



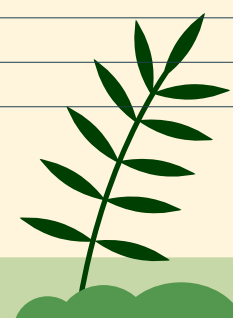
Sustainability Report

The sustainability concept of the Arbonia Group (Arbonia) is presented according to the following three pillars: **Climate**, **Community**, and **Cash**. Arbonia informs its stakeholders not only about current developments but also about the company's plans for ensuring a sustainable and successful future.





Introduction	Facts and figures	30
	Preface	32
	Companies of Arbonia	34
Sustainability approach	Sustainability strategy	38
	Sustainability governance	38
	Materiality analysis	39
	Ethics and integrity	40
	Risk management	41
	Stakeholder engagement	41
	Contribution of Arbonia to the SDGs	43
Climate	Interview: Creating a sustainable indoor climate	46
	Innovative products and solutions	50
	CO ₂ and energy	53
	Resource efficiency	58
	Procurement and supply chain	62
	Community	Interview: The company as a learning organisation
Occupational health and safety	68	
Dynamic corporate culture	70	
Creating and securing jobs	73	
Compensation structure	74	
Cybersecurity	75	
Cash	Interview: A road map for digitisation	78
	Sustainable business strategy and market orientation	80
	Product management	82
	Digitisation	84
Appendix	Report profile	88
	GRI content index	89
	Glossary	93



Facts and figures

3rd place

The new heat pump plant in Opočno, Czech Republic, achieves 3rd place in the Best of Reality Award in the category "Industrial and Logistics Buildings".

4.2%

Arbonia aims for a 4.2% average annual reduction in operational CO₂ emissions from Scope 1 and 2 by 2035 (compared to the reference year 2020).

Bronze status

in the initial assessment by EcoVadis



Scope 3

is taken into account in the sustainability performance for the first time.

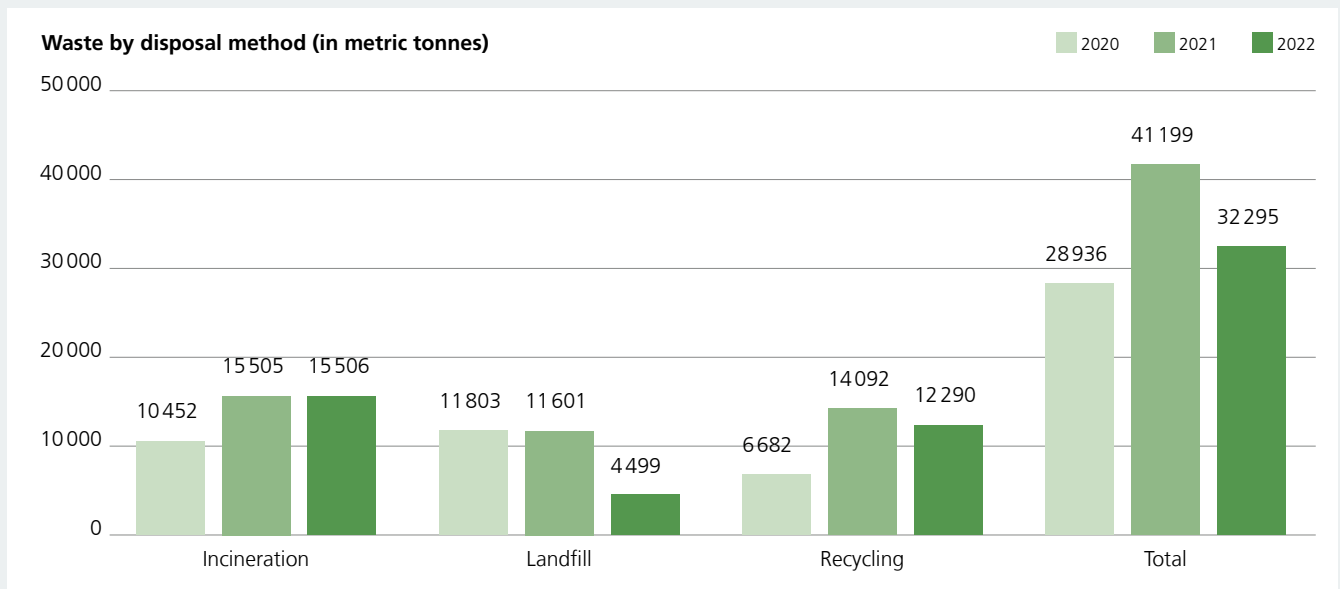
WE SUPPORT



We are a signatory to the UN Global Compact and are committed to its 10 universal principles.

"The heat pump for our production plant in Opočno is connected with our own photovoltaic system, and we store this energy so that our production can be completely CO₂-neutral."

Vladimir Šrajer
Head of the heat pump plant in Opočno



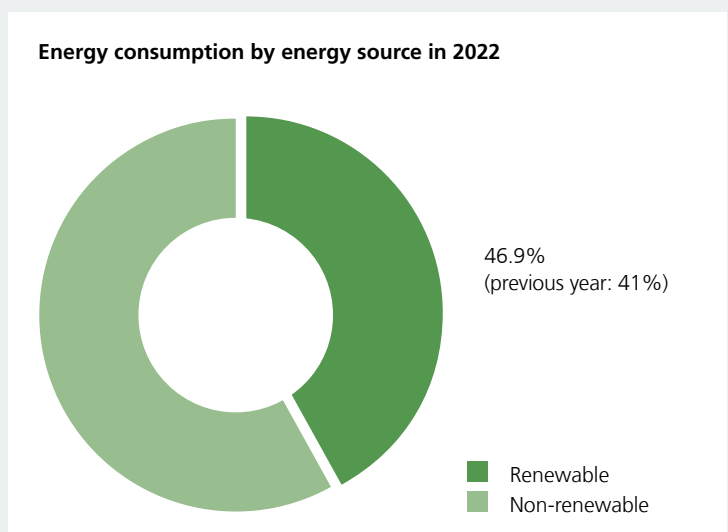
"SAP is at the heart of all our future projects for digitisation."

Berkan Sezer
Project Manager for Digitisation of the Doors Division

Starting in **2023** sustainability criteria will be included in the variable compensation of Group Management.

"Our goal is to continually reinvent ourselves and develop further together with our employees."

Stefanie Klaerding
Head of Human Resources Development and Employer Branding of the Doors Division



Preface



Dear Readers,

Arbonia has been pursuing ambitious goals such as reducing its CO₂ emissions and striving for healthy and sustainable growth for many years. Nowadays, the concept of sustainability is unquestionably part of this ambition. This no longer only means the economic stability of a company. Its contribution to ecological, social, and ethical justice in the world is also becoming more and more important.

Our consistent orientation towards becoming a more sustainable company has brought about great changes for us as Arbonia in recent years. In the process, we have learned to focus on the key issues for the future. We now use this culture of transformation to actively contribute to reducing global warming.

The construction sector is a major producer of CO₂ emissions in Europe, with a share of over 30%. The potential for reducing greenhouse gases in buildings is also therefore immense. Accordingly, there is a very great demand for products that reduce the energy consumption in buildings and have an at least equally high functionality and performance. Buildings can be supplied with renewable energy in a self-sufficient way when they have their own electricity generation, for example, from a photovoltaic installation and an electricity and heat storage system.

We identified this trend early on and substantially contribute to it with our products. Heating and ventilation systems as well as insulated interior doors can achieve significant improvements in new buildings and renovations. We have also made it our task to lower energy consumption and reduce greenhouse gas emissions along our value-added chain and especially in our production processes.

Our achievements and initiatives in the financial year

With the past financial year we have continued to create the conditions for combining financial and non-financial goals in our strategy. Suitable incentives are an important instrument for this. We have therefore decided to integrate sustainability criteria such as effective climate protection in the variable compensation of Group Management starting in financial year 2023.

An important factor for better climate protection is above all the expansion of renewable energies. We were able to improve further in this regard and now cover 47% of our total requirements with renewable sources. The share of green energy has increased to 43%, whereby 13% is now supplied through our own electricity production from photovoltaics, wind energy, as well as combined heat and power (CHP) systems. In total, this has further reduced our greenhouse gas intensity to 0.050 CO₂ equivalents (Scope 1–2) per net revenue.

Our long-term strategy is based on the principle of an integrated CO₂-free system that allows energy to be efficiently generated, transferred, and stored. For this purpose, we are investing in state-of-the-art CHP systems, for example. In Opočno and Stříbro (CZ), modern energy standards have been taken into account in the new construction of a heat pump plant and in the investment in compressors.

In addition to our own greenhouse gas emissions, we also intend to take indirect emissions more strongly into account. We have therefore taken initial steps to record the emissions of our upstream and downstream value-added chain (Scope 3). We will use these measurements to derive reduction targets and corresponding measures.

Our ESG agenda is also in competition with other companies facing the same challenges. For this purpose, we have had ourselves assessed by the rating platform EcoVadis since 2022. We immediately achieved the bronze status there. This means that we are among the top half of the assessed companies. In the future, we want to score even better with targeted measures. At the same time, we also use EcoVadis to assess our suppliers and include this in our supplier assessment.

Our obligation towards political frameworks

In all our efforts, we follow scientific model calculations and global agreements. For this reason, we support the Paris Climate Agreement, which aims to limit global warming to 1.5°C. Since 2021, we have been a signatory of the UN Global Compact and are committed to the ten universal principles of sustainable and responsible corporate governance. As Arbonia, we furthermore endorse the "European Green Deal" as a European sustainability project.

With this sustainability report, we create transparency regarding our goals, measures, and their associated effects. We also give an outlook on projects in the coming years that will continuously increase our sustainability performance.

In the name of the Board of Directors and Group Management, I would like to thank all employees who are helping to shape our exciting transformation process and have been involved in this report. Our dedicated team makes me optimistic about the future, in which we will continue our sustainability agenda.

Daniel Wüest, Group CFO



Companies of Arbonia

Arbonia is a focused building components supplier and consists of two divisions: Heating, Ventilation and Air Conditioning (HVAC) as well as Doors with the two business units Wood Solutions and Glass Solutions.

Production companies

Company	Site	Division / Business Unit	Manufactured products
AFG RUS	Stupino (RU)	HVAC	Steel panel radiators
Arbonia Glassysteme GmbH	Deggendorf (D)	Doors/Glass Solutions	Construction glass
Bekon-Koralle AG	Dagmersellen (CH)	Doors/Glass Solutions	Shower stalls
Brugman Fabryka Grzejników Sp. z o.o.	Legnica (PL)	HVAC	Designer and steel panel radiators
GARANT Türen und Zargen GmbH	Amt Wachsenburg (D)	Doors/Wood Solutions	Interior doors and frames
Invado Sp. z o.o.	Ciasna (PL)	Doors/Wood Solutions	Interior doors
joro türen GmbH	Renchen (D)	Doors/Wood Solutions	Functional doors
Kermi GmbH	Plattling (D)	HVAC Doors/Glass Solutions	Steel panel radiators Shower stalls
Kermi s.r.o.	Stříbro (CZ)	HVAC	Special radiators, battery storage
PRÜM-Türenwerk GmbH	Weinsheim (D)	Doors/Wood Solutions	Interior doors
PZP Heating a.s.	Opočno (CZ)	HVAC	Heat pumps
RWD Schlatter AG	Roggwil (CH)	Doors/Wood Solutions	Functional doors
Sabiana s.p.a.	Corbetta (IT)	HVAC	Ventilation and air conditioning (air heaters, radiant panels, fan coils, central air conditioning units, heat recovery, filter technology, evaporative coolers)
Termovent Komerc d.o.o.	Kladovo (RS)	HVAC	Air-handling units for cleanrooms
TPO Holz-Systeme GmbH	Leutershausen (D)	Doors/Wood Solutions	Special doors incl. door frames and door trims
Vasco BV	Dilsen (BE)	HVAC	Design radiator, ventilation, pipes for underfloor heating



Administration and sales companies

Company	Site	Division / Business Unit	Type of site
AFG Shanghai Building Materials Co. Ltd.	Shanghai (CN)	Doors/Glass Solutions	Sales
Arbonia AG	Arbon (CH)	Group	Holding
Arbonia Doors AG	Arbon (CH)	Doors/Wood Solutions	Administration, sales
Arbonia Doors GmbH	Erfurt (D)	Doors/Wood Solutions	Administration
Arbonia France Sàrl	Hagenbach (FR)	HVAC	Sales
Arbonia HVAC AG	Arbon (CH)	HVAC	Administration
Arbonia Management AG	Arbon (CH)	Group	Administration
Arbonia Riesa GmbH	Riesa (D)	HVAC	Sales
Arbonia Services AG	Arbon (CH)	Group	Administration
Arbonia Solutions AG	Arbon (CH)	HVAC	Sales
Baduscho Dusch- und Badeeinrichtungen Produktions- u Vertriebsgesellschaft mbH	Margarethen am Moos (AT)	Doors/Glass Solutions	Sales
Cirelius S.A.	Avintes (PT)	HVAC	Sales
Kermi Sp. z o.o.	Wroclaw (PL)	HVAC	Sales
Prolux Solutions AG	Arbon (CH)	HVAC	Sales
Tecna S.L.	Alcobendas (ES)	HVAC	Sales
Vasco Group BV	Tubbergen (NL)	HVAC	Sales
Vasco Group GmbH	Dortmund (D)	HVAC	Sales
Vasco Group NV	Dilsen (BE)	HVK	Administration, sales
Vasco Group Sarl	Nogent-sur-Marne (FR)	HVAC	Sales
Vasco Group SP. z o.o.	Legnica (PL)	HVK	Sales
Vasco (UK) Ltd	Horsham (UK)	HVAC	Sales

Sustainability approach

For Arbonia, responsible action is an essential requirement for long-term company success. This includes treating responsibly employees, suppliers, customers and investors, as well as the environment and natural resources.

Our sustainability strategy is divided into the three sub-areas of **Climate** (ecological issues), **Community** (social issues), and **Cash** (economic issues). In these areas, we want to continually improve our sustainability performance beyond the legal requirements.





Sustainability strategy

Our approach is to create (added) value from raw materials in a responsible manner. The consistent focus on a sustainable and long-term business model has brought great changes with it in recent years. For this purpose, we invest in the product portfolio as well as in the production processes in line with a sustainable transformation. We additionally support the "Paris Convention" of the Paris Climate Conference as well as the "European Green Deal". On this basis, we pursue the strategic goal of actively contributing to minimising global warming. CO₂ reduction targets for our emissions from Scope 1 and Scope 2 in line with the Science Based targets Initiative are crucial levers for this. We have also developed initial approaches to recording and reducing the emissions from Scope 3 (see "CO₂ and energy", p. 53).

The Group-wide sustainability strategy is practised in the entire corporate group and supported by the Board of Directors. This is also demonstrated by our joining the United Nations (UN) Global Compact.

The sustainability goals are centrally defined and coordinated; the HVAC and Doors Divisions are responsible for the decentralised implementation. For this purpose, they are developing specific plans with individual measures and expanding their product portfolios in this direction.



Sustainability governance

Arbonia is organised in a decentralised way and has a holding structure. Group Management – consisting of the CFO and the two CEOs of the divisions – determines together with the Executive Chairman of the Board of Directors the targets and measures with which the strategy specified by the Board of Directors will be implemented. The responsibility for the operational business lies with the divisions.

Sustainability is an essential part of the group strategy. The CFO is responsible for managing the topic within the Group. This person develops the sustainability strategy together with the sustainability committee and representatives from the Corporate Communications & Investor Relations Department, who are responsible for the Group-wide coordination. The sustainability committee consists of a representative of the HVAC Division and one representative each from the Wood Solutions Business Unit and the Glass Solutions Business Unit of the Doors Division. The divisions or their companies coordinate individual measures with the Group functions and implement them. Group Management evaluates important initiatives and projects on a monthly basis.

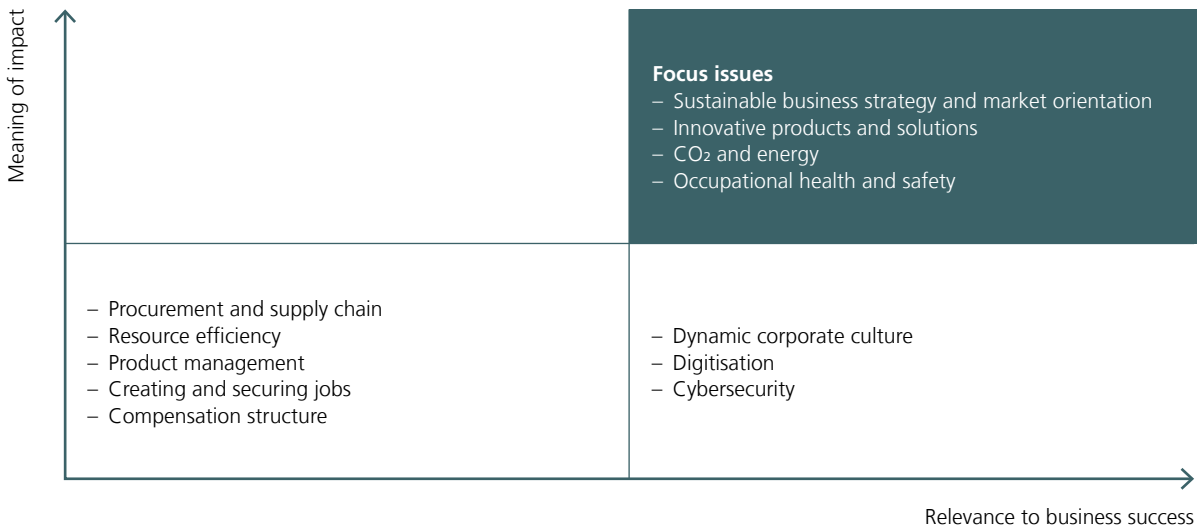
The Board of Directors of Arbonia is continuously informed about new legal requirements for sustainable corporate governance. It takes on the decision-making and control function for all measures and evaluates the performance on the basis of defined targets. This concerns Internal Audit and thus risk assessment, for example. In the reporting year, Internal Audit sent the Board of Directors 14 audit reports on risks and the implementation of planned measures. These reports are also available to external auditors. The Board of Directors is also continually involved in examining possible transactions in the form of due diligence processes. The Board of Directors can order investigations or call in external consultants via the audit committee in all areas of competence. The Nomination and Compensation Committee has decided in consultation with the entire Board of Directors to also integrate climate targets in the variable compensation of Group Management for the first time starting in financial year 2023.

Materiality analysis

The present third sustainability report is based on a materiality analysis that we carried out in 2020. In this process, the relevant topics were determined on the one hand for long-term business success and on the other hand in respect to important effects on the environment and society. The analysis was based on a wide spectrum of contents that included GRI standards and requirements of the Sustainability Accounting Standards Board (SASB), criteria of ESG rating agencies, as well as an industry benchmark. A core team consisting of the Group CFO,

the sustainability officers, as well as representatives of the divisions and of various corporate functions consolidated the selection of topics. The relevancy of the topics was then assessed in a workshop. The CFO as well as representatives of the two divisions, HVAC and Doors, as well as of various corporate functions (e. g. Human Resources and Legal & Compliance) took part in this validation. The process was supported by an external specialist. The result of the analysis is mapped in the following materiality matrix:

Materiality matrix





Ethics and integrity

We are aware of our economic, ecological, and social responsibility and in our Code of Conduct, we commit to 1.) respecting human rights, with particular regard to the prohibition of child labour, 2.) ensuring the health and occupational safety of employees, 3.) cooperating with suppliers who have committed to sustainable operating activities and fulfil their social responsibility, 4.) observing environmental protection standards, and 5.) carefully using resources.

Arbonia designated a compliance officer in each division during the reporting year. They are responsible for implementing Group specifications in the corresponding subsidiaries.

The reporting year was characterised by new due diligence and reporting obligations concerning conflict minerals and child labour that will be applied for the reporting year 2023 for the first time. When selecting suppliers, Arbonia increasingly takes into account whether they observe the due diligence obligations and obtains corresponding supplier evaluations via the analysis platform EcoVadis.

Code of Conduct

In the reporting year, the audit committee of the Board of Directors approved changes to the Code of Conduct and the whistleblowing directive (rules for reporting wrongdoing) in connection with the new EU whistleblower directive. The Code of Conduct is supplemented by further directives such as for example the anticorruption directive, the directives regarding insider trading, and the directive for protection against sexual harassment, bullying, and discrimination at the workplace. The Code of Conduct and some of the further directives have been translated into up to twelve languages and can be called up in the Intranet by white collar employees. In the reporting year, a water policy and a waste policy were also introduced Group-wide, and the existing competition directive was updated due to statutory changes.

Upon joining the Arbonia Group, all employees sign the Code of Conduct and commit to upholding the values as well as the ethical and social principles. The compliance with this requirement as well as the implementation of training sessions on the Code of Conduct is reviewed by Internal Audit, which reports on this to the Board of Directors.

In addition to the Code of Conduct, the Board of Directors issued the "Supplement to the Code of Conduct" in 2018, which specially addresses blue collar employees. This contains in-depth regulations for production – for example, concerning resource handling, occupational safety and environmental protection. It does not include topics such as competition law. The "Supplement to the Code of Conduct" is hung in the factory halls in the form of posters and explained to the employees by the plant or shift managers in training courses.

Whistleblowing concept

The employees are called upon to actively participate in observing the Code of Conduct, including the "Supplement to the Code of Conduct" (together "Code of Conduct" in the following). For this reason, the Board of Directors issued a whistleblowing directive in 2013 and has introduced whistleblowing reporting units. The whistleblowing concept is currently being further developed based on the EU Whistleblowing Directive and in accordance with the national regulations of the individual EU countries. All employees who identify violations of the Code of Conduct are requested to report them to the internal or legally prescribed external reporting units. The CEOs of the divisions, the divisional compliance officer, the head of compliance, and the head of Internal Audit function as internal reporting units. The protection of reporting employees is a central element of the whistleblowing concept. Whistleblowers must not be subject to any disciplinary, legal, or other actions that could be to their detriment due to their reporting.

The Board of Directors is informed about all whistleblowing reports and the associated investigations as well as initiated measures. No suspicious cases were reported through whistleblowing in the reporting year. No sanctions were imposed due to non-compliance cases either.

Code of Conduct training

White collar employees attend Code of Conduct training regularly and as needed. New companies or sites are trained as part of their integration. These training courses deal with all key topics of the Code of Conduct and discuss in more detail individual further instructions and topics, such as non-compliance risks, conflicts of interest, insider trading, data protection, competition and cartel law, as well as corruption. Whistleblowing is also a central topic of these training courses. The employees are shown where they can make whistleblowing reports and how and what further steps are initiated by Arbonia. All training courses for employees are given by Arbonia Compliance.

To take digitisation into account in the compliance area as well, Group Management approved the introduction of various compliance e-learning courses for white collar employees and a training video with the most important contents from the "Supplement to the Code of Conduct" for blue collar employees. These projects were developed further in the reporting year, so that both topics can be introduced in 2023.



Risk management

Our risk management process has been institutionalised for some time now and consists of the following: Every three to five years, the risk catalogue is created again from the bottom up as well as from the top down on the level of the business units, divisions, and the Group using a Greenfield approach. The existing risks are continuously reviewed and – if necessary – adapted as well as supplemented with new risks. The risk catalogue comprises strategic, operative, financial, economic, as well as external risks. They form the basis for the risk analysis workshops that take place annually on the Group and division level with external, independent support.

A wide and varied group of responsible people take part in the workshops (generally eight to twelve participants per workshop). In the first step, the central changes in respect to the previous year are discussed and integrated in the risk catalogue. In the second step, the participants rate the risks in respect to extent of loss, probability of occurrence, and effect

on reputation. In addition, they discuss and define the cash flow relevance and the opportunity/risk ratio. This yields a corresponding risk matrix and associated expected values for the risks. A comparison with the previous year as well as a plausibility check come at the end of the group discussion. After the workshops, the risk owners define how to handle the risks. Furthermore, they develop corresponding measures for a defined period of time to minimise the risk. These measures are reviewed and updated every half-year.

The results of the workshops are aggregated over all divisions (bottom up), and a comparison with the Group is also made (top down). Group Management then discusses and adopts this assessment. This includes a quantification of the risks and a catalogue of measures to minimise the greatest risks. The entire risk profile is presented to the audit committee as well as to the Board of Directors.



Stakeholder engagement

As Arbonia, we maintain an intensive exchange of ideas with all stakeholders who have a significant influence on the economic, social, and ecological goals of the company. This group of internal and external stakeholders includes customers, employees, shareholders and investors, analysts, public authorities, neighbours and communities at the company sites – but also partners such as transport companies, suppliers, research institutes and associations, as well as the general public. The exchange of ideas with these groups takes place in the context of personal discussions, meetings, conferences and trade fairs, as well as surveys. An overview of dealings with the individual stakeholders is given in the table "Inclusion of stakeholders and their concerns" (see p. 42).

Memberships in the most important chambers and associations – including Swissmem (association of the Swiss mechanical, electrical, and metalworking industries), SwissHoldings, or the German-Swiss Chamber of Commerce – allow us to have a continuous exchange of information with sector-related companies and relevant interest groups. We have also been a signatory of the UN Global Compact since the end of 2021 and will fill out the Communication on Progress questionnaire for the first time in 2023.

In addition to our global engagement, we as Arbonia support communities at our production sites. This is demonstrated by numerous donor programmes and the support of non-profit organizations. Many companies sponsor sports activities for young people and adults. The companies of Arbonia also help to finance scholarships to universities of applied science.



Inclusion of stakeholders and their concerns

Stakeholders	Form of inclusion	Concern
Customers	Internal and external customer surveys Personal discussions	Product quality, product life cycle, customer satisfaction
Employees	Employee interviews, employee representatives, labour unions, newsletter	Occupational health and safety, strategy, sustainability performance
Shareholders and investors	General Meeting, representation by Board of Directors, roadshows, 1:1 discussions	Economic performance, future prospects, strategy, sustainability performance
Analysts	Roadshows, conferences, press releases	Economic performance, future prospects, strategy, sustainability performance
Public authorities	Regular exchange, approval processes for particular installations and processes	Compliance with legal and regulatory requirements
Neighbours and communities	Regular exchange, sponsoring	Securing jobs, promoting cultural life, noise and emission protection
Partners such as transport companies, suppliers, research institutes and associations	Supplier surveys, regular exchange	Transport damage minimisation, exchange of information, partnership and fair cooperation
General public	Press releases, website	Current information on the company

Arbonia's contribution to the SDGs

Arbonia is aware of its economic, environmental, and social responsibility. We are committed to operating more sustainably over the long term. We make a substantial contribution to climate protection with our products, which reduce energy consumption in buildings. For this purpose, we continually drive innovations in our two core areas of indoor climate and interior doors.

In addition, Arbonia practices a dynamic, open corporate culture and creates a pleasant, appreciative, and supportive working environment with attractive working conditions. As regional employers, the companies of Arbonia are an important economic factor in the respective regions.

Arbonia is dedicated to the goals for sustainable development of the United Nations and specifically contributes to the following six sustainable development goals (SDGs).

To date, we have not been able to completely measure our contribution to achieving the SDGs. Nevertheless, in the following chapters we show activities that support the goals of the United Nations for sustainable development. This is identified by SDG icons in the corresponding subchapters.



 Priorities and targets

Priority	Target	Status 2022	Page
The HVAC Division achieves an additive CO ₂ savings by operating energy-efficient products ¹ at customers.	By 2025: savings of 350 000 tonnes of CO ₂	Savings of 175 200 tonnes of CO ₂ for the years 2020, 2021, and 2022	56
Arbonia reduces its CO ₂ emissions from Scope 1 and 2.	By 2035: reduction by an average of 4.2% per year	Reduction of 7.86% compared to 2021	54
The HVAC Division reduces material use in production.	By 2035: reduction of error costs to less than 1% yearly	Error costs of 0.68% in 2022	60
The Doors Division reduces resource consumption for water (in m ³), gas (in MWh), and waste (in t).	By 2035: annual reduction of 3%	Natural gas reduced by 33%, waste reduced by 29%, water consumption measured for the first time in 2022 ²	61

¹Among others: heat pumps, X2 radiators
²The Doors Division considerably exceeded the objective in relation to gas and waste in the reporting year. Among other things, this is due to the changeover of the waste management at a large production site of the division, which also resulted in significant shifts within the survey methods.

Climate

As a building components supplier for products and solutions for indoor climate as well as interior doors made of wood and glass, Arbonia takes a responsibility for protecting the environment and climate. We see great potential in the transformation into an environmentally compatible economy and would like to substantially contribute to make buildings more sustainable with our product, development and service portfolio. Through further product innovations and new solutions, we want to minimise the ecological impact of our business activity and that of our customers on the environment so that Arbonia reduces its greenhouse gas emissions along the entire value-added chain.



Creating a sustainable indoor climate

With its new production plant in Opočno (CZ), the HVAC Division of Arbonia meets the strongly growing demand for heat pumps. However, not only the products are sustainable: The production site demonstrates the sustainable heating and cooling of a factory without oil or gas – only with self-manufactured heat pumps. The new production plant in Opočno therefore won 3rd place in the Best of Reality Award in the category "Industrial and Logistics Buildings". The plant manager, Vladimir Šrajer (VS), explains how the division is paying more and more attention to environmental and climate criteria with respect to the production and used materials.

How does a heat pump actually work – can you explain that to us briefly?

VS: The principle of a heat pump is very simple: "Environmental heat becomes heating energy". Specifically, it uses the clean and free environmental heat that is found directly at our doorstep: Heat is stored in the ground as well as in the air and even in water. A heat pump converts this into useful heat for your own four walls, in other words, for heating and hot water production. Modern heat pumps are also able to cool rooms by reversing the process and transporting excess heat from interiors to the outside. A heat pump is thus not only active during the heating period but can also be used during the summer.

Heat pumps from Arbonia are certified with the quality label of the European Heat Pump Association (EHPA). What quality features does this involve?

VS: The heat pump only receives this label if it has been tested according to specific quality guidelines and under laboratory conditions. For example, the efficiency of the pump is tested at different outdoor temperatures. The certification not only comprises the technical data but also the manufacturing process or the service.

Arbonia optimises this manufacturing process with the new production plant in Opočno (CZ), which you manage. How does Arbonia make sure that heat pumps are manufactured more sustainably during production?

VS: For the new production hall, we have primarily used construction materials that can really insulate the building, so that we do not lose any heat or waste heat during operation. For this purpose, we have developed a new heat pump with an output of 40 kilowatts, which we can use to heat and cool the entire production plant. This heat pump is connected with our own photovoltaic system, and we store the energy in a battery so that we can produce completely CO₂-neutral.

Heat pumps are a growth area because they help to achieve the Paris Climate Goals and can reduce CO₂ emissions. How many heat pumps can be produced in the new plant?

VS: The demand for heat pumps is currently very high. We are able to produce up to 15 000 heat pumps per year with the current size of the plant. However, this also strongly depends on resources, personnel, and material availability. These factors currently still limit our actual production capacities. In addition, we have enough free space at the new site to expand the production plant and double the capacity in the medium term.

How is the increased demand split between commercial and private customers?

VS: We register a considerably increased demand from both areas. Currently, around 80% of the inquiries are for residential buildings and around 20% are of a commercial nature. Only two years ago, we produced almost exclusively for residential buildings, but now the demand for large heat pumps or industrial buildings is increasing more and more.

How much power can a heat pump generate for a single-family home, and what models does Arbonia offer?

VS: Heat pumps in single-family homes generally produce an output between 3 and 16 kilowatts. The actual output depends on the heating load, among other things – in other words, the total heat requirement including hot water processing of a house. This should not be confused with the annual heating demand of a building at a defined temperature. The heating load varies from house to house, depending on the construction year and insulation value. Arbonia offers heat pumps from 4 to 22 kilowatts – depending on the technology (brine/water, water/water, and air/water heat pumps).



The energy self-sufficient house

When the sun is shining, the photovoltaic system converts the free sunlight into electrical current – so-called direct current – with the help of solar cells. An alternator converts this direct current into alternating current, which can be used via power outlets to operate all kinds of domestic appliances such as a washing machine or stove or to charge an electric car in the garage. Alternating current can also be used to operate heating and air-conditioning devices such as electric radiators or residential ventilation systems.

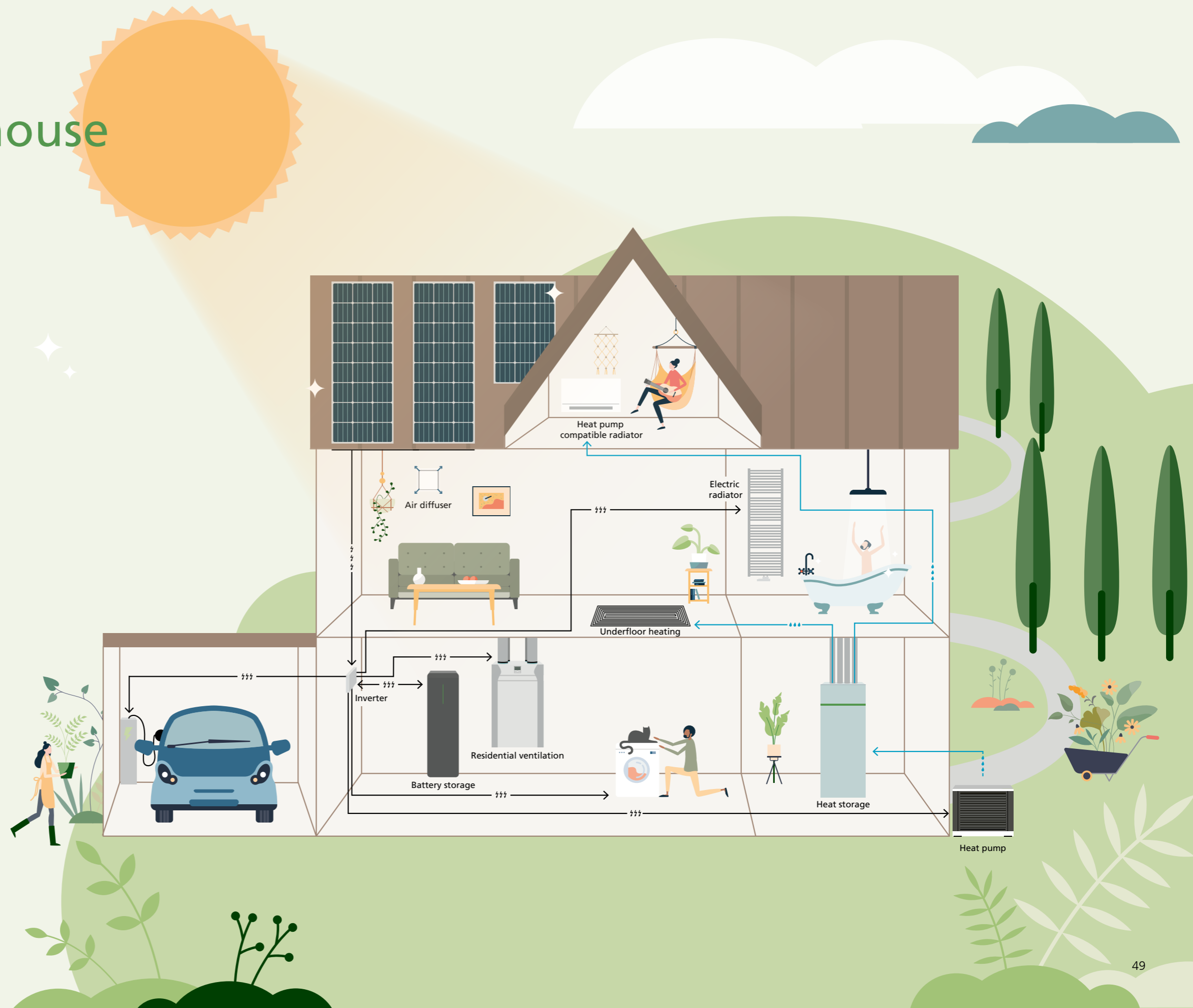
The current is also used to operate the heat pump. This extracts heat from its environment, either from the ground, the water, or the air, and emits it again many times over as heating energy. At the same time, it consumes a small amount of electricity.

To ensure that the heat from the heat pump is used as efficiently as possible, it is recommended to combine the heat pump with underfloor heating. This only needs a low flow temperature. If retrofitting an underfloor heating is not practical in renovations, radiators can be installed that can also be operated with a heat pump.

The heat (energy) that is produced by a heat pump should also be storage-capable, since it is not always used immediately. This makes heat storage units an important additional component in every future-oriented system. These units are connected between the heat pump and the heating system (underfloor heating, radiator, convector), so that excess heat is stored for later use.

It is also advisable to purchase a storage battery (power storage system) for sunny days in order to conserve excess current. At night or on a very cloudy day, this supplies current to the power sockets again via the inverter. This allows a house to be self-sufficiently supplied with current and heat via renewable energies even if the sun is not shining.

The HVAC Division of Arbonia offers a large portion of the products for this environmentally friendly heating system. These include, among others, heat pumps and heat storage units, battery storage, underfloor heating, radiators, convectors, as well as ventilation units and air filters.



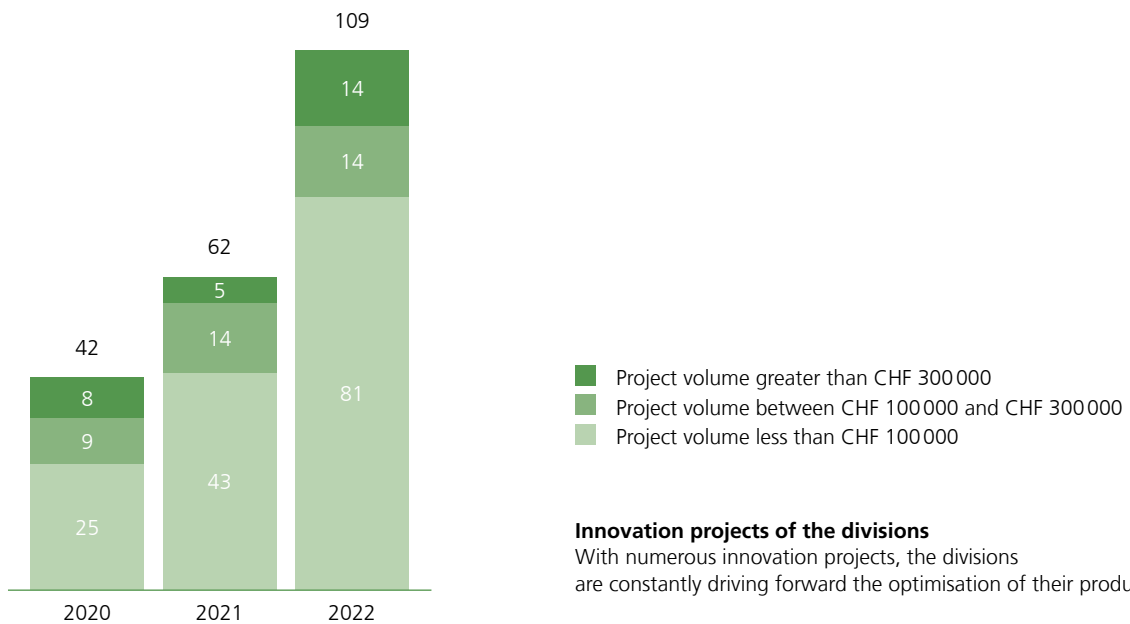


Innovative products and solutions



Our product strategy is based on optimising existing production processes and existing products as well as developing innovative solutions. In doing so, we focus on energy efficiency. We expect further impulses and leaps in development from green technologies. This is our reaction to the increasing demands of customers, residents, and legislators. At the same time, these innovations allow customers to reduce energy consumption

and thus save money. We collect data on the revenues that result from the new products and use this to analyse the success of our product innovations. Feedback from customers and end users significantly contributes to a qualitative assessment as well.



Innovation projects of the divisions

With numerous innovation projects, the divisions are constantly driving forward the optimisation of their products.



Heating, Ventilation and Air Conditioning Division

Energy efficiency thanks to new products

The HVAC Division is continually expanding its existing portfolio with environmentally friendly and energy-saving products and solutions. Traditional heat transfer media as well as modern indoor climate solutions reduce the CO₂ emissions of buildings, benefit from European subsidy programmes, and are strongly in demand in new construction as well as in renovation. A current example of a product innovation is a newly developed heat pump radiator that was placed on the market in the reporting year. This product allows the heating system to be operated at low temperatures, increasing the efficiency of the heat pump. Due to the great demand, further sizes with an additional cooling function will be launched in 2023.

At the HVAC Division, the development of a new heat pump generation and its own storage battery proceeded as planned. In the reporting year, air/water heat pumps for outdoor use with an output of 7 kW and 11 kW as well as a storage battery with a capacity of 6 kWh were introduced to the market. For 2023, an air/water heat pump with an output of 18 kW and a storage battery with a capacity of 10 kWh are also planned in order to be able to equip larger properties. The development of innovative heat pumps and the storage battery enjoy a high priority at the division due to their sustainability. In addition to the actual product development, this also concerns the further process optimisation and system integrations.

The HVAC Division aims for additional innovation impetus through participation in trade fairs, cooperation with universities, studying specialist literature, participation in industry associations and standardisation bodies, as well as the continuous further training of employees. New developments are protected by applying for industrial property rights if possible. The systematic product optimisation is based on the regular exchange of ideas between management and production as well as a professional deadline and cost monitoring.

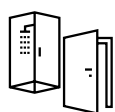
Action instead of reaction

The HVAC Division continues to orient its product portfolio according to sustainability criteria that are compatible with the economic balance of the company. The declared aim is to identify changed market requirements – for example, due to new regulations and laws – early on and to offer new solutions proactively. A good example of this are energy-efficient and resource-saving product solutions for the renovation of existing buildings. The heat pump radiator allows existing radiators to be replaced by efficient low-temperature radiators without major interventions in the existing piping systems. The division therefore expects further revenue growth in this area.

Key figures of innovative products and solutions: HVAC Division

	2022	2021	2020
Employees in research & development (FTE)	80	72	58
Expenditure on research & development (TCHF)	9 323	10 649	8 986
Expenditure on research & development as a share of revenues	1.4%	1.7%	1.7%
Share of net revenues from third parties with new products ¹	12.3%	10.8%	13.3%
Expansion investments in % of total investments	65.7%	25.3%	41.3%

¹ New products are defined as products introduced during the last three years.



Doors Division

Complete offer according to individual customer requirements

The innovative products and solutions of the Doors Division are very important for the pursuit of new market shares. The emphasis is on mass production as well as the manufacturing of wooden and glass doors according to individual customer requirements. The division is also pushing the development and manufacturing of technical doors and fire protection doors as part of a joint project within the entire Wood Solutions Business Unit. The production is supplemented by various service solutions. Intensive support of customers during the construction phase is thus just as natural as preserving the value of manufactured products. This is done, for example, by providing specific cleaning agents and maintenance instructions/work.

Customer-oriented products

The development of high-quality products with optimised material use is based on in-depth market observation: Through regular customer surveys, the division ensures that the requirements and demands of customers are taken into account and reflected in the innovation process. In product development, it not only concentrates on the technical progress but also on an innovative design that aims to convince users and fitters equally. The exchange of experience between the companies of the division as well as the contact with research centres establish solid foundations for this.

The division aims to expand its leading position in the European doors market by developing customer-oriented products, optimising the existing portfolio, reducing delivery times through targeted investments, and strengthening customer relationships. Important drivers for this progress are digitisation and the reduction of packaging material – as well as the development of new product groups. A good example is the PU edging system at the Roggwil (CH) site, which can be used to produce long-lasting doors for the hospital area. The robust

edge contributes to a longer use of the doors. The same effect is achieved by the aluminium frames. A further market innovation is DigiDoor. This technology is based on a digital twin and allows a fast access to product-specific information. This accelerates the process with maintenance and repair work in particular.

Success monitoring for new developments is ensured with a systematic project management and regular reporting to management. The companies of the division make an important contribution to establishing future standards and regulations through their active participation in bodies and committees. This also makes it possible to identify trends early in order to adjust the strategic orientation.

Key figures of innovative products and solutions: Doors Division

	2022	2021	2020
Employees in research & development (FTE)	51	50	44
Expenditure on research & development (TCHF)	4 469	4 950	4 610
Expenditure on research & development as a share of revenues	0.8%	0.9%	0.9%
Share of net revenues from third parties with new products ¹	16.5%	21.4%	18.4%
Expansion investments in % of total investments	58.7%	48.6%	50.9%

¹ New products are defined as products introduced during the last three years..

CO₂ and energy



The topic of "CO₂ and energy" is important to Arbonia in two respects: With a share of over 30%, buildings have a great potential for reducing greenhouse gases; they are the largest source of CO₂ emissions in Europe after mobility. Accordingly, there is a great demand for products that reduce the energy consumption in buildings and ensure a pleasant indoor climate at the same time. Arbonia identified this trend early on and makes a substantial contribution with its products. Improvements can be achieved in new buildings as well as in renovations – especially through the use of integrated system solutions, as well as through the use of individual components from the HVAC Division. Furthermore, the interior doors made of wood and glass also help to lower the energy consumption of buildings thanks to their insulation capacity.

We are also aware that conventional energy generation consumes finite resources that contribute to climate change. At the same time, we aim to operate with the lowest possible emissions at our own company, in production and in the area of transport and logistics. In particular the emissions of the upstream and downstream value-added chain (Scope 3) make up a large part of the overall emissions. Arbonia is therefore in the process of identifying the greatest factors that influence the Scope 3 emissions, in order to formulate reduction targets and measures for this as well. In an initial step, the divisions determined the following categories in a materiality analysis:

- Purchased goods and services
- Capital goods
- Energy-related upstream chain
- Upstream and downstream transport
- Waste
- Commuter traffic

Environment-related activities affect all business processes – from research and development through production to logistics and transport. It is correspondingly important that contributions to reducing greenhouse gas emissions and saving energy are made at each level. As Arbonia, we have been paying special attention to this issue for many years and are continually taking new measures to further improve our environmental impact. The optimisation of energy consumption – and thus the improvement of the CO₂ balance – has long since become a task of all companies, departments, and areas. Specifically, everyone has the possibility to work towards this goal and make their own contributions in the form of improvement suggestions. All targets in the area of energy efficiency are defined annually and advanced with corresponding measures.

One decisive measure for more energy efficiency are certifications of various production sites according to the ISO standard 50001, which requires a complete monitoring of energy key figures, among other things. The monitoring and assessment of energy efficiency within Arbonia are therefore standard. For this purpose, clear competencies and in-house energy officers have been designated. These officers from the areas of production and logistics continuously monitor the target achievement.

On the basis of the Science Based Targets Initiative, we have determined a path for reducing our own CO₂ emissions (Scope 1 and 2) and defined corresponding targets and measures. We aim for an average annual reduction of 4.2% (incl. growth) by the year 2035 (reference year 2020). Initial measures include increasing the share of electricity from renewable energies by expanding the photovoltaic systems, enlarging the fleet of electric cars, and increasing energy efficiency with new machines. A certified energy and environmental management reviews the target achievement and the effectiveness of the implemented measures.

A complete monitoring of the key figures in energy management is the most important instrument for Arbonia to continue to pursue the strategic targets relating to energy efficiency and CO₂ emissions. This also makes it possible to measure the share of renewable energy. The main objective of all companies is to grow responsibly and to aim for maximum energy efficiency.

In the reporting year, Arbonia already succeeded in increasing the share of renewable energy in the total energy consumption to 46.9% (previous year 41.0%). Together with large amounts of green energy, Arbonia was able to increase the overall share of renewable electricity in the total electricity consumption from 32.7% to 43.3%. A further success was the reduction in heating oil consumption for heat production by 24.4%. In total, Arbonia thereby succeeded in reducing its greenhouse gas intensity (greenhouse gas emissions in kgCO₂e/CHF net revenue) by 9.1% (Scope 1–2).

Arbonia's commitment in the area of CO₂ and energy benefits the company by enabling it to meet rising customer expectations regarding sustainability as well as increasing legal requirements.



Key environmental figures

	2022	2021	2020
Energy consumption in MWh	303 721	325 618	319 136
Thereof renewable	46.9%	41.0%	38.1%
Electricity	103 402	107 268	102 461
Own electricity production ¹	12.9%	12.2%	10.6%
Total renewable electricity	43.3%	32.7%	23.6%
Heat	177 999	194 464	193 924
Own heat production (wood chips/shavings)	97 787	98 374	97 343
Natural gas	78 485	93 806	93 772
Heating oil	1 727	2 285	2 810
Fuels	22 321	23 886	22 751
Diesel	21 534	22 624	21 402
Petrol and Liquified Petroleum Gas (LPG)	786	1 262	1 349
Energy consumption in kWh/CHF Net revenues	0.25	0.28	0.31
Greenhouse gas emissions (Scope 1 + 2) in tCO₂e	60 588	65 759	65 046
Scope 1	23 858	27 719	27 530
Own heat production (wood chips/shavings) ²	1 480	1 520	1 504
Natural gas	15 847	19 227	19 220
Heating oil	461	611	751
Diesel	5 805	6 049	5 722
Petrol and Liquified Petroleum Gas (LPG)	266	312	332
Scope 2	36 730	38 040	37 516
Electricity	36 730	38 040	37 516
Greenhouse gas emissions (Scope 1 + 2) in kgCO₂e / CHF Nettoumsatz	0.050	0.055	0.063
Scope 3³	-	-	-
Energy-related upstream chain	15 038	15 104	-
Commuting of employees	11 733	11 822	-

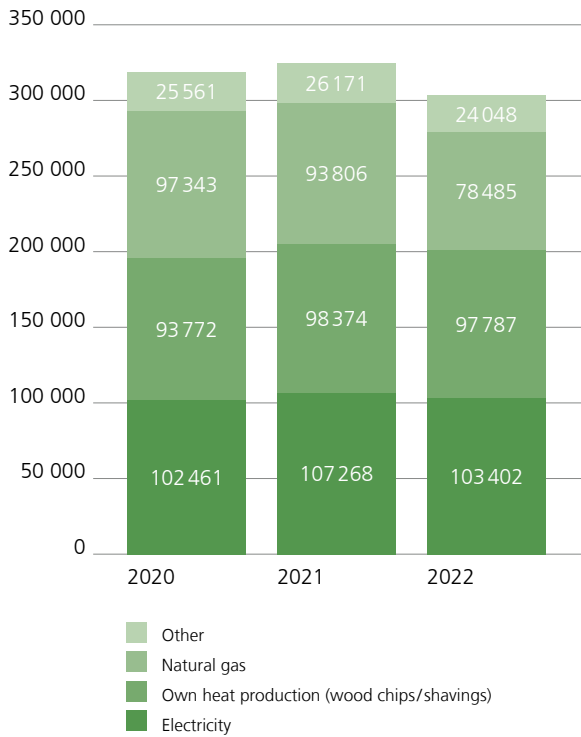
¹ The company's own electricity is produced by means of photovoltaic systems and a wind turbine. These plants do not cause any CO₂ emissions during operation.

² Direct emissions due to the production of the greenhouse gases methane and nitrous oxide, which are not absorbed during growth. Biogenic CO₂ emissions are reported outside of scopes according to the GHG protocol and amounted to 34 616 t CO₂e in 2022 and 34 782 t CO₂e in 2021.

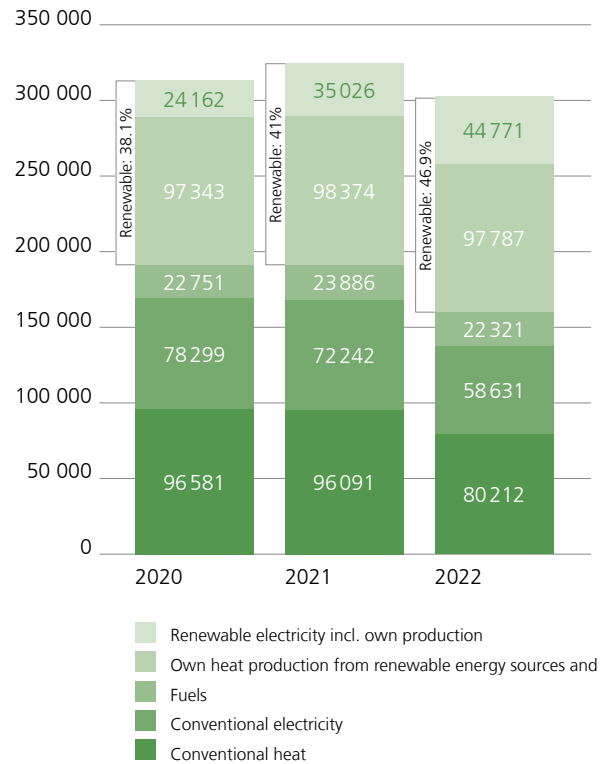
³ Scope 3 emissions will only be fully calculated for the next reporting year. The calculation of the emissions for the present categories was according to the information from the Arbonia Sustainability Report 2021..



Energy consumption by energy source (MWh)



Energy consumption composition (MWh)



Data and calculation basis

The calculation of the greenhouse gas inventory follows the guidelines of the WRI/WBCSD Greenhouse Gas Protocol.

Scope 1: Emissions from fuels.

Scope 2: Emissions that result from the production of purchased electricity. Country-specific emission factors are used here ("location-based approach").

Scope 3: The categories 3.3 Fuel- and energy-related emissions and 3.7 Employee commuting are reported in accordance with the Greenhouse Gas Protocol.

Country-specific emission factors are also used here ("location-based approach").

Used emission factors: EEA 2022, DBEIS, LfU Bavaria, and DEFRA.



Heating, Ventilation and Air Conditioning Division

Saving energy – and producing it ourselves

The HVAC Division is continually expanding its capacities for generating its own electricity and heat from renewable energies. A photovoltaic system at the production site in Kladovo (RS) generates around one third of the site's own power requirements (114.82 MWh in the reporting year). This share is to increase to 50% through a more efficient network supply. The heat production and cooling take place through heat pumps with higher capacities, so that the need for gas is eliminated entirely. The Corbetta (IT) production site is also continually increasing the share of self-generated electricity. Currently, over half of the power requirements are covered by photovoltaics. Further investments are planned in order to further increase this share. In addition, charging stations for electric cars are being installed.

At the Dilsen (BE) site, a wind power generator with an output of two megawatts provides for an improved energy balance. Additionally, the offices were ecologically renovated in the reporting year. Heat pumps were installed here as well, so that gas is no longer needed to generate heat. Furthermore, a new company policy stipulates that only electric cars may be used starting in 2023.

At the Plattling (D) site, the division put a CHP system into operation in 2022 that will lead to CO₂ savings of at least 425 tonnes annually. In Opočno, Czech Republic, the most modern energy standards were taken into account in the new construction of a heat pump plant and in the investment in new compressors (see introductory interview for the chapter, p. 46–47). The reduction of the energy consumption is analysed and monitored at these sites in the framework of Six-Sigma projects, a management system for process optimisation.

Improvement of the CO₂ footprint as a target

The division wants to decrease travel in logistics by optimally bundling loads together. In addition, the division uses telematics data to review and optimise driving behaviour and driving distances. High-emission vehicles are replaced by new ones, for example, at the Corbetta (IT) site, where the fleet was switched to the "Euro 6" emissions standard.

Provision of green areas at local sites

Maintaining biological diversity is closely connected to engagement in the area of CO₂ and energy. After an analysis of the biodiversity at the Plattling (D) site, initial measures were initiated to protect and strengthen the flora and fauna. The creation of green spaces and planting of additional trees on the company premises will promote biodiversity at the local sites of the division.

In addition to greening, efficient production and sales processes also play a decisive role in promoting biodiversity. Despite volume growth, the division is committed to manufacturing in existing or reduced spaces to consolidate production. Intensively built areas in the production plant are compensated for by organically cultivated compensation areas.



Doors Division

Numerous measures for greater environmental protection

The measures of the Doors Division for increasing efficiency are reviewed and ensured by a consistent energy management. At the Deggendorf site, all consumption is called up in real time with a state-of-the-art energy management system. An automated reporting system makes it possible to take counter-measures when defined limit values are exceeded. An annual budget is available for measures to increase efficiency. In addition, a majority of the companies regularly carry out certification audits according to the standards ISO 9001, 14001, and 50001. Energy efficiency is an important factor especially in the modernisation of production lines and peripheral systems because it allows significant reductions in power consumption. Further investments in reducing power consumption concern entrance gates, a planned hall roof with new insulation, as well as a photovoltaic system, LED lighting, and the replacement of a filter system. Of course, attention is also paid to the use of energy-saving technology in new buildings and renovations at the operating sites. In addition, a project for energy efficiency analysis is being carried out from which new measures will be derived.

And the degree of self-sufficiency will ultimately be continually increased through the construction of new or the expansion of existing energy generation systems. At the Prüm doors plant, residual materials from production are used to generate heat and electricity: The 30-year-old CHP system there has reached the end of its life cycle and is currently being replaced by a more modern and more efficient system. The new CHP system, which will be commissioned in 2023, can produce more than double the amount of electricity from biomass waste as the old system. This means that the Weinsheim (D) site will be able to generate up to 60% of the power requirements internally. The Garant production plant in Amt Wachsenburg (D) will take a similar path: In 2021, the planning phase started for a state-of-the-art CHP system, which will commence operations in 2024. Likewise, this system will also cover around 50% of the power requirements of the production plant.

In addition to the above-mentioned objectives, the division is also optimising its production processes – as for example with the implementation of shop floor management at various sites. Furthermore, packaging material will no longer contain any foils whatsoever in the future. This will save 60 t of packaging foil as well as additionally 280 m³ of gas per year by dispensing with a foil shrink machine.

Conservation of biodiversity

The Doors Division is implementing concrete measures and is driving innovations to maintain biological diversity. It has reduced the total solvent emissions for the manufacture of doors by one third in the past ten years, for example, and is

now increasingly relying on water-based coating materials. The share of solvents is currently only around 7.4% in this regard. By changing over the painting process, Prüm and Garant have also succeeded in achieving considerable savings in paint consumption. They have reduced the consumption by 18 and 40 tonnes respectively to less than 100 tonnes of paint per year. The Prüm company has contributed to the renaturation of a compensation area of 12 567 m² and guarantees the financial support of the required maintenance of the deciduous mixed forest for the next 30 years. In addition, the division is involved in the production of beehives and bee colonies in the framework of their wood training workshop.

The Garant company used the proceeds from a raffle on the occasion of their 30-year anniversary to initiate a tree-planting campaign to reforest a nearby forest. Over an area of around two hectares, numerous spruces that were befallen by bark beetles had to be felled. In cooperation with the forest conservation organisation Schutzgemeinschaft Deutscher Wald and the Rockhausen forestry cooperative, Garant used the donated money to buy saplings that were planted with the help of numerous volunteers.

Consistently monitored goals

A certified power management system has made it possible to considerably simplify the monitoring at several companies. This has led to a greater sensitivity for energy savings. At the Plattling (D) site, for example, measurements are regularly taken in production via a state-of-the-art data acquisition system to identify any weak points and immediately replace inefficient consumers. At the Weinsheim (D) site, approximately 100 in-plant energy measurement points are in operation for the machines and the infrastructure.

At Prüm and at Garant, one energy team each is responsible for the current status and initiates improvements. Both companies determine energy key figures defined on a monthly basis and have their energy management systems externally checked and certified (TÜV and ICG) according to ISO 50001 on an annual basis. At Prüm and Garant, the energy and environmental management is also evaluated as part of the annual management review. The power consumption during operation at the Invado site in Poland is also regularly monitored and compared with the figures for the previous year. To check the effectiveness of the measures taken, the power consumption as well as the CO₂ emission is determined for each manufactured product. Audits are additionally carried out at regular intervals. RWD Schlatter also has an energy management system: Targeted measures are derived from the analysed energy key figures that are collected at least once a year.



Resource efficiency



At Arbonia, it is our declared objective to conserve natural resources. For this reason, we are pursuing a foresighted resource management, avoid waste, and reduce material consumption as well as rejects. We measure the quantity of waste and analyse the error costs in order to assess the effectiveness of the measures. The energy- and material-efficient production based on a good resource management simultaneously reduces manufacturing costs and thereby increases competitiveness. Arbonia therefore strives for energy and material savings in the development of new products as well as in the improvement of existing products. The waste resulting at the company is consistently separated, pretreated where necessary, and then recycled. The companies of Arbonia regularly check how resources can be used even more carefully – for example, through clever product design and a production that is as free of defects as possible. For this purpose, we have issued a water policy and a waste policy for the entire Group that went into effect on 1 January 2022.

The subject of sustainability certificates for the manufactured products is becoming increasingly relevant: More and more customers are demanding low-pollutant materials and attach importance to a certification. Furthermore, many products already go through a pollutant test nowadays and are correspondingly certified according to the guidelines of eco-INSTITUT.

On the basis of lean manufacturing, quality can be increased and thus the number of complaints reduced. An improved quality management pays off towards the overriding aim of strengthening and expanding the market position through innovative and reliable products. Improvements in manufacturing technology are equally a matter of course as a continuous modernisation of the machine park and a targeted selection of suppliers for a constantly high raw material quality. Significant factors also include a continuous improvement of personnel qualifications, cross-company implementation of all measures, and the transfer of quality responsibility to employees.

Key figures for resource efficiency

	2022	2021	2020
Error costs in % of net revenues	1.3	1.3	1.4
Waste in t	32 295	41 199	28 936
Non-hazardous waste	29 198	32 967	19 916
Incineration	15 306	9 590	4 422
Landfill	2 992	10 738	10 716
Recycling	10 900	12 639	4 777
Hazardous waste	3 097	8 232	9 021
Incineration	200	5 915	6 030
Landfill	1 506	863	1 086
Recycling	1 390	1 453	1 905

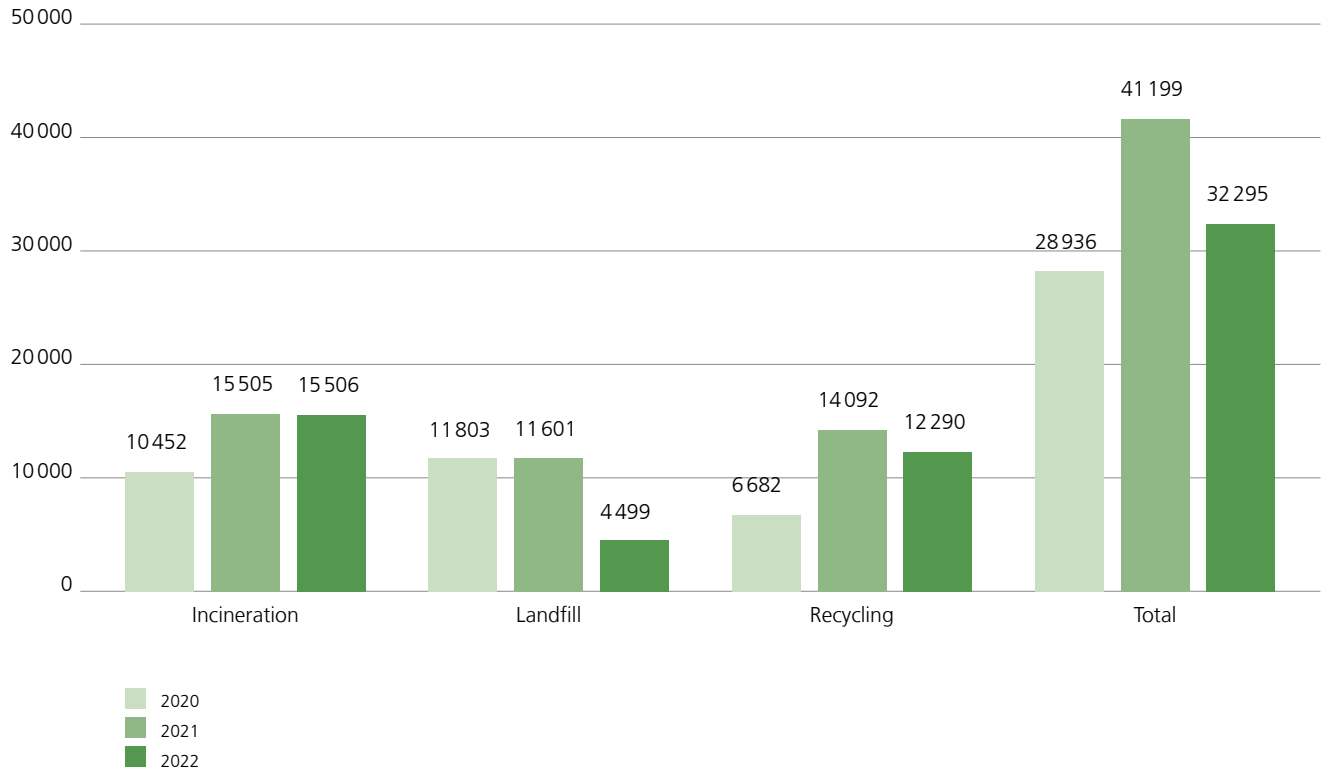
The figures for commercial and hazardous waste cover all manufacturing companies in the Arbonia Group as well as the headquarters in Arbon, Switzerland. Pure distribution companies were not included. The survey method was changed, which is why the values for 2020 and 2021 are not comparable. The waste treatment and disposal at Garant was changed in 2022, resulting in significant shifts within the survey methods.

Key water consumption values

	2022
Water consumption in m ³	271 675
Water consumption in m³/CHF net revenues	0.23

The water consumption was surveyed in 2022 for the first time, which is why no comparative values are given.

Waste by disposal method (in metric tonnes)





Heating, Ventilation and Air Conditioning Division

Continuous resource minimisation and recycling

The goal of the HVAC Division is to minimise material use during production. As a result, the error costs within the division are to be reduced to less than 1% of the annual turnover – while simultaneously increasing productivity. In addition, the division wants to use more recycled materials in all areas. A decrease in waste and the associated direct and indirect costs is also being pursued. The quantity of products that are disposed of through waste incineration and in landfills are also to be analysed and minimised. Last but not least, the division also makes an important contribution to the careful use of resources with its products. Steel radiators, for example, are nearly completely recyclable and can be reused at the end of their life. In the production of radiant panels, less material is now required due to an improved product design; the same holds true for heat exchangers.

Examples for an efficient use of resources

In the reporting year, it was possible to keep reject and error costs constant. In Plattling (D), the current projects for reducing panel thicknesses were advanced. The greatest challenge turned out to be maintaining the required pressure stability. At the Střebro (CZ) site, the packaging was optimised: Instead of foil and Styrofoam, packages of recycled cardboard are now being consistently used. In Corbetta (IT), it was possible to significantly reduce the resulting copper scrap. A new ultrafiltration system allows sustainable water treatment and thus leads to a reduction in water consumption. During the reporting year, the site also introduced a consistent waste separation and recycling programme in the offices as well as in production. In Serbia, the division installed various workstations to optimise all process steps further – for example through digital solutions. The objective is to reduce waste by using scrap for production – for example for metal plates and profiles.



Doors Division

Resource efficiency along the entire value chain

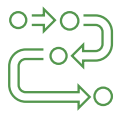
Resource efficiency is also relevant for the Doors Division over the entire value chain. In the reporting year, it was possible to lower the consumption of natural gas by 33% and reduce waste by 29%. Water consumption was measured for the first time with reliable figures. To optimise the material consumption and avoid waste, a resource-friendly manufacturing is already pursued during development. The use of old or common parts is also checked in this phase. Arbonia Glassysteme (formerly GVG) collects its waste glass and delivers it to the manufacturing plant, reducing energy consumption in production.

The topic of resource efficiency is closely linked to product quality in the Doors Division – because high-quality products not only mean fewer rejects but also fewer complaints and thus higher customer satisfaction. At the division, reject and error costs are to be minimised by a continuous monitoring of resource efficiency.

An efficient use of required resources is achieved with stable, simple processes and the consistent reduction of rejects. Residual materials from production are recycled wherever possible. To improve resource efficiency, however, permanent information and training of employees – via shopfloor management or company meetings, for example – is decisive. In this way, Invado has succeeded in improving the economic and resource efficiency of the production processes with the introduction of the one-piece flow principle. The new process provides for a considerably lower time, material, and resource costs and thus a more effective production.

Ambitious targets

For the Doors Division, energy-related and environmental key figures play an important role in the planning and application of the future production technology. For example, Garant wants to lower the energy and resource consumption per manufactured part by at least 3%. This is to be achieved through greater efficiencies of the machines, preventive maintenance and continuous servicing, optimisation of the manufacturing control and minimisation of downtimes. RWD Schlatter wants to make processes more sustainable in the future. The company has already laid an important foundation for this with the state-of-the-art machinery. Particular attention is also to be paid to a further reduction of production waste and a consistent residue utilisation. Invado has set itself the goal of delivering doors and frames exclusively in cardboard packaging in the future. In addition, Invado wants to continue the principle of continuous improvement. The successful implementation of the SAP system (incl. production and fine planning as well as production control system) is to help with planning and following production processes (see introductory interview in the Cash chapter, p. 78–79). Thanks to the integrated enterprise management software, Invado can monitor the production more efficiently, identify the places that produce the most waste, and initiate data-based improvement measures. The companies of the division want to reduce their inventories and improve delivery accuracy. The targets are also monitored through monthly tracking, among other things.



Procurement and supply chain



A sustainable supply chain brings a multitude of advantages. It creates innovation and drives the development of new management and production methods forwards. In addition, it improves reputation, strengthens customer relationships, and increases the interest of investors. A sustainable supply chain furthermore provides business benefits, since it improves the control of costs and resources and can thus lead to savings.

Nevertheless, negative effects can also occur due to risks within the supply chain. This concerns ecological aspects such as Scope 3 emissions as well as human rights violations. We are conscious of this challenge and strive for a higher transparency and duty of care with our suppliers.

The COVID-19 pandemic has made us aware of further direct and indirect effects during the past two years. The tail of the COVID-19 pandemic as well as the war in Ukraine made 2022 a year with multiple challenges in respect to the supply chain as well as energy prices. In this respect, we have intensified our efforts to cover the total requirements of value added. The context of procurement and supply chain not only comprises the total direct material (all materials that enter inventory through purchasing and procurement) but also indirect material such as tools and equipment, consultation and rent.

We preferably work with suppliers from the EU or the EEA; ideally with companies from countries in which Arbonia is active with production sites. In the reporting year, 78% of the purchasing volume was procured locally. This makes it possible to shorten transport distances and minimise the environmental impact. It additionally improves the control of production means compared to a partnership with suppliers from remote regions.

The topic of procurement and supply chain at Arbonia comprises on the one hand the procurement management for the most used materials and semi-finished goods – in other words, wood, steel, glass, and aluminium. On the other hand, the assessment of suppliers according to ecological and social criteria is also a part of this. At the same time, respect for human rights in the supply chain is of decisive importance. Since more than 95% of used materials are sourced from suppliers in Europe, a high standard is enshrined in law.

As a corporate group, we continuously raise awareness for ecological and social factors in direct and indirect purchasing. For this purpose, we train the employees of our purchasing departments in relation to sustainable supply chains, and we are working on a company-wide standard for supplier assessment in accordance with ESG criteria. In a first step, all direct suppliers are checked and prioritised according to the sales volume. As soon as this process is established, indirect suppliers will also follow according to the same assessment criteria. For the assessment of suppliers, external key figures (e.g. solvency, risk indicators, ESG ratings) are collected and combined with

the internally generated data into a holistic assessment. In the reporting year, we primarily used ratings from EcoVadis for this for the first time. In respect to new regulations, the focus was on the procurement market of Germany and on large suppliers with more than CHF 1 million purchasing volume. As a result, we were able to cover around three quarters of the total purchasing volume in Germany or 54% of the global purchasing volume with EcoVadis or comparable ratings. For the coming years, we aim to integrate further large as well as smaller suppliers into the rating of EcoVadis. Suppliers from countries with an increased risk in relation to violations of human rights, child labour, and slavery are under observation regardless of the purchasing volume. However, these make up less than 2% of the global purchasing volume. Suppliers without an external certificate have to guarantee in a suitable way, for example, with a code of conduct that human rights are respected and that child labour and forced labour in particular are prevented.

As Arbonia, we have also had ourselves assessed by EcoVadis in the reporting year and achieved a bronze rating. This means that we are among the top half of all assessed companies. In the medium term, we want to improve this rating especially in the area of sustainable procurement through training and new guidelines.

In Germany, the Bundestag passed the Supply Chain Due Diligence Act (LkSG) in June 2021, which provides a legal framework for the responsibility of companies along the entire supply chain. This is relevant for all Arbonia companies active in Germany. They are evaluating the specific impacts of the new legislation and initiating corresponding compliance measures. The companies active in Switzerland have also initiated a comparable process to determine the implications of the counterproposal to the corporate responsibility initiative, the provisions of which went into effect on 1 January 2022 and will be applied for the first time in the reporting year 2023.

In addition, Arbonia has developed a Supplier Code of Conduct, which is to be successively extended to all suppliers if possible and is already part of orders. In this, Arbonia expressly commits itself to the Universal Declaration of Human Rights of the United Nations, the UN Convention on the Elimination of All Forms of Discrimination Against Women, and the UN Convention on the Rights of the Child.



Heating, Ventilation and Air Conditioning Division

Increased requirements – new measures

An intensified procurement of sustainable products is a matter of course for the entire HVAC Division. The pilot project for procuring decarbonised steel (with Green Steel certificate) for the production of steel panel radiators at the Plattling (D) site was successfully implemented in the reporting year. The division is currently focused on a concerted approach between sales and marketing for a green steel panel radiator strategy.

In respect to waste management, the Corbetta (IT) site has concluded a formal agreement with the suppliers to formalise all aspects (disposal licenses, information on the type, volume, and costs of the waste etc.). At the Dilsen (BE) site, it was possible to reduce the number of lorries used through a consistent optimisation of the logistics and logistics partners. In the packaging area, Sabiana has launched programmes for different products for which the packaging has a great effect on the costs and disposal. For example, the company is trying with its suppliers to introduce reusable containers, replace conventional wooden pallets with pallets made of corrugated board, and reduce waste with component packages.

Clear responsibilities in regard to procurement and supply chain

In close coordination with the customers and the marketing and sales departments, products are to be developed that can be manufactured more sustainably. The main goal of Sabiana remains certification in accordance with ISO standard 14000, which assesses the affects of the supply chain on the environment. For this purpose, the company assigns clear responsibilities, creates regular exchange formats and develops a status report including key performance indicators (KPIs). Sabiana monitored the progress, results, and achievement in smaller projects (delivery agreement, RoHS, REACH, 3TG etc.) monthly during the reporting year and properly registered them with position reports. In this connection, the head of logistics has the objective of monitoring transport costs monthly and optimising them in relation to the value of the transported goods.



Doors Division

The companies of the division pay attention to consistent certificates of origin for wood, among other things. At RWD Schlatter, a new timber trade regulation specifies a PEFC share of 80%; for FSC-certified wood, the share is 20%. At Invado, 100% of the wooden panels are made of raw material of European origin (EUTR documents). A complete monitoring of the used chemicals is also part of the consideration. In this way, the division avoids toxic substances and replaces them with less problematic materials. Additionally, the division is gradually changing over to ecological packaging materials such as cardboard and paper and is increasingly eliminating plastic or Styrofoam. Attention is also paid to recycling of the packaging. As a result, Kermit Sanitary Equipment in Plattling (D) was able to avoid 600 km of wooden panels in the reporting year, replacing them with cardboard. At RWD Schlatter, residue from Sonitus cores was used as an intermediate layer for transport.

Measures in supplier management and in logistics

On the customer side as well, corresponding audits are increasingly being carried out to determine whether the Doors Division complies with sustainability criteria. For example, the customers of Invado regularly check what materials the company uses to manufacture doors and frames and where the raw materials come from. For this reason, the division prefers to work with suppliers who have proven themselves for years. At the same time, initiatives for avoiding or recycling production waste are becoming more and more important. Ultimately, conserving resources also has a positive effect on profitability. For this purpose, the division carries out internal as well as external audits in the areas of quality, social issues, and energy efficiency. The expansion of a strategic category management is therefore being continued. This continually collects and evaluates market information in order to react to potential risks in the supply chain early on.



Priorities and targets

Priority	Target	Status 2022	Page
By increasing occupational safety, we reduce days lost to work accidents.	By 2025: Reduction of lost days by 25% compared to 2021	Increase of 4.3% compared to the base year	68
Arbonia increases the participation rate in e-learning courses in the area of cybersecurity.	By 2025: Participation rate of 100%	Average participation rate of 68%	75

Community

Our employees are the driving force for the further development of our company. They simultaneously act as ambassadors for our values. As an overall objective, Arbonia promotes a resource-friendly future with energy-efficient, high-quality and durable products by outfitting highly energy-efficient new buildings and renovations. The employees show themselves to be dedicated, determined and reliable in their day-to-day work.

As an internationally operating company, Arbonia assumes 100% of its responsibility for respecting human rights and avoiding child labour. In all countries in which it operates, it adheres to the Universal Declaration on Human Rights of the United Nations, the Convention on the Elimination of All Forms of Discrimination against Women, the UN Convention on the Rights of the Child and other international standards for protecting human rights. In addition, Arbonia has joined the UN Global Compact and has committed to support the implementation of the ten principles in the sub-areas of Human Rights, Labour, Environment and Anti-Corruption.



The company as a learning organisation

Modern HR work takes into account the dynamics in the labour market and the needs of the company's own workforce. In an interview, Stefanie Klaerding (SK), Head of HR Development and Employer Branding of the Doors Division, discusses the strategy for these areas.



Employer branding is a central key to being attractive to applicants in the – sometimes highly competitive – labour market. How does the Doors Division position itself as an employer brand?

SK: At the Doors Division, we see two main challenges for our strategic HR work in respect to employer branding. The first challenge is recruiting and the associated shortage of skilled workers. This starts with trainees and ends with highly specialised IT workers. In many areas, there is an employee's market and graduates and students are very well aware of this. In the area of employer branding, our main goal is therefore to make the individual companies and in particular the Doors Division as a whole so attractive in the labour market that we attract the best. And we have to do this in a target-group-specific way via the various channels of

communication – from classic printed advertisements to social media.

And what is the second challenge?

SK: We see this in the retention of our employees. We have to be so attractive as an employer that we keep our good colleagues with us over the long term. Incentives for this include interesting benefits, exciting, cross-division projects and further education as well. This is why the two areas of HR development and employer branding are closely interlinked in the Doors Division. The employees want to continue their education – and have to do this as well – to keep pace with the new developments and achieve the best performance for the company. This not only holds true in areas such as digitisation but also in respect to topics such as leadership or project management.

What demands do you perceive from the young generation in particular?

SK: Especially younger applicants place a great deal of value on the topic of corporate culture and are very different from the baby boomers and Generation X, especially in Generations Y, Z and the upcoming Alphas. For Generation Z and Alpha, meaningful and sustainable work is a focal point. Can I help to shape things? Can I contribute ideas? What is the work-life balance like? The demands go far beyond the hard facts such as salary and position. The younger ones above all want to have fun at work and feel involved. In other words, they do not want to work at a company but on and with a company.

When you think about a brand, it is about distinctiveness. What qualities make Arbonia Doors distinctive as an employer?

SK: We are currently in the process of refining our employer brand further and pushing it in a more target-group-specific way. At the Doors Division, we already cover the wishes of our target groups. On the one hand, we are locally very connected with our companies, and on the other hand, as part of the Arbonia Group we can ensure a versatile employee development with a Europe-wide training. "Work locally, think globally" characterises the brand of our division.

How flexible is such an employer branding when the demands differ between the individual generations?

SK: A company is always a living and learning entity. With each new generation that we onboard, with each trainee course, new impulses are added. For example, we are currently changing over our entire social media channels to the new demands of the generations, improving our internal and external communication through targeted measures and developing a cross-division HR development with a focus on leadership and performance management. Our goal is for us to continually re-invent ourselves and develop further together with our employees.

How do you develop the right messages so that the employer brand stays authentic with all the adjustments?

SK: For this purpose, we speak with a lot of employees, do workshops, look into the executive programmes. I regularly meet with executives, employees, trainees, as well as trainers and we also intensively exchange ideas

across divisions. In doing so, it is important to us not to approach the matter too conceptionally but pragmatically together with the employees.

You link the topic of employee retention with HR development. What opportunities and incentives do you offer employees?

SK: HR development starts in pre-onboarding and onboarding. We then accompany the employee during his or her entire career at the company. We do not see employee development as a collection of forms that are eventually deposited somewhere and whose measures, which are usually derived according to a watering-can principle, end up in some rigid programmes. While their sense and above all impact are usually not measured. Instead, we always learn through employee and feedback discussions, performance appraisals and digitally supported talent reviews precisely where employees stand and what kind of individual development they need to be able to perform their tasks even better. We do not want a talent management where we administer employees, instead we believe in talent empowerment in which employees continually develop further through us.

HR work will become even more flexible in the future and be even more strongly oriented to key performance indicators. What does that mean concretely for your day-to-day work?

SK: We work with modern digital systems which naturally monitor our key performance indicators – whether in recruiting or in development. However, we use them not only to measure the use of budgets and the return on investment but also the sustainability of the measures as well. After all, good HR work – and thus also the employer branding and the corresponding HR development – is ultimately not an end in itself but always has the central goal of improving the company's performance.



What is the goal of employer branding?

Employer branding is a strategic corporate measure to present a company as an attractive employer on the whole to existing and potential employees and to gain an edge on competitors.

1946–1964
Baby boomers

1965–1980
X

The generations:
1981–1996
Y

1997–2010
Z

2011–2025
Alpha



Occupational health and safety



As Arbonia, we ensure a health and safety culture on a high level by operating safe production plants as well as distribution and logistics sites. This involves the prevention of accidents and injuries, a continuous risk analysis with derived measures, as well as a proactive health promotion at the workplace. This aims to lower absences, prevent illnesses and reduce mental and physical stress. Consistent occupational safety is also an important topic for us due to its impact on the operating activities of the companies: Each accident and absence causes additional costs. The consequences can be a slowdown or downtimes in production. This is associated with reputational damage and a lower work morale.

Our concept for occupational health and safety is based on a three pillar concept. The first pillar provides measures for prevention. The second pillar integrates absence management, which refers to interventions. The third pillar contains case management, which promotes integration or re-integration. All three pillars are supported and developed together with the concerned stakeholders – Group Management, managers, HR employees, business partners, as well as social partners. In the future, the effectiveness of the individual measures is to be monitored using various KPIs – the results will be reported to the above mentioned stakeholders.

Risk avoidance and health protection are central topics in all employee training of Arbonia. We continually analyse the processes internally and externally, for example, through special workplace inspections together with the responsible people. If accidents occur, they are immediately analysed and measures are initiated to minimise the future risk of accidents. To avoid and identify health risks to the employees early on, we hold leadership courses for supervisors on a regular basis.

All of our sites fulfil the legal regulations for the respective countries, so that applying for a certification according to OHSAS 18001 or ISO 45001 would be basically possible. This has not been necessary so far, though. During the ongoing COVID-19 pandemic, the health and safety of the employees was a priority topic. Thanks to preventive measures such as temperature measuring devices at the plant entrances and a code of conduct for corona measures as well as regular, free tests, it was possible to maintain regular operation at all sites in 2022. At many Arbonia sites, it was also possible to provide employees with a coordinated vaccination offer.

During the reporting year, we further expanded the company health management system and took specific measures to minimise non-occupational accidents as well. These include courses for stress management, first aid courses and psychological offers. The measures are aligned with the needs of the workforce via corresponding employee surveys and their effectiveness is evaluated via appropriate key figures.

Key figures for occupational health and safety

	2022	2021
Proportion of employees covered by an occupational health and safety management system	97.5%	97.0%
Absence rate	7.2%	5.5%
Accident frequency rate (number of accidents per 200 000 working hours)	5.9	6.9
Rate of accident severity (los days per 200 000 working hours)	70.7	67.8

The key figures for occupational safety cover the employees of all manufacturing companies of the Arbonia Group as well as the headquarters in Arbon, Switzerland. Pure distribution companies were not included. The survey method was changed, which is why no comparison value is shown for 2020.



Heating, Ventilation and Air Conditioning Division

Prevention thanks to training and process optimisation

All employees of the HVAC Division receive safety and fire protection instruction matching their workplace on an annual basis. Internal and external safety training is regularly offered by the division – the training to be a first aider and company paramedic, for example, every year. The employees also have access to all relevant training courses of their respective trade association.

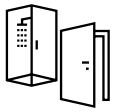
Employees are consistently involved in designing the occupational safety systems through their valuable suggestions for improvement. At the Plattling (D) site, all work processes are regularly reviewed – with the aim of minimising physically difficult or stressful activities through technical support or the use of machines. In the administration area, the individual work situation is continually optimised through regular inspections by the company doctors – for example, by using height-adjustable desks. In Corbetta (IT), internal area inspections and hazard analyses are also standard for all workplaces. Employees enjoy a health insurance that provides preventative medical check-ups for the entire family.

The employees of the division are always provided with the protective equipment and work safety clothing necessary for their work free of charge. In addition, defibrillators are available at all locations. If accidents or illnesses should occur, shift paramedics and first aiders are available.

Statistics on the sickness and accident rates allow a monthly overview of the current situation at all companies. The low absences and the high productivity prove that the HVAC Division is well positioned in respect to occupational health and safety.

A wide range of measures

With the "Jobcycle" initiative, the HVAC Division provided the employees at the Plattling (D) site access to e-bikes during the reporting year as well. Numerous employees took advantage of this offer, in order to accomplish part of their personal fitness programme on their way to work and thereby improve their own quality of life and health. An opportunity to quit smoking was also offered through the health working group. A shoulder-neck screening also met with great interest by employees as well as a presentation on healthy eating at the workplace.



Doors Division

Health promotion, prevention and training

Company health programmes are also offered at the Doors Division. Examples include the "Focus on People" platform at the Glass Solutions Business Unit and a comprehensive range of courses and training. Employees can also take advantage of professional company medical care as well as preventative medical check-ups.

Various committees of the companies (occupational safety committee, health working committee, works council committee, occupational health and safety protection) hold regular meetings to analyse the current situation and develop suitable measures. The division also promises its customers in every work contract to maintain the highest standards in respect to occupational safety. External business partners who work on the business premises of the division also communicate and apply the same safety rules.

All employees of the Doors Division have access to subsidised, occupational health services and health promotion programmes such as fitness, yoga and Pilates. Health problems such as back pain are actively addressed with ergonomic workplaces.

Invado has installed an automatic unloading unit for coffered doors to avoid manual unloading of heavy material in the future. A door buffer station was also set up behind the machining centres, eliminating the manual work in this area. Such automations had been implemented at the other companies a long time ago – which has brought great relief and increased effectiveness.

Continually reviewed targets

In addition to internal reviews, the division also relies on regular feedback from external agencies to achieve targets. The division receives important feedback through area inspections by the industrial inspectorate and trade unions as well as from external safety audits.

Occupational safety is also continually checked and evaluated at Garant, Prüm, RWD Schlatter and Invado. At Invado, this check also comprises the analysis of the results of work environment tests (e.g. noise, weights) and medical examinations as well as the performance of risk assessments at the workplace. Occupational safety is further increased by continuous inspections of the work conditions and the machine efficiency as well as the ongoing safety training of the employees.



Dynamic corporate culture

As Arbonia, we live a dynamic, open corporate culture. In doing so, we always aim to create a pleasant, appreciative and supportive work environment. Wages, social benefits, employment level, contract set-up and compensation are to follow the principles of a responsible Group. For this purpose, three central leadership principles were determined: Firstly, colleagues maintain a personal and direct relationship among each other and are open to ideas or other points of view. Secondly, day-to-day business is characterised by pragmatism and realism; decisions are based on facts. Thirdly, managers take time for their employees and regard them as people, not just workers.

These principles also apply to the development of employees in addition to the day-to-day work. With our HR work, we want to help people reach their full potential and we invest in internal and external further training for this purpose.

Such a work environment is demonstrated by motivated and satisfied employees. This increases competitiveness and is reflected in a lower gross fluctuation rate (incl. retirements).

In the reporting year, however, this increased slightly from 9.8% in the previous year to 10.7%. To maintain and optimise our high level as a fair employer in line with the market, we regularly compare ourselves with other internationally active companies of a similar size.

Within the corporate group, the respective HR officers of the divisions as well as of the Group are responsible for the further development of the Arbonia culture. They report to the CEOs of the divisions or the Group CFO. A regular exchange among the HR officers ensures that corresponding impulses are perceived in all companies.

We place great value on diversity among the employees. This includes values such as equal opportunity, non-discrimination, as well as equal treatment at the company – regardless of sex, citizenship, ethnic origin, skin colour, religion or impairments. Although the labour market is regulated differently in each country, the overarching guidelines of the Group and the divisions apply for Arbonia at all sites.





Close social partnership

The close cooperation with all employee representatives in all countries is a decisive factor for our business success. In Switzerland, the collective labour agreement of the Swiss mechanical, electrical and metalworking industries (Swissmem) is applied at all companies, unless other mandatory collective labour agreements are in effect. The contacts with the social partners in Switzerland therefore generally take place through this association. Most of the German companies are also subject to collective labour agreements – either via an in-house wage agreement or the regional collective agreement of the trade unions.

The Arbonia Board of Directors approves all important internal frameworks and general agreements. These include the Code of Conduct (see "Ethics and integrity", p. 40), the salary system, leadership development, collective labour agreements and wage agreements, as well as the strategic guidelines for HR development over all levels down to the local sites. The divisions receive support from the Group in succession planning and management development as well as in recording key performance indicators. In addition, personnel matters are also discussed and addressed across divisions depending on their relevancy.

Employees can see the conditions of the respectively valid wage agreements on information boards and screens at the production plants at all times, in addition to through communication by the social partners themselves. At the same time, there is no uniform procedure for the entire group, since the requirements differ according to the company and local

regulations. However, regular meetings take place between the managements and employee representatives from the trade unions everywhere. When an employment relationship is terminated, the divisions have a standardised process.

Training programmes as a matter of course

The number of trainees, who mainly work at Kermit, Prüm and Garant in Germany, declined minimally – from 156 in the previous year to 153. As Arbonia we support the vocational further development of employees with internal and external further training and contribute to the majority of costs. At some sites, we also annually offer dual study places in order to support young college students in a practical way. Employees are prepared for new requirements with internal and external training. In addition to specialist further training, this also includes seminars for strengthening methodical expertise, educational leave, advancement qualification and courses on project management. Training rooms and exhibits at the production sites offer employees the possibility to familiarise themselves with the manufacturing processes as well as with the product application. We determine the need for further training with the help of annual employee interviews as well as through the close cooperation between supervisors and the Human Resources department. In principle, any employee can take part in further training. It must follow a clear objective, however. This applies to internal as well as external programmes. The quality of further training is evaluated by employees after the completion of the programme and the supervisors and external training institutions sometimes also fill in an evaluation form.

Composition of the workforce as of 31 December

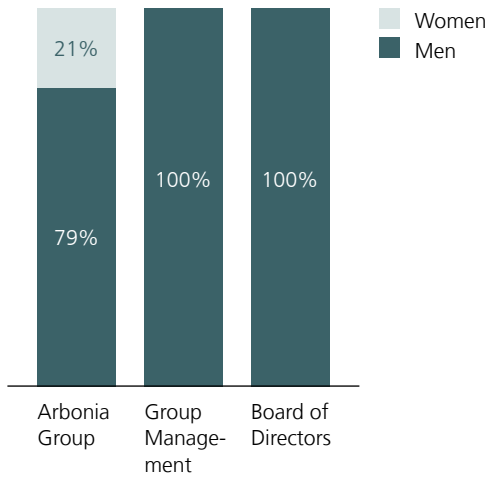
	2022 ²	Share	2021 ¹	Share	2020	Share
Employees (permanent employees only; in FTE)	6 132		6 040		5 515	
Employees (permanent employees only)	6 341	97.3%	6 232	97.6%	5 708	97.3%
Apprentices, interns and trainees	176	2.7%	165	2.4%	160	2.7%
Employees who are not permanent ³	203					
Employees by employment type (permanent employees only)						
Full-time		93.1%		93.0%		93.3%
Part-time		6.9%		7.0%		6.7%

¹ Without the Tervovent, Cicsa and GVG companies acquired in 2021.

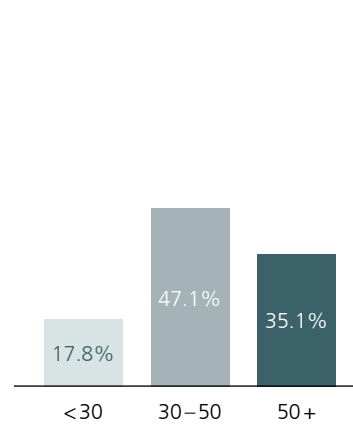
² Without the Joro and Cirelius companies acquired in 2022.

³ Such employees were mainly employed in logistics, assembly and production in the reporting year.

Diversity by gender



Age structure



Heating, Ventilation and Air Conditioning Division

Target-oriented for higher employee satisfaction

The companies of the HVAC Division have set themselves high targets as part of their dynamic corporate culture. The aim is to quickly react to changing conditions. A low fluctuation rate and a high employee satisfaction remain core objectives. HR development measures are to contribute to this. As a further objective, the division pursues the integration of employees with a migration background.

The Corbetta (IT) site reviews the satisfaction of its employees every two years through a survey. In addition, mental health and work-related stress factors are also analysed. The evaluation is presented to the Managing Director and various measures are derived on the basis of this data.

To fill vacant positions quickly with qualified people, the division would like to place greater emphasis on employer branding. The company aims to overcome the demographic

development through targeted recruiting of new employees and increased retention of existing ones. In Italy, the division intends to promote employee satisfaction with an exchange programme for highly qualified employees in partnership with a sector-related company. The success of these measures is measured based on the key performance indicators and the fluctuation rate. The division offers various work and part-time models and enables mobile working if technically possible.

Talent acquisition and retention

At the HVAC Division, vacant leadership positions are mostly filled internally with the division's own junior staff. The shortage of skilled workers, however, remains one of the greatest challenges for the division and is evident in longer recruitment processes. This problem is cushioned by the low fluctuation rate and the long periods of employment. The division always strives for non-discrimination and gender-neutral recruitment processes in personnel recruitment.



Doors Division

Corporate culture as part of corporate identity

The division regards a dynamic corporate culture as an important part of employer branding. It also reflects the social responsibility of the individual companies and has a correspondingly high priority.

Measures in the corporate culture area

Measures for retaining employees include increased efforts in the area of HR development or an improved integration of employees with a migration background. A clear employer branding aims to better emphasise the characteristics of the individual companies (see introductory interview in the chapter, p. 66–67). As a result, the Doors Division hopes to fill vacant positions more quickly with qualified employees. In addition to reducing the fluctuation rate, Garant also want to shorten the length of the filling process, among other things with professional onboarding systems as well as by developing new key performance indicators in human resources. In general, the division aims to counter changing conditions faster and more flexibly. The progress in achieving these objectives is checked using key performance

indicators such as the fluctuation rate or period of employment. At Invado, the targets – which also include a further diversification of the top management, which is currently 40% women – are reviewed by external audits at regular intervals.

At Prüm, views on culture and cooperation in the workforce were surveyed as part of a psychological risk assessment. The results are discussed with the employees in workshops.

Qualified workers

In the Glass Solutions Business Unit, the shortage of skilled workers became apparent during recruitment in the reporting year. This especially affected employees in production and qualified specialist personnel. As in the past, it was possible to fill the majority of vacant leadership positions internally. The promotion of young employees and the hiring of graduates proved to be a great advantage in this respect once again. Nevertheless, the lack of skilled employees remains a challenge despite the low fluctuation rate and longer periods of employment.



Creating and securing jobs

As regional employers, the Arbonia companies have a central importance: They create and secure jobs, generate income and pay public taxes. The membership in the Swissmem collective labour agreement (GAV) and further wage agreements gives the employees additional security in respect to working conditions and legal matters. Arbonia and its companies are therefore an important employer and economic factor in the respective regions. Many companies of Arbonia have a significant influence on their environment.

At the same time, it is our stated aim to permanently secure the attractiveness of our sites, further increase employee retention and retain valuable know-how and many years of experience. Measures for this range from cooperation with schools and universities to regional activities in personnel marketing, for example, through trade fair appearances and sponsoring.

All of our companies maintain continuous relationships to their stakeholders in order to communicate to the outside world innovative strength, social commitment and a positive aura for employee recruitment. Investments in the infrastructure as well as the progressing digitisation create further synergy effects within the Group and thereby provide high efficiency gains. The growing automation of routine activities further increases the

quality of jobs. We as Arbonia thus provide our employees with modern facilities and offer them attractive, future-oriented jobs as well as a wide range of development and career opportunities.

By directly addressing the regional labour market and identifying potential employees early on, for example, in the framework of internships, the quality and quantity of the workforce at the respective sites is to be strengthened further. These targets can be quickly and simply checked: They are achieved when jobs can be filled and the site remains competitive.

Various employee benefits also contribute to our attractiveness as an employer. These include a programme for e-bikes or discounted memberships in fitness studios and swimming pools. A tailored integration management allows employees with health impairments to return to the workplace.

At the same time, we have made our workplaces more flexible – among other things with a connection for mobile work. The strengthening of employer branding is currently proving to be our greatest leverage: In light of the very tight applicant market, a clear and distinctive profile will be need to recruit enough qualified employees in the future as well (see introductory interview in the chapter, p. 66–67).



Compensation structure

The compensation system of Arbonia scheme is based on the conviction that the success of a company depends to a considerable extent on the quality of work and dedication of employees. We want to use our compensation system to attract and retain employees with the necessary skills and qualities and to motivate them to deliver a consistently high level of performance. The compensation system is designed to ensure that the interests of top managers are consistent with the interests of Arbonia and its shareholders.

In developing the compensation structure, we follow common market practices of similarly situated companies that operate on the capital market. In 2020, Arbonia commissioned HCM International AG to carry out a benchmark analysis in relation to the compensation of the members of Group Management. This analysis was carried out on the basis of a comparison group with industrial companies domiciled in Switzerland with a similar stock market capitalisation and a comparison group with industrial companies domiciled in Switzerland with a similar revenue and it showed that the compensation of the members of Group Management are of a similar magnitude as those of the two comparison groups.

On the occasion of each Annual General Meeting, the Board of Directors proposes that the Compensation Report be approved by means of a non-binding consultative voting process. In the

reporting year, the approval rating for this proposal was 62.65%. The Compensation Report (see p. 115) of Arbonia presents the compensation governance and the principles of the compensation system of the Board of Directors and Group Management. In addition, it contains information on the compensation of the Board of Directors and Group Management in the respective financial year, on the roles with economic purpose that the members of the Board of Directors and Group Management exercised at other companies and on the shareholding rights held by the members of the Board of Directors and Group Management.

The Compensation Report has been compiled in accordance with the regulations on compensation at companies whose shares are listed at a stock exchange in the Swiss law that supplements the Swiss Civil Code (Part Five: Code of Obligations) in the fourth section on corporate law and the directive on information relating to corporate governance (RLCG) of 18 June 2021 of the SIX Exchange Regulation.

For the financial year 2023, Arbonia will include a sustainability target in the variable compensation of Group Management for the first time. The Board of Directors determined this at the request of the Nomination and Compensation Committee in the reporting year. This is to create incentives for efforts towards a more sustainable corporate governance.



Cybersecurity

As Arbonia, we can only maintain information security together with our employees. Our aim is to protect the operating activities and competitiveness of the group against successful attacks. Otherwise, considerable damage can result for us as a company and for our customers through cyber attacks. These range from the loss of employee and customer data to a complete production standstill including high ransom demands.

For this reason, we as Arbonia have accelerated the expansion of the information Security Management System, which contains a holistic security programme. In addition, further guidelines have been issued, for example, on general IT security, password security, or the information security requirements for third parties. The security awareness programme helps employees successfully recognize real threats and potential attacks in both their business and private lives and to react to them correctly, in accordance with the motto "THINK BEFORE YOU Click.Post.Type". Various KPIs give Arbonia an overview of the implemented security measures. Stakeholders are involved in the further development of the IT security architecture through regular user surveys.

The responsibility for the information security of the entire Arbonia Group basically rests with the Chief Information Security Officer and the IT Board, which consists of the Group CIO, the division CIOs and the Group CFO as well as IT representatives of both divisions and the Group. The relevant topics are always coordinated with the division officers and Group Management. For implementing individual measures, the local IT teams and ICT security specialists provide support as interfaces to the sites and companies.

Together for more IT security

The employees of Arbonia are a central link in the security chain in the area of cybersecurity and must assume the corresponding responsibility. The most common attack tool for cyber attacks is e-mail – followed by social engineering (manipulation or influencing of a person) and the Internet. For this reason, it is extremely important to recognise, avoid and report suspicious sources.

Through targeted measures to strengthen so-called cyber resilience, we as Arbonia try to reduce the risk of successful cyber attacks to an absolute minimum. The Group pursues an integrated security approach with technical measures, processes, guidelines and standards, the compliance to and implementation of which is checked by the Chief Information Security Officer and his or her team on the Group level. Cyber attacks of any kind must be recognised early on and repelled. Accordingly, employees are increasingly being trained and made aware of this topic. The integrated security approach in the framework of the information security strategy is continually reviewed using audits and penetration tests. Cyber risks are an integral part of the risk management process and thus also the risk transfer to insurance.

THINK BEFORE YOU Click.Post.Type.

The security awareness campaigns under the motto "THINK BEFORE YOU Click.Post.Type" contain various measures. In this context, employees are regularly invited to participate in various awareness and training units, whereby more in-depth training courses are pursued specially for IT administrators and other exposed persons. These courses provide information on the secure handling of data as well as information systems and aim to make everyday life more secure. The participation rate was 68% in the reporting year (previous year: 58%) and should increase to 100% by 2025.

On the basis of a high cyber resilience and e-mail security, Arbonia's general objective is not to experience any safety-critical incidents and thus ensure a permanently smooth course of business. For this purpose, the results of the attack simulations are used to strengthen the resilience. To control security, cyber maturity is also measured on the basis of defined standards. Further key figures are collected via SIEM incidents (security information and event management) for all companies and are used to improve cyber defence. In this process (malicious) incidents and the reaction to them are continually recorded. The management system classifies these incidents according to their type and severity and evaluates the defence measure according to filter functions and existing use cases. As a further protection level, a project for NDR (network detection response) has been implemented.



Priorities and targets

Priority	Target 2026	Status 2022	Page
Organic revenue growth (CAGR 2021–2026)	>5% p.a	5.5%	80
EBITDA (without M&A)	>CHF 200 million	CHF 108.3 million	
Investments in % of net revenue (replacement and expansion investments)	4–5%	14.5%	
Annual dividend increase from financial year 2022	15%	15%	
The HVAC Division increased its proportion of growth products ¹ in relation to the total revenue.	> 67%	~ 53%	81
The HVAC Division is developing sustainably and achieving revenue growth as well as an increase in the EBITDA margin.	Revenue > CHF 800 million EBITDA > CHF 100 million EBITDA margin > 12.5%	Revenue CHF 646.2 million EBITDA CHF 59.2 million EBITDA margin 9.2%	81
The Doors Division is developing sustainably and achieving revenue growth as well as an increase in the EBITDA margin.	Revenue > CHF 725 million EBITDA > CHF 110 million EBITDA margin > 15.0%	Revenue CHF 552.7 million EBITDA CHF 62.2 million EBITDA margin 11.3%	82
Arbonia is increasing the proportion of production volume that is covered by ISO certifications.	By 2025: > 80%	81.5%	82

¹Ventilation, heat pumps, fan coils, air-handling units, energy storage, design radiators

Cash

One of our important sustainability issues is the long-term economic stability of the company. The organic revenue growth and the operating profit on the EBITDA level are the central financial control parameters.



A timetable for digitisation



Arbonia and its companies are becoming more and more digital. In an interview, Berkan Sezer (BS), Project Manager Digitisation of the Doors Division, and Martin Kindle (MK), Team Leader Business Applications of the Arbonia Group, explain what projects they are driving forwards at the Doors Division and how that changes the working procedure at the company.

To what extent does digitisation have an effect on reaching sustainability goals?

BS: The classic example is saving paper through digitised processes. This is quickly achieved. However, at Arbonia it is about more. Let's take our new configurator DOORIT, for example, which replaces manual calculation. This system cannot configure any doors that cannot be produced as well. Therefore, no rejects occur and consequently almost no materials have to be disposed of unnecessarily.

What role does the implementation of the uniform SAP system play in a digital value-added chain at the Doors Division?

MK: With the harmonised SAP system, we create the prerequisite for all further steps of our digital transformation. At the current time, we are gradually introducing the modern

ERP system SAP S/4 HANA at our companies. Until 2019, the four companies of the Doors Division still used different systems, which made it difficult to create a common database and thus go in the direction of digitisation. Our approach is now based on an integrative system in the form of a global template on which all companies can build. Digitisation means finding a common denominator, in other words, harmonising processes and minimising interfaces.

BS: SAP is at the heart of all future projects for our digitisation. This gives us a basis with which we can design the strategy, implementation and realisation of the individual projects. These projects can also run parallel and dock onto the existing environment. This can be DOORIT, it can be a 3D rendering, or the digital door manual. Because everything is based on a common data pool.

Can you sketch out how the digitisation roadmap of Arbonia will look like and what objectives will be pursued with it?

BS: We are currently in the process of creating the above-mentioned common data pool, the so-called single point of truth, or SPOT for short. In the final expansion stage, it should be possible for us to digitise the entire value-added process – starting with the dealer who configures the door via DOORIT. The dealer can import the door to his or her merchandise management. The order is immediately transferred to the production line, which is in turn highly automated up until delivery. The entire process takes place on a digital level with very many check mechanisms and is thus hardly prone to error.

MK: The SAP integration allows us to collect, process and quickly evaluate data. This is now automatically possible, even in real time. This accelerates our processes and we increase efficiency as well as productivity. However, the pandemic has also shown that we can increase resiliency and flexibility through digitisation. Our goal is to be able to adjust our business model to the market requirements quickly and easily when framework conditions change.

The Invado company is a kind of pilot project for the transformation of the Doors Division. What has been implemented there?

MK: At Invado, we have completely restructured the web shop on the customer side. At the same time, we have further digitised the production with SAP. On the one hand, this concerns the entire production planning. On the other hand, we have implemented a manufacturing execution system, in short MES. This allows us to link the business processes in the SAP system with the machine connection.

What is going to happen with the rollout and what findings from the Invado project can help with this?

MK: The objective is to go live with PRÜM and GARANT by 2024; afterwards, our Swiss company RWD Schlatter will change over to SAP. The global template, which represents the basis for the next rollouts, will help us with all further projects. We are thereby creating a harmonised system. During the Invado project, we have improved a few things that did not run smoothly at the beginning. Processes were also optimised. All of these findings are now included in the global template.

Transformation not only concerns the use of software but the working procedures at the company. How do you inspire colleagues for the change?

BS: At the Doors Division, we work on projects of a certain magnitude, which require agile methods and tools. Before we introduce something new, we offer the employees training and coaching. In addition, there are several stand-ups and synchronisation meetings every week in which we convey the advantages of modern working procedures directly in the project. One example: Instead of Excel, the colleagues are increasingly using tools such as Jira or Confluence for documentation. As a result, processes are streamlined and inconsistencies between different documents are minimised. Another example is the kanban board with which we display the status of a project and assign tickets to members in a project team. In our experience, the communication always remains professional, calm and constructive because all members are working with the same method and the focus is not on personal matters.

MK: I would like to add knowledge management as an important adaptation. We want to transfer the wide knowledge and the competency regarding processes that are inside people's heads to a system to which all other employees have access. With a modern ERP system, it is possible to establish a standard for this. At the same time, however, it is important to create trust in this system so that the employees also consider it their personal system.





Sustainable business strategy and market orientation



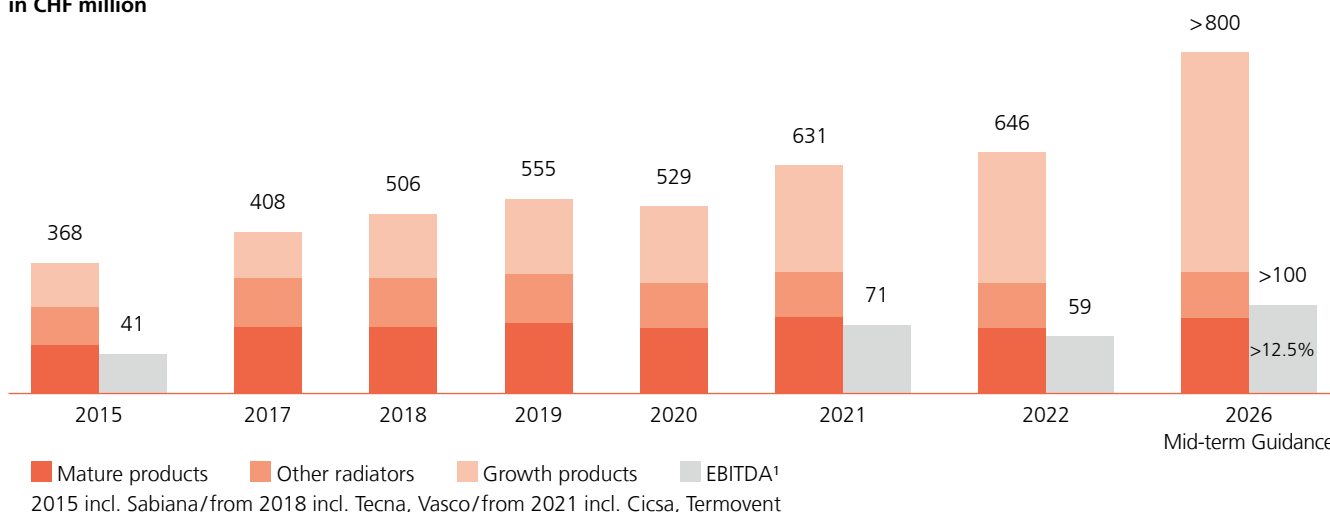
In 2021, Arbonia sold the Windows Division and integrated the Sanitary Equipment Division into the Doors Division. Since then, the product portfolio has been divided between the Heating, Ventilation and Air Conditioning (HVAC) Division and the Doors Division. In both divisions, Arbonia has been pushing the sale of projects that contribute to sustainability. Important criteria

for this are energy efficiency, conserving the environment and increasing the safety for users. In addition to these general guidelines, we are pursuing quantitative goals, such as for reducing CO₂ emissions in the production as well as in the application of products.

Development of the HVAC Division

Net revenues 2015–2026

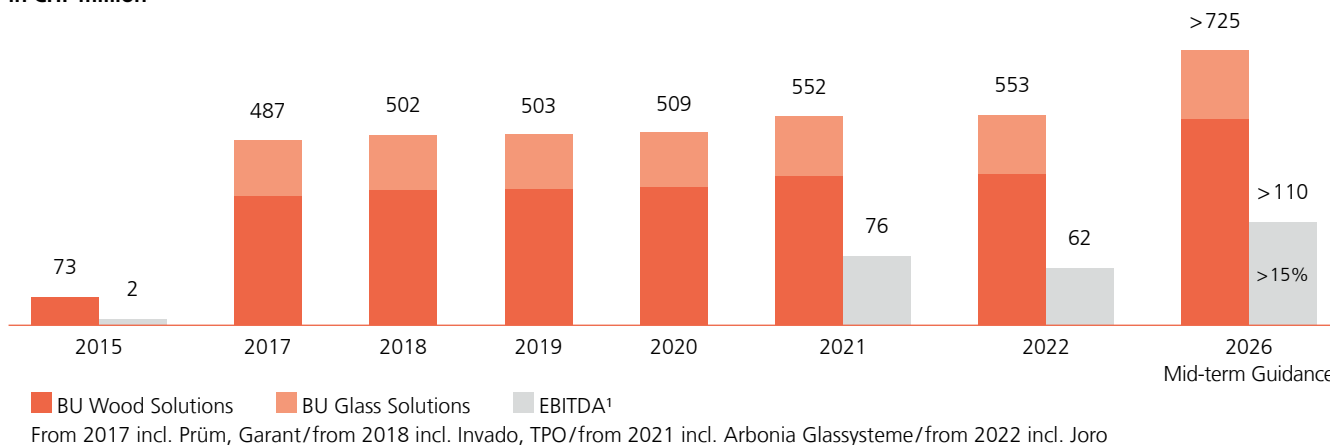
in CHF million



Development of the Doors Division

Net revenues 2015–2026

in CHF million



¹ Without one-time effects; EBITDA margin for 2026 according to Mid-term Guidance



Heating, Ventilation and Air Conditioning Division

The strategy of the HVAC Division is clearly oriented towards the relevant megatrends "CO₂ reduction" and "health and comfortable indoor climate". In regard to the development of the product portfolio, the focus is on growth products while simultaneously expanding the strong position in the original product groups. In the reporting year, it was possible to make targeted investments to reinforce the strategy for products and production that is based on the following four pillars:

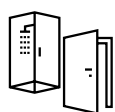
- "Best in class" products for radiators
- Use of renewable energies with the heat pump and storage battery products
- Radiant heating and cooling for modern buildings
- Ventilation and indoor air quality

The strategy of the HVAC Division is oriented towards the climate change package of the EU Commission, which aims to reduce greenhouse gases by 55% by 2030 and a climate-neutral economic area by 2050. The division has already been pursuing a consistent strategy of further developing integrated heating systems and corresponding components with innovations for many years. This product strategy comprises modern heat generation and optimum heat transfer as well as energy storage systems for all building types and application areas. At the same time, Arbonia offers solutions for new buildings as well as the renovation market.

The division serves the market for heat pumps, which is currently growing strongly, with its new production plant in Opočno (CZ). For 2023, it is planned to install a PV system on the roof that will supply the production systems with renewable energy.

In the reporting year, the division launched a resource-friendly, highly efficient generation of the air/water pump for the lower and middle performance range. As an addition to the heat pump range, a new warm water and buffer storage tank was launched that follows a modular structure and has a high degree of pre-assembly. In addition, the division is currently developing a storage battery based on the sustainable redox flow technology that presents a future-oriented alternative to conventional lithium-ion batteries for private as well as commercial residential construction. The series production of the storage battery was started at the Stříbro (CZ) site in the fourth quarter of 2022.

In addition to the four pillars of the strategy, the HVAC Division is optimising its production footprint further. The production plant in Tubbergen (NL) was therefore closed in order to consolidate the capacities for the production of steel panel radiators. For this purpose, the highly automated Plattling (D) site was expanded to the competence centre of the division in the area of producing steel panel radiators. To make the value-added process more productive and flexible, individual press parts are marked with a lasered, unique QR code. Further projects for reducing complexity and cutting costs have also been initiated.



Doors Division

In 2021, the Sanitary Equipment Division with its shower doors and shower partitions was integrated into the Doors Division as the Glass Solutions Business Unit. In the reporting year, joint initiatives were created, in particular for market cultivation in contract sales as well as procurement.

The Wood Solutions Business Unit is pursuing a multi-year investment programme to increase productivity and expand capacities. The overarching aim is to improve delivery performance. A large part of the investments goes into expanding the capacity of the two German door plants, Prüm and Garant. Among other things, the property of the Garant production plant was purchased. Further investments concerned a second high-bay warehouse as well as a combined heat and power (CHP) plant. For the Prüm company, a new frame plant was built that was completed in the reporting year. Arbonia also invested in a spraying robot at the RWD Schlatter company and started the construction of a raw material and finished goods warehouse at this Swiss site.

After the investments that have been made, the Wood Solutions Business Unit can produce around 900 000 more doors with corresponding frames than before.

The division additionally invested in the IT and digitisation of processes. At the Invado company, the ERP system was changed over to SAP S4/HANA in the reporting year. The SAP team is currently working on the rollout for the other companies of the division (see introductory interview in the chapter, p. 78–79). The harmonisation of the ERP system will make the future cooperation between the companies more efficient and increase productivity.

In the reporting year, the division acquired 100% of joro Türen GmbH, a producer of special doors for protection against fire, smoke, noise and intruders with approvals and certifications for oversized doors. This adds to the industrial range of the division in order to meet more individual customer requirements. At the same time, this expands the contractor services business.



Product management



Our product management assigns responsibilities within the company, defines specifications for quality assurance and regulates the labelling requirement including corresponding certifications in line with technical conformity. With our measures, we especially want to extend the service life of the products. Key factors are the continuous optimisation of the quality management and the production methods, the modernisation of the machinery as well as the careful selection of suppliers with the highest standards. Corresponding training courses for employees are to continuously increase the responsibility for product quality.

The product management implements all new requirements from customers or legislators at the interface between the company and the market. These immediately flow into the product programme planning and roadmap. The sales managers of the individual markets are informed of this in close consultation. The development department implements the defined projects corresponding. The project management is additionally responsible for product compliance in regard to legal regulations and standards, ensures safety and health for (end) customers and controls the handling of problematic components such as dangerous chemicals. A large portion of our production sites operate with certifications for environmental management (ISO 14001) and energy (ISO 50001).

Key figures for product management

	2022	2021	2020
Total production volume ¹ in TCHF	833 586	851 671	742 613
of which at ISO 14001 certified sites	47.8%	42.7%	41.7%
of which at ISO 50001 certified sites	71.6%	64.9%	68.8%

¹ Production costs of goods produced at the site, excluding purchases.



Heating, Ventilation and Air Conditioning Division

Interface to the market

The challenge for the product management of the HVAC Division is to implement new and already existing demands with innovative products. The division is therefore active in various bodies, such as the German Institute for Standardisation (DIN) and the Federation of German Heating Industry (BDH). This cross-sector exchange enables the division to help shape technical progress and incorporate innovations into its product management early on. In the HVAC Division, the processes and product programme planning are therefore continually adjusted and the responsible employees are trained in respect to new trends and standards as early as possible. Adapted and newly developed products also have to be documented, certified and protected with patents. For a positive perception on the market, aesthetic aspects are also taken into account in the product design, which is to supplement the technical effects from use. To increase public interest, selected innovations are presented in the framework of design contests.

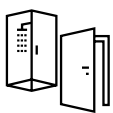
Products with certification and success monitoring

At all companies of the HVAC division, the product development follows a systematic process with defined milestones. In this connection, the sales development of new products as well as qualitative feedback from the market environment

allow a reliable success monitoring. These new products as well as most of the other products of the HVAC Division are subject to a product certification with the quality marks RAL and NF for radiators, EHPA for heat pumps and DINCertco approvals for underfloor heating pipes. Fan coils have mostly Eurovent certifications, while chimneys have the IMQ certificate.

Guaranteed product safety

Upon delivery of the products, customers receive instructions with corresponding safety notes on use, assembly and maintenance. In addition, the customer service of the HVAC Division can be reached via a hotline and by e-mail. For electrical work, the customer service employees of the HVAC Division pass a course that enables them to perform work on electrical devices for corresponding assembly. The division has optimised the processes for the heat pump product in particular, for which ad hoc service is necessary: In the first step, the back office provides 1st level support. If the problem cannot be solved here, the office-based technical service takes over in the 2nd level and checks the heat pump via remote maintenance – up to 70% of the problems can be solved this way. In the 3rd level, a customer service technician is tasked to check the system on site, or support is alternatively provided by a specialist in the technical department.



Doors Division

Certification and quality assurance

The internal product management of the Doors Division ensures that even highly specialised customer requirements are fulfilled in every detail and all legal regulations and common standards are observed without compromise through standards-compliant production. In this way, the sales volume for certified products can be successively increased.

Product quality is ensured at the Doors Division with the quality management system ISO 9001 as well as further certifications bodies such as ift and SIPIZ. Quality assurance monitors the materials used during manufacturing, supervises the production control and checks the manufactured parts. The assurance of the highest quality standards – the heart of the standard EN ISO 9001 – makes it possible to maximise customer satisfaction. The building products manufactured by the Doors Division are subsequently placed on the market in accordance with valid legal regulations and standards. This requires an in-house production control; the corresponding

documentation is performed by the respective department of quality control at the individual companies.

Quality characteristics and conformity

The innovative spirit of the division is based on active participation in various bodies as well as on the division-wide exchange of know-how and experience. As a result, customers always receive innovative, high-quality and durable products. The shower stalls of the Glass Solutions Business Unit, for example, are characterised by exceptional durability. These products are tested in accordance with the strict standards EN 14428 (CE) and PPP 53005 (TÜV/GS). This covers characteristics such as sturdy materials, seals and easy-care use. The use of single-pane safety glass up to ten millimetres thick is documented in accordance with the standard EN 12150.

The Ciasna (PL) and Roggwil (CH) sites are certified according to the ISO standard 9001: Standardised procedures not only ensure the quality of the products but also the delivery reliability and the correct product labelling. Further seals of



approval are relevant certificates for wood from sustainable forestry, the pollutant test by eco-institut, the Environmental Product Declaration (EPD) and the RAL quality mark of the German Institute for Quality Assurance.

The production controls in the factories of the individual companies are verified once a year as part of external audits. Invado, for example, successfully received the certification for sustainable forestry PEFC in the operating year. RWD Schlatter, Prüm and Garant each passed the audits of FSC, PEFC, WPK ift and WPK SIPIZ in the reporting year.



Digitisation

Digitisation brings us many advantages as Arbonia. Amongst others, it simplifies the cooperation at construction sites – for example, thanks to building information modelling (BIM) and product information management (PIM). These and other digital processes eliminate sources of error and reduce the manual effort for employees. This affects the entire value-added chain – from development to production and logistics up to administration. Basically all processes can be digitised and thereby improved. The individual companies become more competitive and attractive as a result.

Direct access to information and services as well as easier processes and shorter processing times are increasingly expected by customers, partners and employees. This helps us

to work faster and more accurately and to use the time gained for activities with added value. In addition to decarbonisation, digitisation therefore impacts the operating activities the most. For example, by using all relevant SAP modules for each order, we ensure a completely automated handling process.

Digitisation therefore offers an opportunity to distinguish ourselves from the competition. The responsibility for the digitisation process lies with the divisions. Their implementation of the corresponding projects is guided by the requirements of the users. Agile working methods and the principles of lean management are applied in this process. The digitisation process already has an impact: Our digital competencies are increasingly being noticed by customers, partners and employees.



Heating, Ventilation and Air Conditioning Division

Digitisation as a competitive factor

In manufacturing, digitisation is constantly being driven forward – for example through the increased networking of the production machinery through control centre technology. Industry 4.0 and Logistics 4.0 lead to considerably increased efficiency with reduced use of resources. In product development, digitisation is also very relevant because products are increasingly networked within the division, thereby improving energy efficiency further.

In administration and sales, processes are also being gradually digitised and automated. The Kermi company, for example, is establishing a multi-channel distribution. The use of social media and the development of in-house programmed product

apps is just as natural for the company as using the Intranet as a central information platform.

Digital in development and production

The Corbetta (IT) site has successfully completed the internal configuration and implementation of the new manufacturing execution system (MES) in the entire production as well as the computerised maintenance management system (CMMS). The introduction of a new production process control (digital kanban) to reduce inventories, the introduction of a warehouse management system (WMS), as well as the introduction of a new production planner and a code configurator remain objectives. By 2023, digitisation is also to be implemented in logistics. In Dilsen (BE) an upgrade of the ERP system has been



started; the go-live is planned for January 2023. Afterwards, the site intends to devote itself to implementing artificial intelligence (AI) and robotic process automation (RPA) while continuously increasing security in the area of information and

communication technology at the same time. The intended objectives are checked with regular feedback from the stakeholders, comparisons with competitors and a semi-annual assessment.



Doors Division

Harmonisation of the digitisation roadmap

In addition to the comprehensive investment programme into the modern production plants, digitisation is also a focus of the Doors Division. This offers many opportunities, such as simplifying work processes and reducing errors through automation. In 2019, the Wood Solutions Business Unit initiated a digitisation roadmap along which it has since been substantially renewing the existing IT landscape, in order to make the systems ready for the future.

The core of this IT strategy is the introduction of SAP S/4 HANA as a modern and harmonised ERP system for the entire Wood Solutions Business Unit and the associated automation of the core business processes – from paper to digital. With the changeover to this uniform "foundation", the division is creating a solid basis for future growth and for further digitisation efforts (see introductory interview in this chapter, p. 78–79). A significant advantage of this uniform system is that additions and new developments only have to be created once instead of having to develop individual solutions for each company of the Wood Solutions Business Unit (e. g. MES for the production, web shop, etc.). In the reporting year, the division finished changing over the system landscape of Invado in Poland. The two German companies Prüm and Garant will now follow; their changeover was initiated in the reporting year.

Networking of machines and processes

In the course of the SAP introduction, Invado introduced a system for operating and machine data logging (MES) during the reporting year. This ensures a seamless networking of machines and business processes and increases efficiency as a result. In addition, the existing web shop of Invado is being replaced by a new, modern solution that is directly connected to the new SAP system, thereby reducing internal workload.

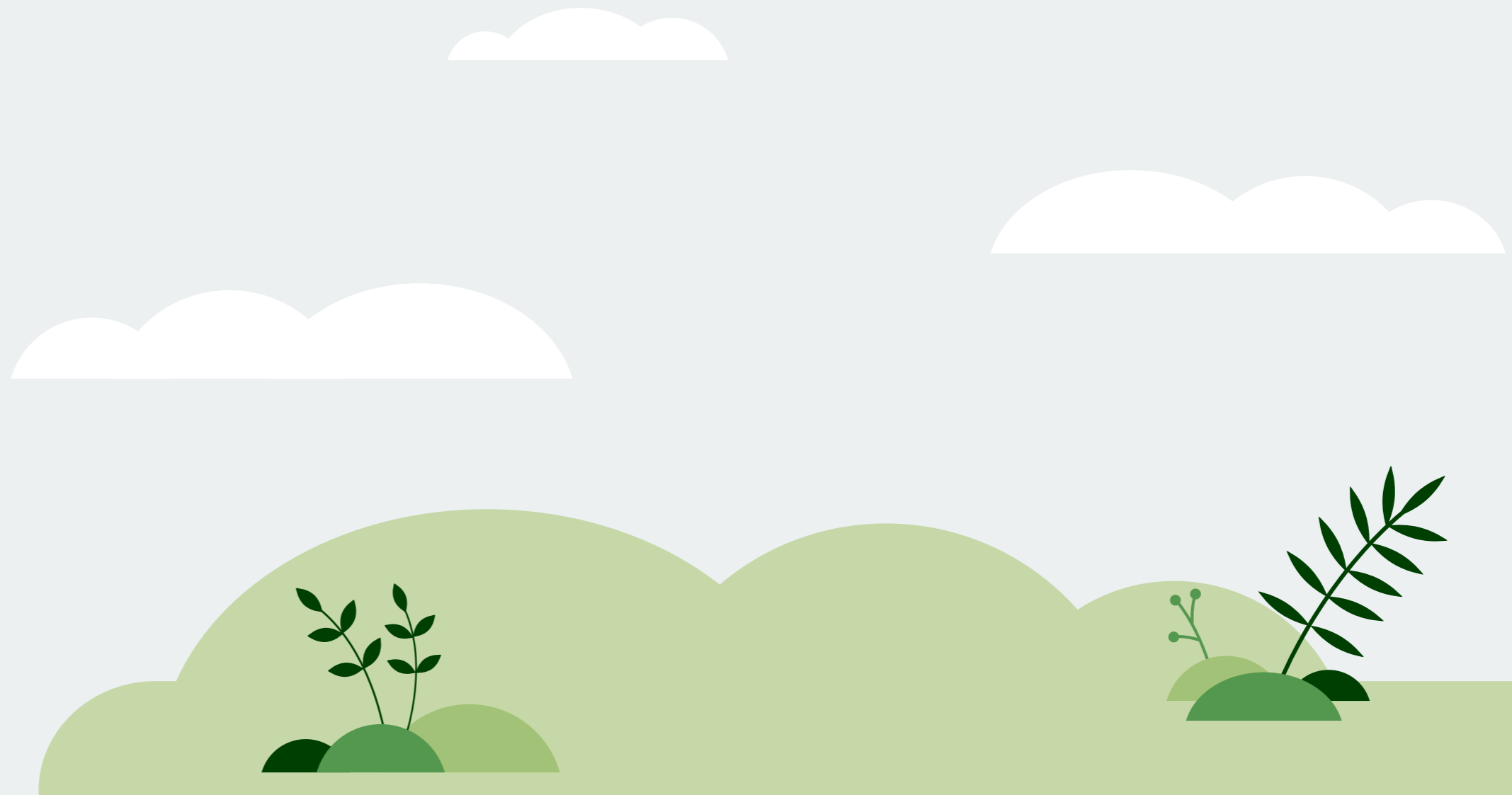
Efficient door calculation tool

With the introduction of DOORIT, the Prüm and Garant companies will completely digitise the offer process for their customers in the future. This is a web-based door calculation tool which is backed by up-to-date details and data. This significantly reduces error rates and time expenditure for the customer as well as for the companies (see introductory interview in the chapter, p. 78–79).

The digital twin

RWD Schlatter was able to launch a digital interface to increase customer integration in the maintenance business. The intended solution allows the customer to see the possibilities and the condition of a door online. The customer also has access to all records and documents at all times. For example, information on opening and closing cycles, moisture, vibrations and temperature can be read to determine the ideal time for maintenance.

Appendix





Report profile


With this sustainability report, Arbonia AG is publishing non-financial information on its operating activities for the third time (date of publication: 28 February 2023). It thereby enshrines ecological, social and economic sustainability in its corporate development. Arbonia documents its impacts on the climate and the environment, specifies strategic sustainability targets and reports on the degree of target achievement for the essential issues. The presentation contains overarching management approaches for the entire Group. In addition, the targets and measures are described on the level of the Heating, Ventilation and Air-Conditioning (HVAC) Division and the Doors Division.

This report has been created in accordance with the GRI Standards 2021. All information refers to the reporting period from 1 January to 31 December 2022 (in line with the financial reporting). The indicators were selected based on a materiality analysis in which various internal and external stakeholders were surveyed. As a result, twelve essential topics were defined. Four of these topics are suited as focus topics due to their high business relevance as well as their impact on the environment and people (see p. 39). Further guidelines for the content structure are ESG rating analyses, guidelines of the Sustainability Accounting Standard Boards (SASB), as well as the Sustainable Development Goals (SDGs) of the United Nations.

The key environmental figures of this sustainability report include the resource consumption of all manufacturing companies of the Arbonia Group as well as the Corporate Center in Arbon, Switzerland. Pure administration and distribution companies were not included due to their low environmental impact. The key figures in relation to employees include all companies. The key figures of the Doors Division also contain the figures of the former Sanitary Equipment Division, which was integrated in 2021, for all years. Some Arbonia sites produce for several companies, which is why the corresponding site is often given in the report instead of the brand name.

There is an annual reporting cycle – the last report was published on 2 March 2021. No significant changes were made in the reporting in comparison to the previous report. The scope of consolidation of the annual report is given on page 207–208.

The sustainability report has been created on behalf of Group Management and approved by the Board of Directors. It is not subject to any external audit.

GRI content index



2023

The sustainability report 2022 was presented to GRI Services for performance of the "GRI Content Index – Essentials Service". It was checked that the GRI content index is presented clearly and in accordance with the standards and that the references for the disclosures 2-1 to 2-5, 3-1 and 3-2 match the corresponding contents in the report.

Use declaration	Arbonia has reported in accordance with the GRI Standards on the fiscal year 2022 starting on 01. January 2022 and ending on 31. December 2022.	
GRI 1 used	GRI 1: Foundation 2021	
Applicable GRI Sector Standard(s)	None	
Standard / Disclosure	Location	Comment / Omission
General Disclosures		
GRI 2: General Disclosures 2021		
1. 1. The organisation and its reporting standards		
2-1: Organisational details	34, 35, 88	
2-2: Entities included in the organisation's sustainability reporting	34, 35, 88	
2-3: Reporting period, frequency and contact point	88, 238	
2-4: Restatements of information	88	
2-5: External assurance	88	
2. Activities and workers		
2-6: Activities, value chain and other business relationships	4, 5, 11–13, 19–21, 62	
2-7: Employees	71, 72	
2-8: Workers who are not employees	71	
3. Governance		
2-9: Governance structure and composition	98–113	
2-10: Nomination and selection of the highest governance body	105–107	
2-11: Chair of the highest governance body	38	
2-12: Role of the highest governance body in overseeing the management of impacts	38	
2-13: Delegation of responsibility for managing impacts	38	
2-14: Role of the highest governance body in sustainability reporting	39, 88	
2-15: Conflicts of interest	98–113	
2-16: Communication of critical concerns	40	



Standard / Disclosure	Location	Comment / Omission
2-17: Collective knowledge of the highest governance body	38	
2-18: Evaluation of the performance of the highest governance body	33, 38, 74	
2-19: Remuneration policies	121–131	
2-20: Process to determine remuneration	74	
2-21: Annual total compensation ratio		Restrictions on confidentiality: Employees' individual salaries are protected as confidential information and their disclosure, including for the purpose of statistical analysis, remains restricted accordingly.

4. Strategy, policies and practices

2-22: Statement on sustainable development strategy	33	
2-23: Policy commitments	33, 38, 40, 43, 62	
2-24: Embedding policy commitments	38, 40, 62	
2-25: Processes to remediate negative impacts	40	
2-26: Mechanisms for seeking advice and raising concerns	40	
2-27: Compliance with laws and regulations	40	
2-28: Membership associations	41	

5. Stakeholder engagement

2-29: Approach to stakeholder engagement	41, 42	
2-30: Collective bargaining agreements	70, 71	

Material Topics

GRI 3: Material Topics 2021

3-1: Process to determine material topics	39	
3-2: List of material topics	39	

Innovative products & solutions

3-3: Management of material topics	44, 50–52	
------------------------------------	-----------	--

CO₂ and Energy

3-3: Management of material topics	44, 53, 56, 57	
GRI 302: Energy 2016		
302-1: Energy consumption within the organisation	54, 55	
302-3: Energy intensity	54	
302-4: Reduction of energy consumption	54, 55	



Standard / Disclosure	Location	Comment / Omission
GRI 305: Emissions 2016		
305-1: Direct (Scope 1) GHG emissions	54	
305-2: Energy indirect (Scope 2) GHG emissions	54	
305-4: GHG emissions intensity	53, 54	
305-5: Reduction of GHG emissions	44, 54	
Resource efficiency		
3-3: Management of material topics	44, 58, 60, 61	
GRI 303: Water and Effluents 2018		
303-5: Water consumption	58	
GRI 306: Waste 2020		
306-3: Waste generated	58, 59	
Procurement and supply chain		
3-3: Management of material topics	62, 63	
GRI 204: Procurement practices 2016		
204-1: Proportion of spending on local suppliers	62	
GRI 308: Supplier Environmental Assessment 2016		
308-1: New suppliers that were screened using environmental criteria	62	
GRI 414: Supplier Social Assessment 2016		
414-1: New suppliers that were screened using social criteria	62	
Occupational health and safety		
3-3: Management of material topics	64, 68–70	
GRI 403: Occupational health and safety 2018		
403-1: Occupational health and safety management system	68	
403-2: Hazard identification, risk assessment and incident investigation	68–70	
403-3: Occupational health services	68–70	
403-4: Worker participation, consultation and communication on occupational health and safety	69, 70	
403-5: Worker training on occupational health and safety	68–70	
403-6: Promotion of worker health	68–70	
403-7: Prevention and mitigation of occupational health and safety impacts directly linked by business relationship	68	
403-8: Workers covered by an occupational health and safety management system	68	
403-9: Work-related injuries	68	



Standard / Disclosure	Location	Comment / Omission
Dynamic corporate culture		
3-3: Management of material topics	70–73	
GRI 401: Employment 2016		
401-1: New employee hires and employee turnover	70, 71	
GRI 404: Training and Education 2016		
404-2: Programs for upgrading employee skills and transition assistance programs	71	
GRI 405: Diversity and Equal Opportunity 2016		
405-1: Diversity in governance bodies and employees	71, 72	
Creating and securing jobs		
3-3: Management of material topics	73, 74	
Compensation structure		
3-3: Management of material topics	74	
Cybersecurity		
3-3: Management of material topics	64, 75	
Sustainable business strategy and market orientation		
3-3: Management of material topics	76, 80–82	
Product management		
3-3: Management of material topics	76, 82–84	
GRI 417: Marketing and Labeling 2016		
417-1: Requirements for product and service information and labeling	82–84	
Digitisation		
3-3: Management of material topics	84, 85	



Glossary

Best of Reality Award: Competition for the best projects of the Czech real estate market. It evaluates and awards prizes to properties that are newly built or extensively reconstructed. Since 2019, a prize has also been awarded for the most environmentally friendly project.

BIM – Building Information Modelling: Describes a method of networked planning, execution and management of buildings and other structures using software. All relevant building data is digitally modelled, combined and collected. The building is also geometrically visualised as a virtual model.

CHP – Combined Heat and Power: The simultaneous generation of mechanical energy and usable heat that result in a joint thermodynamic process. The mechanical energy is normally directly converted into electric current. The heat is used for heating purposes. The advantage of CHP is the lower fuel requirement for the simultaneous provision of electricity and heat, which greatly reduces the emissions of greenhouse gases. CHP can be used with nearly every fuel and every heat source.

CMMS – Computerized Maintenance Management System: This software manages maintenance-relevant information in a database. This supports the daily work processes of the maintenance staff and can serve as a basis for optimisation.

Common parts: Components that can be used unchanged in different products but are not standard parts. A high percentage of common parts is the heart of the platform concept.

DEFRA – Department for Environment, Food & Rural Affairs: The British "Department for Environment, Food & Rural Affairs" is responsible for environmental protection, rural development, landscape and nature protection, sustainable development, agriculture and various aspects of animal protection.

Digital twin: A digital representative of a material or immaterial object from the real world in the digital world. Digital twins allow an overlapping data exchange. They are more than pure data, consisting of models of the represented object and can contain simulations, algorithms and services that describe characteristics of the represented object.

EcoVadis: The platform provides holistic assessments in the area of sustainability (environment, labour and human rights, ethics and sustainable procurement). On the one hand, this gives companies a better understanding of their own performance in these areas. On the other hand, companies can also see assessments of their suppliers through this platform and thereby obtain a more comprehensive picture of their supply chains.

EHPA – European Heat Pump Association: This seal of approval was created to ensure a sustainable, high quality level for heat pumps. This defines technical, planning-related, as well as service-specific quality guidelines for heat pumps in order to ensure a high energy efficiency and operational safety.

Employer branding: A strategic corporate measure to present a company as an attractive employer. The objective is essential to permanently increase the efficiency of personnel recruiting as well as the quality of applicants due to marketing effects. In addition, qualified and dedicated employees are to be retained with the company in the long term through greater identification and by establishing an emotional bond.

European Green Deal: The 27 EU member states intend to become climate-neutral by 2050 with the European Green Deal. In an initial step, the greenhouse gas emissions are to be reduced by at least 55% by 2030 compared to 1990.

EUTR – European Timber Regulation: This European timber trade regulation requires all European market participants to face their responsibility in the worldwide procurement of timber and timber products.

ESG – Environmental, Social, Governance: Environmental protection, social issues and good governance – is often equated with the term "sustainable".

FSC – Forest Stewardship Council: An international certification system for more sustainable forestry. The wood of furniture, toys, books, notebooks and pencils with the FSC symbol comes from forests that are more sustainably managed.

Green energy: Electrical energy that is generated without the climate-damaging greenhouse gas carbon dioxide (CO₂) is called green energy or eco-power. It is generated in an environmentally friendly manner, for example, with hydro-electric plants, wind turbines, or solar cells.

Greenfield approach: Stands for a completely new start with SAP S/4HANA "on a green field". This refers to complete re-engineering and the possibility of extensively simplifying processes. This is based on technological innovations.

Greenhouse Gas (GHG) Protocol Initiative: A partnership of different companies, NGOs and governments. The initiative is coordinated by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD). The goal of the initiative is to develop recognised standards for greenhouse gas accounting.

GRI – Global Reporting Initiative: The GRI standards for creating sustainability reports were developed to provide organisations with guidelines for creating reports on their economic, environmental and/or social impacts.



IEA – International Energy Agency: Is a cooperation platform in the area of research, development, market introduction and application of energy technologies.

ISO – International Organisation for Standardization: The International Organisation for Standardization develops international standards that help to improve the quality and safety of goods and services as well as not the least simplify trade between countries and companies.

KPIs – Key Performance Indicators: In business management, key performance indicators are defined that refer to the success, the performance, or the capacity utilisation of a company, its individual organisational units, or a machine. They show specific development opportunities and risk potentials for sustainability.

Layered buffer storage: Ensures that heat generation and heat consumption are decoupled. This means that heat can be generated independently of the time of consumption. A heat pump therefore does not have to start up each time when a radiator is turned up, for example. The layered buffer storage thus stores the thermal energy generated by the heat pump and transfers it to the heating system and to the domestic hot water.

Lean Manufacturing: Corporate philosophy that contains an effective and efficient design of production. The design of the value-added chain focuses on the areas of customer orientation and waste avoidance, which reduces costs at a company.

LkSG – Supply Chain Due Diligence Act: The German federal law controls the economic action of companies based in the Federal Republic of Germany – generally with 3000 or more domestic employees by subjecting them to duties of care in respect to human rights within their supply chains.

MES – Manufacturing Execution System: A layer of a multi-layer manufacturing management system that operates close to the process. The MES differs from similarly effective systems for production planning, so-called ERP systems, by its direct connection to the distributed systems of the process automation and allows the guidance, steering, direction, or control of production in real time. This includes classic data collection and preparation as well as all other processes that have a prompt effect on the production process.

NDR (Network Detection and Response): describes security solutions that continuously monitor and analyse network traffic in order to identify and automatically react to suspicious data traffic. Artificial intelligence (AI) and machine learning (ML) methods are used to analyse network traffic and identify anomalies.

PEFC – Programme for the Endorsement of Forest Certification Schemes: Certification system for larger and smaller forest owners as well as wood-processing and wood-selling companies that are committed to sustainable management and fair as well as transparent trade.

PIM – Product Information Management: The provision of product information for use in different output media or sales channels as well as for different locations. The prerequisite for this is the media-neutral administration, maintenance and modification of product information in a central system in order to be able to supply each channel with consistent, accurate information without great resource expenditure.

Redox flow technology: Storage technology based on vanadium in which electrical current can be stored. This storage technology is more climate friendly because it does not require rare materials and conflict raw materials, is completely recyclable and also has a high operational safety and durability

SASB – Sustainability Accounting Standards Board: The purpose of the SASB is to develop and disseminate standards for sustainability accounting that help public companies to disclose essential, decision-relevant information for investors. It is an independent, non-profit organisation.

Scopes: To distinguish between direct and indirect emission sources, the GHG Protocol defines three areas of validity for reporting and accounting greenhouse gases.

Scope 1: All emissions that we directly cause

Scope 2: Indirect CO₂ emissions from purchased energy such as electricity, steam, district heating or cooling

Scope 3: All indirect emissions that occur along our value-added chain.

SBTi – Science Based Targets Initiative: Is an initiative of different organisations that specifies reduction targets for greenhouse gas emissions. It specifies how much and how quickly a company has to reduce its greenhouse gas emissions to limit global warming to less than 1.5 °C in line with the Paris Agreement.

SDGs – Sustainable Development Goals: The 17 goals for sustainable development are political objectives of the United Nations (UN) which are to ensure sustainable development on an economic, social, as well as ecological level throughout the world. With the Agenda 2030, all UN member states – as well as Switzerland – have committed to achieving these goals by 2030. The basic principle of the agenda is "Leave no one behind", because a sustainable development can only be successful and efficient when the poorest and most neglected populations are reached first.



SIEM – Security Information and Event Management:

Performs a real-time analysis of security alarms from various sources, applications and network components and thereby serves the computer security of an organisation.

Six Sigma: A method for process improvement, statistical quality objective and at the same time a method of quality management. Primarily a procedure model for eliminating deviations. Sigma stands for the Greek letter used to represent the standard deviation in a statistical normal distribution.

Social engineering: Interpersonal influencing with the goal of provoking certain behaviours in people, for example, motivating them to reveal personal information, buy a product, or release financial resources.

Sonitus core layer: The inside of a door is also called the core and is enclosed by the frame and cover plates. Sonitus cores are primarily used with sound insulated doors. The residue of the relatively soft material is also well suited to protecting doors from scratches during transport. This makes it possible to save other protective material, or residue can be reused instead of disposed of.

UN Global Compact: A worldwide compact concluded between companies and the UN to make globalisation more social and ecological. These companies commit to observing certain social and ecological minimum standards.