsibility."



FRONIUS SWITZERLAND

Since 2017, the roof of the company building in Switzerland has accommodated a photovoltaic system with four Fronius Symo inverters, a Fronius Solar Battery, a Fronius Smart Meter, and a Fronius Ohmpilot for hot water. The annual output in 2020 was 30 MWh, 70 % of which was used for self-consumption including mobility. A total of 25 % of the company vehicles are electric. We use the excess power generated to power a free of charge e-mobility charging station for our employees, customers, and the local population, for example.



SOLAR POWER FOR CHILDREN

FRONIUS MEXICO

Sustainability is not yet a high priority in every culture and country. Fronius Mexico is setting a good example and has introduced an action program to teach children about the power of solar energy. It is never too early to start environmental education that positively affects the behavior of the younger generation. Fronius Mexico has consolidated its activities into “San Pedro de Pinta”, an event during which roads are closed to cars on Sundays. This enables people to walk or cycle freely and children to play safely in the streets. Every Sunday, Fronius employees organize eco activities for the young visitors - with energetic support from the Fronius superpower mascot “Peter Power”.



While children learned about the power of the sun in a playful setting, their parents found out more about renewable energy and the Fronius vision of 24 hours of sun.



WELLBEING AT WORK

There are several fundamental reasons for promoting wellbeing at work, for example occupational safety and a certain level of comfort. The respect given to employees by their employers, appreciation among colleagues, transparent communication, and opportunities for further development are also extremely important – and all our subsidiaries subscribe to this approach.

PERSONAL DEVELOPMENT / ITALY

Back in 2019, Fronius Italy introduced individual coaching sessions for its employees to develop an awareness of their personal strengths. This resulted in individual development plans with specific training needs. In 2020, employees were offered bespoke training courses for hard skills and coaching sessions to develop soft skills (partly online).

TEAM SPIRIT / THAILAND

Fronius Thailand has initiated a "Star Employee Program". Employees can nominate their colleagues for making a positive contribution to the company based on the Fronius Way 4.1 values: sustainability, innovation and creativity, community, cost effectiveness, and quality awareness. The program helps shape the community, create greater awareness of the Fronius values, and acknowledge the contributions made by other colleagues.



COVID-19 / UK

Covid-19 resulted in far-reaching restrictions for our subsidiaries around the world. Some of our sales and information centers even had to close temporarily. During external visits, the safety of all employees, customers, and partners was guaranteed by the provision of face masks and hand sanitizers. At Fronius UK, the impact on the environment was minimized by using washable and reusable face masks as well as refillable hand sanitizer bottles.

"As the virus is set to be with us for some time, we want to protect ourselves in the most sustainable way possible," explains Beate Rübig, Managing Director of Fronius UK. "The use of protective equipment is the new normal and we want to do our part in keeping the volume of waste as low as possible."

EMPLOYEES AND SOCIETY

We want to use our employees' energy more effectively.

We are therefore creating the framework for enhancing the opportunities of individuals and teams alike. As a family business, Fronius thinks in terms of generations and takes a conscientious approach to resources. This will enable Fronius to continue to push boundaries far into the future.



With their knowledge, skills, attitude, and motivation, our employees represent the potential and power behind our growth.

It is therefore important that we continuously further develop this personal and technical potential and to use it effectively across all departments and around the world. Managers encourage and support this development. They are role models for our belief in values, commitment, and the pursuit of goals.

AWARD
On the occasion of "Randstad Employer Branding Research 2020" Fronius was voted on 3rd place among the most attractive employers in Austria. In the independently conducted study, more than 3,700 respondents rated the 150 largest domestic companies according to their attractiveness as employers.



3,776
TOTAL NUMBER OF EMPLOYEES
2019: 3,632
2018: 3,147

3,335
FULL-TIME EMPLOYEES
31 % WOMEN
69 % MEN

2019: 3,254
31 % ♀, 69 % ♂
2018: 2,703
31 % ♀, 69 % ♂

421
PART-TIME EMPLOYEES
72 % WOMEN
28 % MEN

2019: 378
73 % ♀, 27 % ♂
2018: 333
73 % ♀, 27 % ♂

516
TOTAL NUMBER OF NEW EMPLOYEES
2019: 697
2018: 744

321
NEW EMPLOYEES AGED 30 OR UNDER
2019: 391
2018: 406

195
NEW EMPLOYEES AGED 31-50
2019: 266
2018: 298

18
NEW EMPLOYEES AGED 51+
2019: 40
2018: 40

155
TEMPORARY STAFF
2019: 243
2018: 251

Date: December 2020 - Not including apprentices.
Figures apply to Fronius International GmbH (Austria)

HEALTHY AND SAFE WORKING ENVIRONMENT

Nothing was more of a priority than health in 2020 – the health of every individual and of our society. "Stay healthy" was both the motto and the biggest challenge.

Even when we are not experiencing a global pandemic, health plays an important part in our lives. We take the health of our employees extremely seriously and this is anchored in the core values of our corporate strategy, the Fronius Way 4.1.

„We perceive our people in their entirety, respect individuality, and value the diversity that results. We attach great importance to health and safety and we pay careful attention to people in our surroundings."

HEALTH REQUIRES ACTION

All Fronius sites are certified according to the ISO 45001 occupational health and safety management system. The management system regulates occupational health and safety matters. By implementing high standards and continuous improvements, accidents at work can be prevented, for example. A comparison with the industry as a whole revealed that we record fewer accidents than other companies. However, one accident at work is still one too many and we will continue to implement measures to reduce incidents at the workplace.

ACCIDENT STATISTICS	2018	2019	2020
Rate of documentable injuries at the workplace*	12.20	8.86	13.7

*/ * Rate of documentable injuries at the workplace* = accidents resulting in sick leave / working hours x 1,000,000*

Guided by the management system, Occupational Health Management (OHM) pursues the following objectives:

/ To promote the health of all employees
/ To support the performance of the company as a whole
/ To have a positive influence on the company's attractiveness as an employer

HEALTH REQUIRES PROTECTION

In medicine, the principle of "Prevention instead of cure" applies, and this is all the more relevant in times of Corona. For this reason, we have purchased sanitizers and protective masks, set up our own testing system, developed safety concepts for company restaurants and for meetings, adapted or digitalized working processes, and introduced rules of behavior.

Fronius offers vaccinations as a way of preventing other illnesses. In 2020, more than 800 tick vaccines were administered to Fronius employees free of charge. We also offered the flu shot to high-risk groups only due to limited availability.

HEALTH REQUIRES WELLBEING

Physical and mental wellbeing are extremely important to health. We therefore encourage employees to keep moving, particularly during activities that involve holding the same posture for prolonged periods. Various activities such as yoga, back support exercises, and more have a positive effect and are offered by Fronius either at a low price or even free of charge.

A company psychologist is available to help employees maintain their mental health, particularly now during times of crisis. In 2020, numerous members of staff were supported through difficult situations in over 80 hours of direct consultations. We also offer innovative methods for treating stress and pain.



REGINA RETTIG-REISINGER
Company psychologist
and member of the OHM team

"Our regular monitoring shows that we are on the right path. In comparison with other Upper Austrian companies, Fronius employees are generally healthier and recover faster."



FRONIUS FUTURE TALENTS

"We develop motivated, committed employees with heart, head, and common sense." This vision remained at the heart of Fronius apprentice training in 2020. Every day, we found new, sustainable solutions that enabled us to advance the training of Fronius specialists and support the development of around 140 trainees despite the challenging conditions.

INDIVIDUAL PERSPECTIVES

With 18 skilled trades, Fronius is one of the most diverse training organizations in Upper Austria. In 2020, 40 optimistic and ambitious young men and women started their specialist training in their dream careers.
By offering these schemes, Fronius is giving young people much-needed encouragement as well as opportunities for the future. The positive development of apprentice numbers therefore continued in 2020.



137
APPRENTICES
in total

18
SKILLED TRADES
in thirteen groups

SKILLED TRADE	F	M
Electronics engineer	3	36
Electrical engineer	0	15
Mechatronics engineer	4	23
Metalworker	4	21
Design engineer	0	1
Media specialist	1	1
IT technician	1	5

SKILLED TRADE	F	M
Application developer - coding	0	2
Office administrator and industrial business management assistant	4	4
Buyer	0	2
Finance and accounting assistant	2	0
Company logistics specialist	3	3
Cook	1	1



BETTINA HUEMER
Human Resources

"Right now in particular, we want to encourage young people. We are a forward-looking company, which means continuity and longevity are part of our basic vocabulary. There will be a time when the crisis is over and we want to prepare for this time. This is how we develop the managers of tomorrow from our own ranks."

SOLUTION-BASED, OPPORTUNISTIC APPROACH

Together with over 400 colleagues working in the practical fields, the HR apprentice training team adopted a positive, solution-based, opportunistic approach to offering apprentices practical training in 2020. Across all areas – from career orientation, try-outs, and trade fair appearances to apprentice selection, information for parents, and onboarding, all the way through to education, training structure, conducting interviews, and active support for the young people – COVID-19 called for creative ideas with heart, head, and common sense.

Within a few days, for example, a complex eLearning environment was created for all apprentices to continue high-quality training in times of distance learning and help the young people make optimum use of their time at home. The continuous further development of this digital learning environment subsequently resulted in a new system, the integration of which into the various methods of theoretical and practical training is now being pushed forward. Exciting weekend challenges have also been introduced in order to improve not only wellbeing but also solidarity between the participants, despite the distance between them.



MODULAR QUALITY UPGRADE

The rollout of various new standards within the Fronius apprentice training scheme is planned for early 2021. These will form the foundation for the modular quality upgrade across all skilled trades. With full transparency for everyone involved, roles, objectives, content, and organization will be redefined in order to achieve the set goals and prepare our #FroniusFutureTalents even better for the challenges of the future.



EMPLOYEE DEVELOPMENT

The knowledge and skills of our employees form the basis for our growth.

TRAINING AND FURTHER EDUCATION

Fronius places great emphasis on continuously developing the personal and technical skills of its employees. Both managers and the employees themselves take responsibility for continuous training and further education in various forms. The Human Resources Development department supports these learning processes, promotes learning, and helps trainees transfer the things they have learned to their everyday work. The range of opportunities for personal development is vast – from internal and external specialist training courses to management and character-building seminars all the way through to customized Fronius programs.





ANNUAL EMPLOYEE MEETINGS

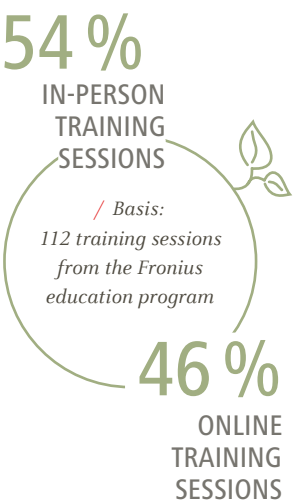
In the annual Fronius employee meetings, managers and employees set aside time to discuss the way they work together, reflect on their performance, and define goals. The guidelines that are provided create a framework, suggest questions to ask from various perspectives, and provide space for performance appraisals. Personal strengths are highlighted, potential for development is identified, and measures for personal and professional further development are defined.

FURTHER DEVELOPMENT OF SKILLS

Every employee or employee group is given opportunities for continuous further development (online or in-person courses, internal or external). In 2020, a total of 7,746 participants attended personality, management, technical, process, and strategy training sessions.

THE FRONIUS EDUCATION PROGRAM

is one of the most important instruments of training and further education. It provides motivation and answers questions on the subject of change within the company and encourages the further development of individual employees while still providing classic training such as project management, management outside the hierarchy, and much more. In 2020, 1,447 participants took part in a total of 112 training sessions. In spring, we were able to respond quickly to the new conditions brought about by the Corona crisis: many of the in-person training sessions that were scheduled could be easily moved online.



Average number of hours spent on training and further education in 2020: 12.82 h per employee

(basis: average number of employees in 2020)

MANAGER TRAINING

Fronius trains its managers within the scope of a multi-day manager training program and provides further support for managers in their (new) roles. Managers also take part in internal manager workshops, training sessions focusing on managerial issues, and individual coaching sessions. This helps shape the management culture together and promote the development of strong manager personalities.

BENEFITS & EVENTS

With attractive bonus models, sponsored activities, child-friendly care facilities, and a balanced menu, Fronius supports the social networking, health, and wellbeing of all employees.







COMPANY CATERING

Good food and a healthy diet have a hugely positive impact on wellbeing – and this requires high-quality ingredients. Thomas Weinberger, Head of Catering, places huge value on the quality, freshness, and origin of the food he prepares. "The Fronius company restaurants are supplied by handpicked suppliers whose production conditions we review in great detail. We also use as few ready-made products as possible and replace these with locally produced goods. You can also taste this quality." And speaking of taste – this is also enhanced by herbs grown ourselves at the Fronius sites.

To ensure colleagues working the night shift also get a hot meal, pre-prepared dishes are available from vending machines in Sattledt and Pettenbach.



A hot water dispenser and a variety of teas are available to employees. Special tea varieties (invigorating or calming) have been selected by the newly trained shift fitness coaches for the various shift times.



CHILDCARE

At Fronius, children are in the best hands. At the company kindergarten, which is open throughout the year, children from the age of 15 months are looked after in two toddler groups and one kindergarten group. Parents can also cover their holiday time in August with the summer kindergarten.

Another family-friendly project was also introduced at Fronius in 2020: the holiday care scheme, specifically designed for elementary school students.

Working with the educational specialists from the Upper Austrian Hilfswerk (public social aid organization), we have developed an excellent holiday program. Some of the activities include waterbomb fights, afternoon barbecues, and a programming workshop for children ("CoderDojo"). The project has attracted a huge amount of interest. Parents often find it difficult to find the right childcare for their children or to share holiday time between both parents.





© Photo: OERK/Mitter

BLOOD DONATION CAMPAIGN

Rolling up our sleeves and putting our feet up for a good cause. The 13th blood donation campaign took place in October at the Sattledt site. The Red Cross team comes to Fronius once a year and rewards employees who have donated with drinks and snacks for doing a good deed during their working hours. The number of volunteers was particularly high in 2020. Around 93 employees, 30 of whom were donating for the first time, helped set a new Fronius record – in spite of Corona.



THE NEW HOME OFFICE

The home office is the new trend. As a result of the first COVID-19 lockdown, many employees experienced working from home for the first time. This way of working has been possible at Fronius since May 2020.

There are various advantages to the home office: improved work-life balance and a reduced impact on the environment and climate (less commuting means lower harmful substance and greenhouse gas emissions).

At Fronius, we place great importance on finding the right balance between working from home and the office and developing individual solutions together with our employees. Community and team spirit are what define us at Fronius. We value the ongoing exchange between our employees, which is often too short when working from home. Neither can an ergonomic working environment always be guaranteed. In order to find the right balance, Fronius employees can spend up to 50% of their weekly working time working from home, depending on their scope of duties and responsibilities.

"LANGE NACHT DER FORSCHUNG" GOES DIGITAL

This year, Fronius again took part in the "Lange Nacht der Forschung" (LNF) (Long Night of Research) – Austria's largest science and research event. As was dictated by the circumstances, this was the first time the LNF took place online. Contributions such as "Spaceship Earth", a virtual company tour, and two wordraps ("A passionate scientist" and "Creative solution-finder") were presented on the virtual Fronius visitor platform.

SHIFT FITNESS CABARET

At the end of February, fitness gurus Andreas Koller and Ingo Vogl presented production employees with facts, tips, and tricks in two sessions on the subject of "shift fitness". Lifestyle matters such as nutrition, exercise, sleep, shift work, and social interaction were presented from a medical perspective and in cabaret style, providing several "Aha!" moments among the audience as well as inspiration for day-to-day (working) life.







BIKE TO WORK

Fronius

DEVELOPER MEETING

As a result of the Corona crisis, the developer meeting was held online for the first time in 2020. The inspiring mix of internal and external speakers addressed the core R&D audience as well as several other interested parties – more than 800 employees followed the presentations live.

With keynote speakers and a talk from the Fronius management board, the focus of the morning session was the future. The afternoon was dedicated to external technology inputs and virtual market stalls. The highlight wall provided an interactive element with a selection of positive memories.

CYCLISTS' BREAKFAST

There are a number of great reasons to cycle to work: environmental protection, physical activity, exercise in the fresh air, saving fuel money. In September, Fronius took part in the European mobility week by handing out breakfast packs to Fronius employees who traveled to work by bike. A total of 205 cyclists (including electric scooter riders and skateboarders) left their cars at home and received a goody bag in return.

ECOLOGICAL RESPONSIBILITY

As a production company, we are keenly aware of the effects of our business activities on the environment.



The optimum use of our resources is firmly anchored in the Fronius values, which apply equally to every department. With sustainable visions and innovative developments, we are setting a clear example and doing our best to preserve our planet's resources.



DECARBONIZATION AND CLIMATE PROTECTION

We are already beginning to feel the effects of climate change. Stakeholders throughout the world are being encouraged to do their part in reducing greenhouse gas emissions. The UN Climate Change Conference in 2015 set the goal of keeping the global temperature increase to below 2 degrees. In response to this, Europe set ambitious goals to reduce emissions by 55 % by 2030 and to become climate-neutral by 2050. Austria took this one step further by declaring its intention to become climate-neutral by 2040.

The climate crisis could also pose challenges for Fronius. There may be a decline in demand for energy-intensive products, increasing energy costs may have an impact, or extreme weather events may cause damage and an unstable energy supply. These risks could also escalate in some countries and cause problems in our value creation chain, as has been the case, for example, during the COVID-19 crisis.

The path to climate neutrality does, however, create various opportunities for Fronius. We offer innovative, efficient products that contribute towards a sustainable energy system. By investing in energy-saving technologies and adopting a responsible approach to resources, we save both energy and material costs.

In an effort to curb climate change, Fronius has set itself the goal of moving completely away from fossil energy carriers and instead using renewable energy sources at its sites in Austria. Decarbonization is a core element of our sustainability strategy.



ENERGY TRANSITION LEADERS INITIATIVE

As a pioneering company, Fronius is actively involved in the ‚Energy Transition Leaders Initiative'. Our goal is to present the projects we have already introduced in the fields of energy efficiency and renewable energy to other companies as best practice examples. By demonstrating the added value of these projects, including reducing energy costs and increasing our competitive edge, we are hoping to inspire other companies to work towards a vision of climate-neutral management. By working with the other companies involved, we can also develop common solutions to existing challenges.

The energy transition can only be successful if we work together.

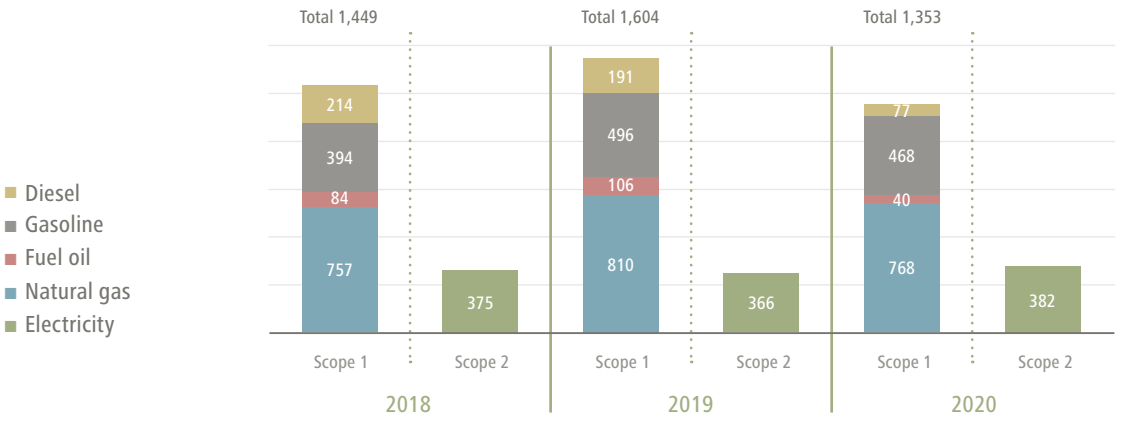


OUR ECOLOGICAL FOOTPRINT

At Fronius, we record our direct and indirect greenhouse gas emissions. Scope 1 comprises the energy consumption emissions directly at our sites, including the energy used for cooling, heating, and processes. Scope 2 includes indirect emissions from the use of purchased electricity, as the emissions are produced by the energy suppliers. Other indirect greenhouse gas emissions that are produced outside of our company fall under Scope 3.

Greenhouse gas emissions in Scope 1 and Scope 2 declined in 2020 in comparison with 2019, despite an increase in production volume. This underlines our objective of separating greenhouse gas emissions from economic growth.

Greenhouse gas emissions, Scope 1 and 2 (t CO_{2e})

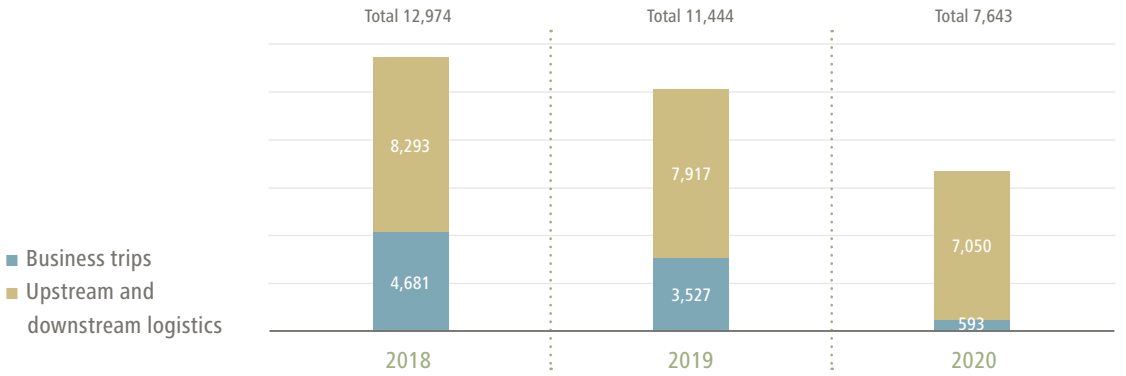


		2018	2019	2020
Greenhouse gas emissions, Scope 1 and 2	t CO_{2e}	1,824	1,970	1,735
Specific greenhouse gas emissions	t CO_{2e} / t product volume	0.15	0.13	0.10

/ Source for emission factor: Federal Environment Agency 2019

Scope 3 comprises emissions caused by upstream and downstream goods transport and business trips.

Greenhouse gas emissions, Scope 3 (t CO_{2e})



ENERGY MANAGEMENT



Energy management plays an important role in responsible management.
By consuming energy efficiently and making use of renewable energy, we can prevent greenhouse gas emissions and advance decarbonization.

WE HAVE SET OURSELVES THREE MAIN GOALS:

- / Move away from fossil energy carriers to renewable energy sources
- / Expand our photovoltaic systems
- / Increase energy efficiency

CONVERTING TO RENEWABLE ENERGY SOURCES

Since the introduction of the environmental and energy management system in 2014, we have been able to significantly improve our ecological performance. Now, 86 % of the energy we use comes from renewable sources, of which 12 % is from geothermal energy, 14 % from biomass, and 4 % from photovoltaics, plus 56 % from purchased green power. During the renovation of existing buildings, for example, oil heating has been replaced by pellet heating and the waste heat from laboratories is also being used.

EXPANDING OUR PHOTOVOLTAIC SYSTEMS

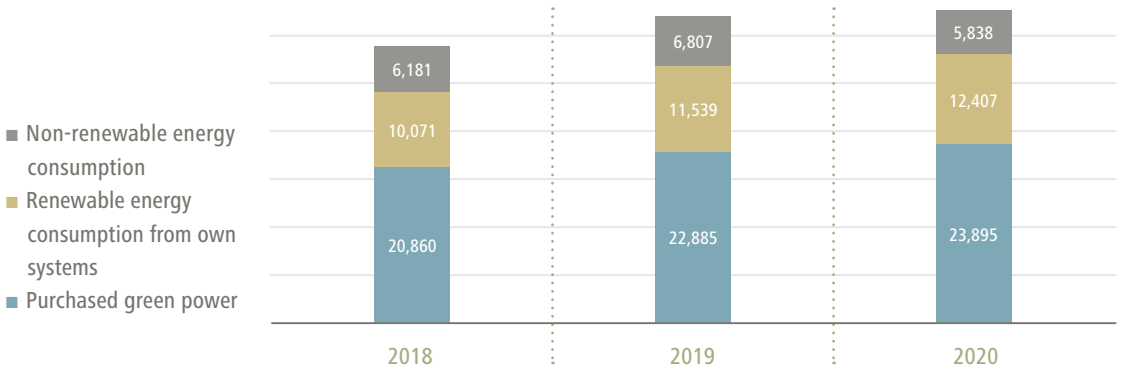
Fronius aims to generate as much of its own electrical energy as possible using photovoltaic systems. By expanding our photovoltaic capacity at the sites in Pettenbach, Sattledt, Steinhaus, Salzburg, and Vienna, we have been able to increase our self-generated power in 2020 by +54 % to 1,865 Gigawatt hours.

INCREASING ENERGY EFFICIENCY

Our conscious decision to use new and resource-conserving technologies is instilled in all areas of the company. We continuously implement measures to optimize our energy consumption. In 2020, we started the new "Young Resource" apprentice project, in which apprentices put the use of resources during production under the microscope. The energy consumption of small consumers was measured and energy saving potential identified, which could significantly reduce our ecological footprint.

Our approach to energy management applies to all sites of Fronius International GmbH but in particular to the production sites in Sattledt and Pettenbach, the research and development site in Thalheim, and the sales site in Wels. Regular internal audits are carried out in order to identify and evaluate energy issues and energy consumption. Every four years, an energy audit is carried out by experts in order to improve the current situation and identify possible energy-saving measures. The results are summarized in an energy report, which contains detailed documentation of our energy consumption as well as the measures derived from the audit in order to increase energy efficiency.

Energy consumption by source (MWh)



ENERGY CONSUMPTION OF ALL FRONIUS SITES		2018	2019	2020
Total energy consumption	MWh	37,112	41,231	42,193
		Proportion in MWh		
Non-renewable energy consumption		6,181	6,807	5,838
■ Fuel oil		263	335	125
■ Diesel		859	767	310
■ Gasoline		1,599	2,011	1,906
■ Natural gas		3,443	3,686	3,497
Renewable energy consumption from own systems		10,071	11,539	12,407
■ Photovoltaics		445	924	1,741
■ Geothermal energy		4,982	5,600	4,904
■ Biomass		4,644	5,015	5,762
■ Purchased green power		20,860	22,885	23,895
Specific energy consumption	MWh / t product volume	2.96	2.81	2.53

YIELD FROM OWN PHOTOVOLTAIC SYSTEMS		2018	2019	2020
Total PV output	MWh	1,096	1,195	1,865

ENERGY CONSUMPTION OF FRONIUS SUBSIDIARIES		2018	2019	2020
Total energy consumption	MWh	-	27,475	37,716

/ **Energy consumption data from our subsidiaries were collected 2019 for the first time.*

ENVIRONMENTAL MANAGEMENT & USE OF RESOURCES

Fronius is aware of the ecological impact of its operations and continuously implements improvement measures for a more responsible future.

In 2014, Fronius introduced its environmental and energy management system according to the internationally recognized ISO 14001 standard. Complying with this standard means that we systematically take account of our overall impact on the environment, can make targeted improvements, and minimize our environmental risks. Since introducing the environmental management system, we have significantly reduced our emissions, optimized our waste management, and used our resources more efficiently.

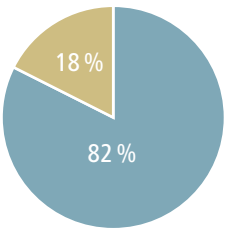
EFFICIENT USE OF RESOURCES IN SHIPPING

Important measures have also been taken in logistics with regard to resource conservation. One of these measures aims to reduce the use of plastic. Cardboard inserts and padding are used to protect our products during shipment. Where we would previously have used plastic film to fill the packages, we are now using recycled paper. The sizes of the boxes have also been better adapted to the products.

We are conscious of our use of cardboard. We reuse cardboard packaging wherever possible. In 2020, we reused around 20 metric tons of cardboard that would otherwise have been disposed of.



Packaging



■ Renewable
■ Non-renewable

Through close collaboration between the Product Development and Production departments, we develop efficient and sustainable production processes, thereby saving valuable materials and energy.

MATERIALS USED		2018	2019	2020
Total material/raw material usage	t	17,095	17,620	18,371
			Share in t	
Semi-finished products		11,593	11,800	13,382
Raw material		2,995	2,953	3,045
Packaging		1,701	2,066	1,285
Auxiliary materials and consumables		806	801	659
Specific material consumption	t / t product volume	1.36	1.20	1.10

WATER CONSUMPTION

Water is essential for the survival of humans, animals, and plants, and should therefore be treated with respect. Although the theoretically available volume of water in Austria exceeds the actual water demand, there are still regional and temporary water shortages which cause groundwater levels to fall. All washrooms and irrigation systems at Fronius International GmbH sites have been optimized. The site in Sattledt has an 800 m^3 rainwater collection tank that is used not only for extinguishing purposes but also to water the gardens.

WATER CONSUMPTION BY SOURCE		2018	2019	2020
Total water consumption	m^3	39,800	38,673	33,650
			Proportion in m^3	
From municipal water supply		37,575	36,944	32,341
Surface water/rainwater		372	1,729	474
Groundwater		1,853	0	835

WASTE MANAGEMENT

Fronius has set itself the target of avoiding waste wherever possible and to reuse any unavoidable waste as far as possible as a valuable resource. This reduces the use of raw materials, some of which are in very limited supply on our planet or the extraction of which can be extremely energy-intensive or environmentally damaging. Within the scope of the environmental management system, all waste produced at the sites of Fronius International GmbH is subjected to continuous monitoring. Seventy percent of our waste is currently recycled – these materials are prepared for reuse by our waste management companies. This makes an important contribution towards reducing our environmental impact.

Within the scope of various awareness-building campaigns, we instill in our employees the concept of waste prevention, reduction, and separation. A waste separation quiz and a series of articles in our sustainability blog proved particularly successful.

EVERY CONTRIBUTION COUNTS

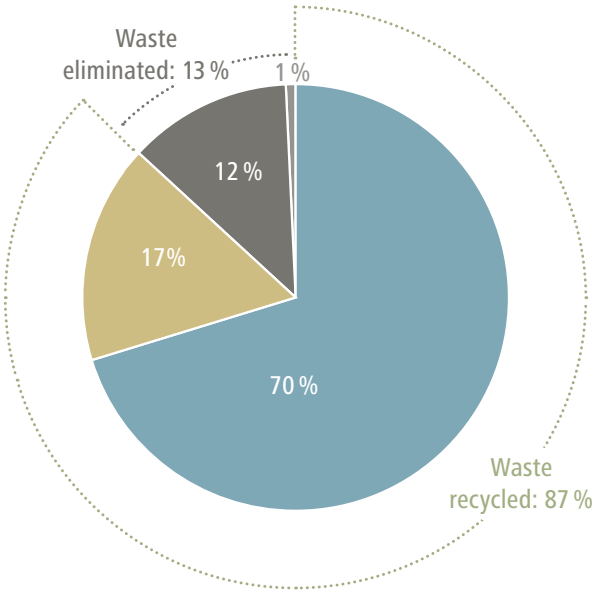
All hot-drink machines at the Fronius sites use biodegradable paper cups, but waste prevention is a higher priority than recycling. This is why Fronius started the "myHäferl" campaign, whereby employees are given a discount for using their own cups.



A total of around 50 different types of waste are collected and then sent either for recycling or disposal.

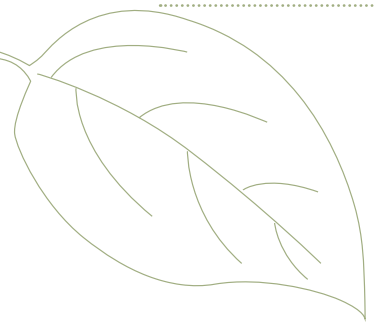
Waste produced by disposal method

- reuse & recycling
- recycling
- incineration
- landfill



WASTE PRODUCED - NON-HAZARDOUS WASTE		2018	2019	2020
Total recycled waste	t	2,871	3,190	3,170
			Share in t	
Reuse & recycling		2,217	2,344	2,223
Recycling		189	232	518
Composting		110	77	0
Incineration		355	510	406
Landfill		0	26	23

WASTE PRODUCED - HAZARDOUS WASTE		2018	2019	2020
Total recycled waste	t	259	330	352
			Share in t	
Reuse & recycling		134	215	250
Recycling		35	52	71
Composting		0	0	0
Incineration		30	63	29
Landfill		61	0	1



As a manufacturer and distributor of products, Fronius must comply with numerous legal regulations and obligations.

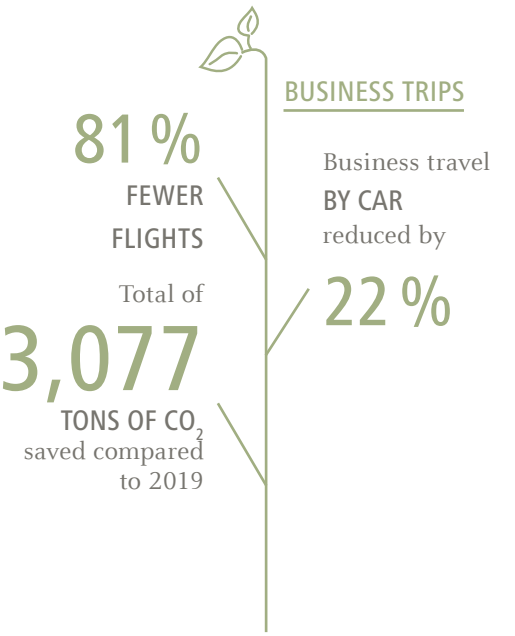
To ensure our packaging is collected and recycled in an environmentally friendly manner, we participate in a collection and recycling system. An authorized company returns and recycles the packaging from the products we have sold in Austria. In 2020, this amounted to 120.7 metric tons. In parallel with this collection and recycling system, we also make use of the comprehensive recycling service for the electrical equipment and batteries we have brought into circulation in Austria. In 2020, this amounted to 780 metric tons.



TRANSPORT IMPLICATIONS

As an international company, a significant proportion of our emissions are produced by business trips.

As a result of the Corona pandemic, the distance traveled for business trips was reduced significantly in 2020. Thanks to the development of our digital infrastructure, we were able to switch quickly to video conferences, webinars, and other digital platforms. Meetings, customer calls, training sessions, and other events were largely moved online. In comparison with 2019, the number of kilometers traveled by air was reduced by 81 % and by car by 22 %. The greenhouse gas emissions produced as a result of business trips were thereby reduced by 3,077 metric tons of CO_2.



MOBILITY	Distance in km			Greenhouse gas emissions t CO_{2e}		
	2018	2019	2020	2018	2019	2020
Total value	15,523,282	17,172,067	6,263,852	5,289.4	4,214.6	1,137.9
Plane	11,212,779	11,847,520	2,305,600	4,676.9	3,520.4	590.0
Car	4,002,640	4,834,551	3,758,896	608.2	687.3	545.1
Train	307,863	489,996	199,356	4.3	6.9	2.8

E-MOBILITY

The Fronius fleet is growing to include more and more alternative-fuel vehicles so as to make the transition to clean mobility even more appealing to employees. At the sites in Austria, green energy is provided by more than 150 networked electric charging points for cars and bicycles as well as a hydrogen refueling system – all powered exclusively by our photovoltaic systems. In 2020 alone, our photovoltaic systems produced a total of 1,865 MWh of energy, enough to cover around 12 million kilometers. We provide our employees and customers who use electric and hydrogen vehicles the energy free of charge. This is because the future of mobility at Fronius is electric and hydrogen-powered, with fossil fuels becoming a thing of the past.

BIKE TO WORK

Cycling is not only good for the environment, but also for our own health and wallets. Traveling to work by electric bike and charging the battery free of charge is already possible at the Fronius sites in Sattledt, Wels, and Thalheim. The latter has recently erected a new bike shed with space for 80 bikes.



This year, Fronius employees took part in the "Upper Austria bike to work" campaign. Together, they covered over 16,000 kilometers by bike.

LOGISTICS

Upstream and downstream material and goods transport is carried out by commissioned transport companies.

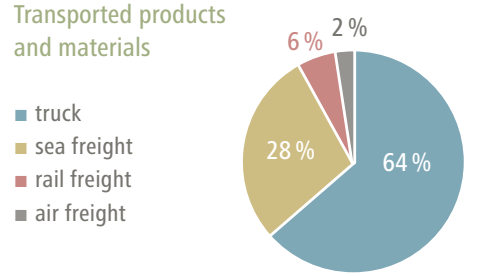
Fronius avoids air freight within Europe and we have created incentives for intercontinental transport to our subsidiaries to encourage the use of sea freight instead of air freight.

As a result, we reduced the transport of goods by air by 39 % in 2020 in comparison with the previous year. In the case of sea freight, pre-carriage takes place by railroad. In 2020, we reduced the total volume of greenhouse gas emissions produced by material and goods transport by 11 % in comparison with 2019.

In 2020, Fronius also introduced the freight forwarder assessment, whereby our sales partners are assessed according to sustainability and other criteria.

(See also "Downstream value creation", page 46)

Transported products and materials





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