

Rieder

Green Report

Sustainability report 2021

#01

Rethinking
building skins



Innovation out of a sense of responsibility

Interview with Wolfgang Rieder

GRI
2-22

Wolfgang, in your view, does the construction sector have the potential to make an important contribution to a climate-neutral future?

Given the massive impact the climate crisis has, far too little is being done by the construction industry. The construction sector therefore not only has the potential to make changes, it has a duty to do so. The construction industry is responsible for as much as 38% of global CO₂ emissions, 8% of which are attributed to cement*. Rieder is aware of this responsibility, as concrete is still largely made from cement. We have analysed our sustainability performance and worked out the CO₂ footprint of our company in order to identify important levers for a climate strategy. According to our 2019 state analysis, the company emits some 7,100 metric tons of CO₂ each year. As a result of our zero waste strategy (1/3 substitution, 1/3 efficient processes, 1/3 offset measures), total CO₂ emissions (scope 1, 2 and 3) in 2021 were around 4,515 metric tons. This means that to date, despite increasing output, the company has already saved 36% compared with 2019.

I don't want to be accused of our generation being responsible for destroying our planet Earth. I could never forgive myself for not doing something despite my better knowledge.

How have the results of the environmental analysis influenced your corporate actions?

The results have spurred the consumption debate as well as the discussion on resilience. Now we need to take a close look at what there is and have a debate on recycling and the circular economy in order to come up with measures for action. To achieve this ambitious goal, we have already switched to green energy, made our production processes more efficient, and developed products based on the zero-waste strategy.

What exactly is the zero-waste strategy all about?

For Rieder, zero waste means minimising the use of raw materials and avoiding waste in production and logistics, both in the pre- and post-consumer sector. We reached a milestone in 2021 by reducing the cement content in our concrete matrix by 50% compared with the original matrix. I hope that our actions will motivate others to do the same. Dialogue among the stakeholders in the construction industry is important: because if we have common goals, we can act faster and show others what is possible.



* UNO report: 2020 Global status report for buildings and construction

In addition to cement content, what are the factors that influence the climate effect of concrete?

Our glass fibre concrete products have a thickness of only 13 millimetres, which means material consumption is low – that’s a big advantage! Reducing material usage is an important issue. We invest 4 to 6% of our budget in research and development, essentially with a view to greening our products and the entire production process. We took a look at our entire value chain and realised, for example, that in the past we sometimes produced 40 to 50% more material than ended up on the construction site. This is a disastrous figure – not just in terms of ecology. We optimised things, and now we are at 1 processed metre for each 1.2 square metres produced. But our target is 0.8 for 1 square metre. This is an exciting entrepreneurial task.

At the Maishofen site, you have focused on building within the existing fabric. What were the ecological effects of this?

Our investments of more than 20 million euros in the Rieder Campus with new company headquarters and a production hall as a hybrid building are the largest in the company’s history. Renovating the existing building instead of constructing a new one was a deliberate decision with sustainable construction in mind. An institute accompanied the conversion to measure exactly how much CO₂ was saved, and compared to a new building, it was over 300 metric tons. It was a process with a lot of resistance: is there always a need for something new, or can existing stock be used in a new way? In the new office, for example, old floors and noise absorbers are used as building materials. We reused iron supports from 1958 from my grandfather’s and father’s concrete plants. Switching from oil to pellet heating also scores points in terms of wood as a renewable fuel. Another highlight: the new headquarters was clad with the first CO₂-reduced facade panels.

How can product development be used to promote sustainability?

We have developed a product that aims to reduce waste in the production of concrete panels, the pixel (see page 33). A new software will take account of the amount of waste and generate project-specific design options for facades. We are also working on a closed-loop system, which means taking our products back and feeding them into the production cycle. This raises logistical and technical questions, especially since our product is designed for durability without loss of quality.

Which areas of your work where sustainability is of particular relevance will you focus on in the future?

I prefer the term accountability to sustainability. This means that organisations and companies should monitor, measure, and take responsibility for how their actions affect their ecosystems. It is also important to me to create a working environment that promotes diversity and intersectionality. A company has to put its values into practice.



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01



Rieder Group

Rieder

The Rieder Group specialises in the manufacture of solution-oriented, eco-friendly and commercially viable concrete products. Inspired by the needs of many customers, Rieder uses the material concrete not just as protection, but also in many other areas of application. Economic efficiency, intelligence, aesthetics and emotional appeal are the ingredients that give facade design a new meaning.

Three generations and over 60 years of company history



The company was founded in 1958 by Wolfgang Rieder senior and Hans Rieder and is now run in the third generation by Wolfgang Rieder and Angelika Rieder. Since its foundation, the company has frequently changed its product portfolio and adapted it to the requirements of the market. In 2004, Wolfgang Rieder acquired the production facility for glass fibre concrete in Kolbermoor, Bavaria, in 2004. His vision was to develop a lightweight yet stable facade panel made of glass fibre reinforced concrete that can

withstand weather and environmental conditions while being sustainable as well as aesthetically appealing. Over the past 18 years, Rieder's product range has grown, and so has the architectural design possibilities of the material. Since then, Rieder has invested and created a rapidly growing business sector with numerous product innovations in the field of facades. In 2015, the vacant hall of a former car dealership in Maishofen was turned into an additional production facility. Rieder ushered in a new era with the

formation of Rieder NORAM Inc. in 2020, establishing a new corporate headquarters in the heart of Wisconsin. A new headquarters was also built in Maishofen in 2021 and 2022, which was occupied in April 2022: the Rieder Campus with many open spaces, cafés, offices, a showroom, a sample hall and a production facility with a workshop and Maker Lab.

The corporate culture is all about environmental and climate protection as well as art and architecture

The greatest driving force behind our continuous development is the striving to create more than just sustainable concrete elements in order to allow us to make an active contribution to the energy revolution ourselves. The aim is to offer architects and builders

an intelligent facade with countless possibilities in terms of aesthetics, flexibility of design, sustainability, and cost-effectiveness. In addition to its commitment to climate and environmental protection, Rieder also has a cultural mission: together for better

architecture. Part of Rieder's cultural mission is to support the work of designers, artists and architects. Being in close contact with students and creative professionals is an integral part of Rieder's corporate culture.

Rieder Group today

With a total of 105 employees, the Rieder Group today produces intelligent facade solutions made of concrete (GRI 2-7) at its sites in Maishofen (Austria), Kolbermoor (Germany) and Ladysmith (USA). The Rieder Group is internationally active and offers customers a large network. The company's facilities and sales partners in more than 50 countries mean the innovative concrete

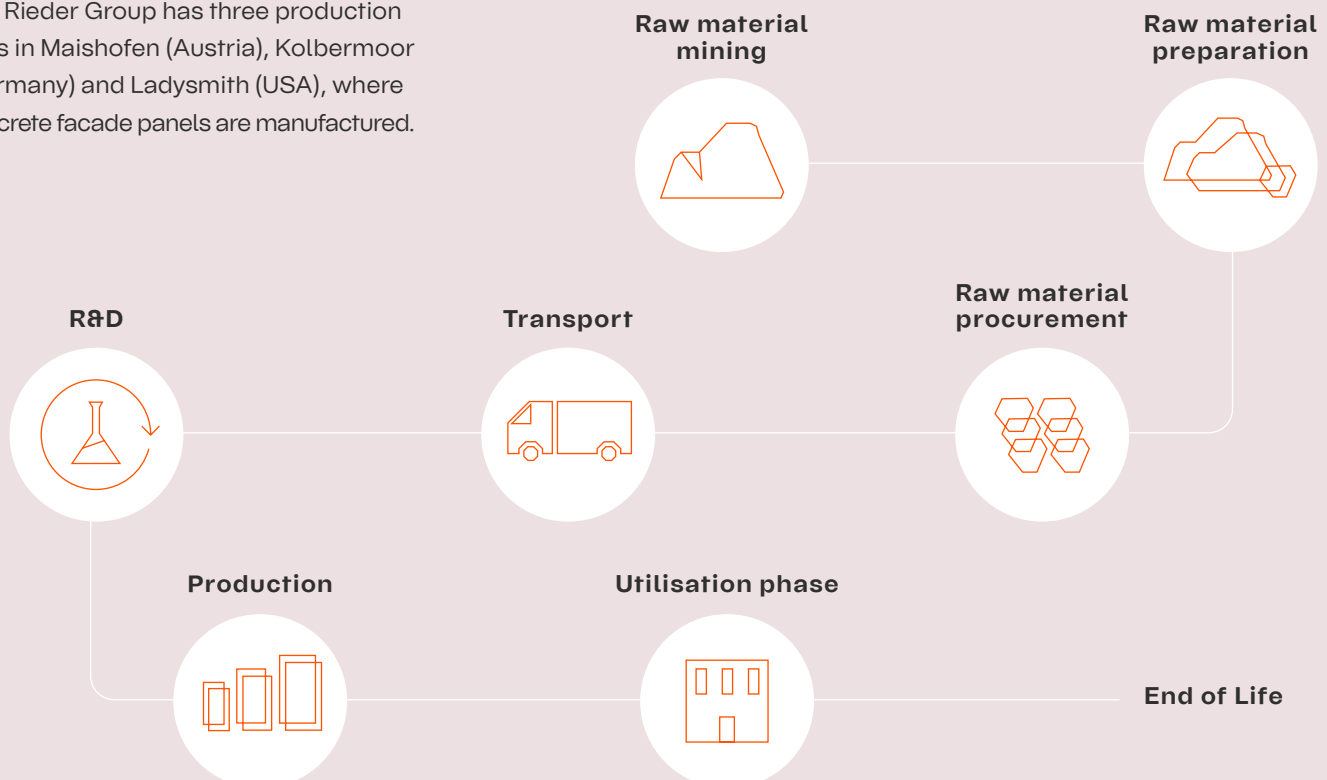
products are used worldwide. With the ISO 9001 and ISO 14001 certifications, Rieder sets itself high standards in terms of quality management and environmental protection. In addition to commitment and a strong team, the strengths of the Austrian family-owned company include the ability to combine tradition with innovation. Many Rieder facade projects have been

certified according to building certification systems such as DGNB (German Sustainable Building Council), LEED (Leadership in Energy and Environmental Design), and BREEAM (Building Research Establishment Environmental Assessment Methodology).

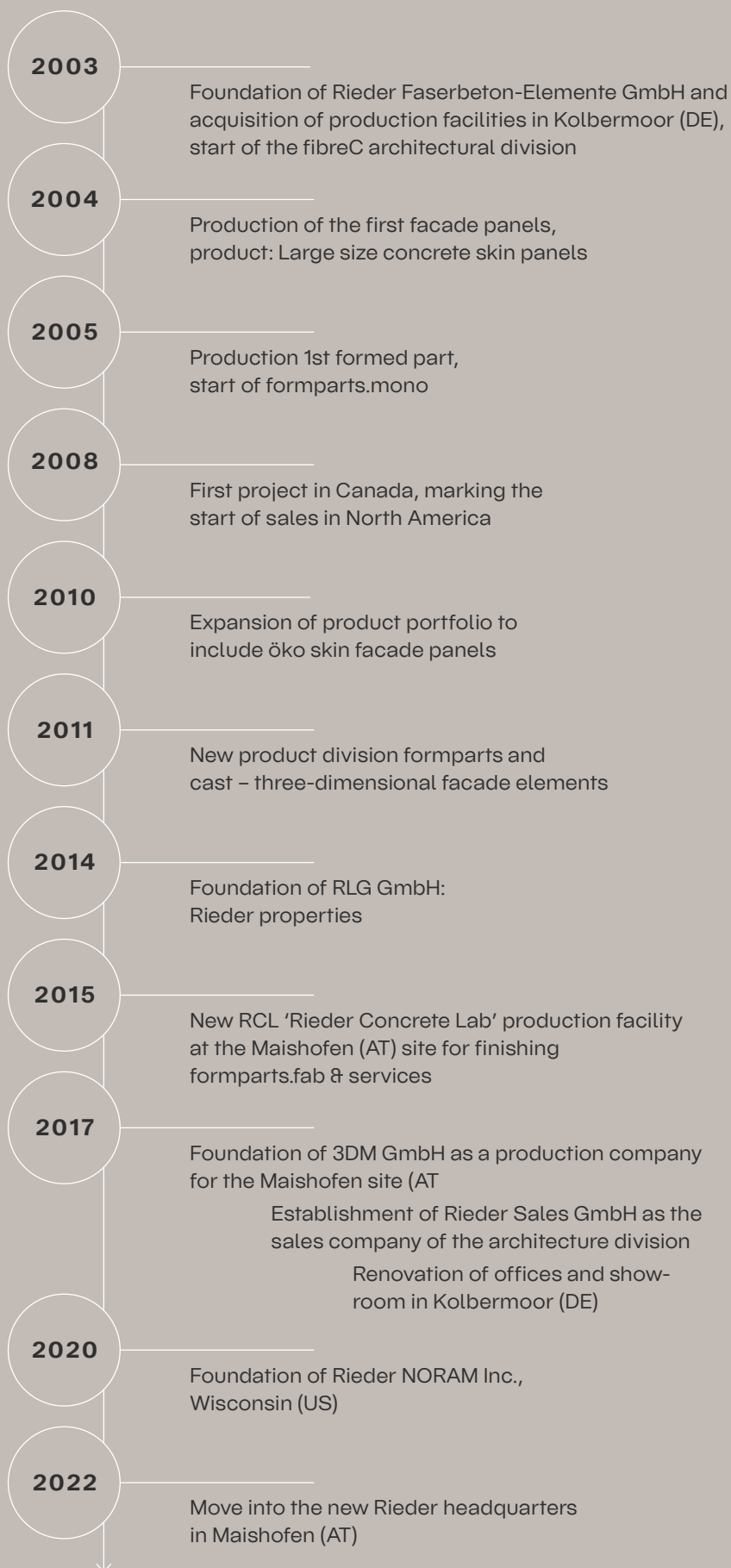
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The Rieder value chain

The Rieder Group has three production sites in Maishofen (Austria), Kolbermoor (Germany) and Ladysmith (USA), where concrete facade panels are manufactured.

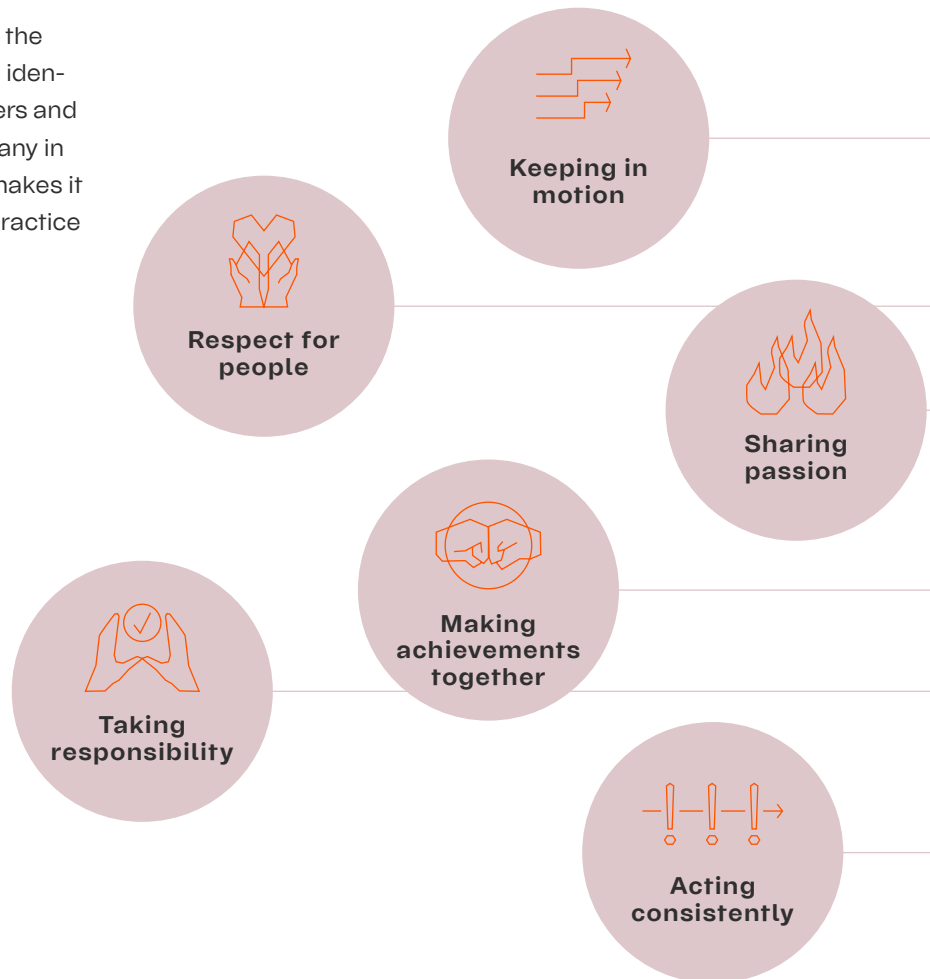


The most important milestones at a glance



Lived corporate values

The Rieder DNA, like human DNA, outlines the central corporate values that make up the identity of Rieder. It identifies the success drivers and strengths of the employees and the company in order to cultivate and expand them. This makes it possible to make decisions faster and to practice personal responsibility.



Certifications

ISO 14001 – Environmental management system since 2007

ISO 9001 – Quality management system since 2005

Memberships

- Österreichischer Fachverband für hinterlüftete Fassaden (ÖFHF) www.oefhf.at
- FVHF Fachverband Baustoffe und Bauteile für vorgehängte hinterlüftete Fassaden e.V. www.fvhf.de
- FVF Fachvereinigung Faserbeton e.V. www.fvf-faserbeton.de
- AFBW – Allianz Faserbasierte Werkstoffe Baden-Württemberg e.V. www.afbw.eu
- Info-b Informationsgemeinschaft Betonwerkstein e.V. www.infob.de
- Innovative Gebäude Österreich (Innovative buildings of Austria) www.innovativegebäude.at
- DGNB Deutsche Gesellschaft für Nachhaltiges Bauen (German Sustainable Building Council) – DGNB e.V. www.dgnb.de

02

Sustainability at Rieder

Rieder

2.1. Focus on climate and environmental protection

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Rieder focuses on all things resource management and environmental and climate protection (**GRI 3-3**). In the facilities of the Rieder Group, all prod-

ucts are manufactured with the best possible conservation of resources and reduction of negative environmental impacts in mind. These corporate prin-

ciples are put into practice both in our corporate culture and in our dealings with customers and partners.

The guiding principles of sustainability management

The main development driver is the wish to create more than just sustainable products made from concrete, in order to make an **active contribution to the energy transition.**

The Rieder Group is certified according to **ISO 14001 and ISO 9001**. Environmental protection also means being prepared to compromise: It can only be sustainable with a **healthy economy.**

With a critical eye on its own business, the Rieder Group sets itself high goals and **promotes sustainability** in all areas of the company.

The investment strategy of the operating units is primarily geared towards sustainable environmental protection. In doing so, we are guided by **ecological and economic aspects.**

Sustainability strategy

The entrepreneurial actions of the Rieder Group are driven by the following principles: the polluter-pays principle, the precautionary principle, and the principle of prudence as well as the substitution principle, the cooperation principle, and the sus-

tainability principle. Key decisions are made based on scientific findings. To this end, Rieder works with institutes such as the Austrian Institute for Building Biology and Ecology (IBO) and the German Sustainable Building Council (DGNB), and with renowned

engineering firms such as the BUI (Brameshuber + Uebachs Ingenieure GmbH, a spin-off of the Institute for Building Research at RWTH Aachen), which provides expert advice on all matters relating to building materials technology.

2.2. Materiality analysis

GRI 3-1

Rieder is publishing a voluntary sustainability report for the first time for the 2021 financial year. The focus of the report is on the headquarters in Maishofen (Austria) and the production facility in Kolbermoor (Germany), where the company's main activities take place. The plan is to include secondary Rieder facilities in the analysis in the future. The present sustainability report complies with the international standards of the Global Reporting Initiative (GRI) and was prepared with reference to the GRI Standards 2021. In order to meet these requirements, the first step was to identify the key sustainability issues for Rieder with regard to the environment, society and the economy.

The analysis started with an in-depth examination of the value chain, including upstream and downstream activities outside the company's own boundaries. In this context, all economic, ecological and social impacts of the individual issues were evaluated. In addition, both external stakeholder groups and Rieder employees were involved in the analysis through an online survey.

A total of 15 topics were considered in detail. The evaluation assessed Rieder's potential impact on sustainability as well as the relevance of the topics for stakeholders. The essential factors are defined by Rieder's core team with the support of external sustainability

experts (**GRI 2-14**). This results in the following key topics for Rieder, which are reported on in detail starting on page 25 (**GRI 3-2**):

Environmental issues

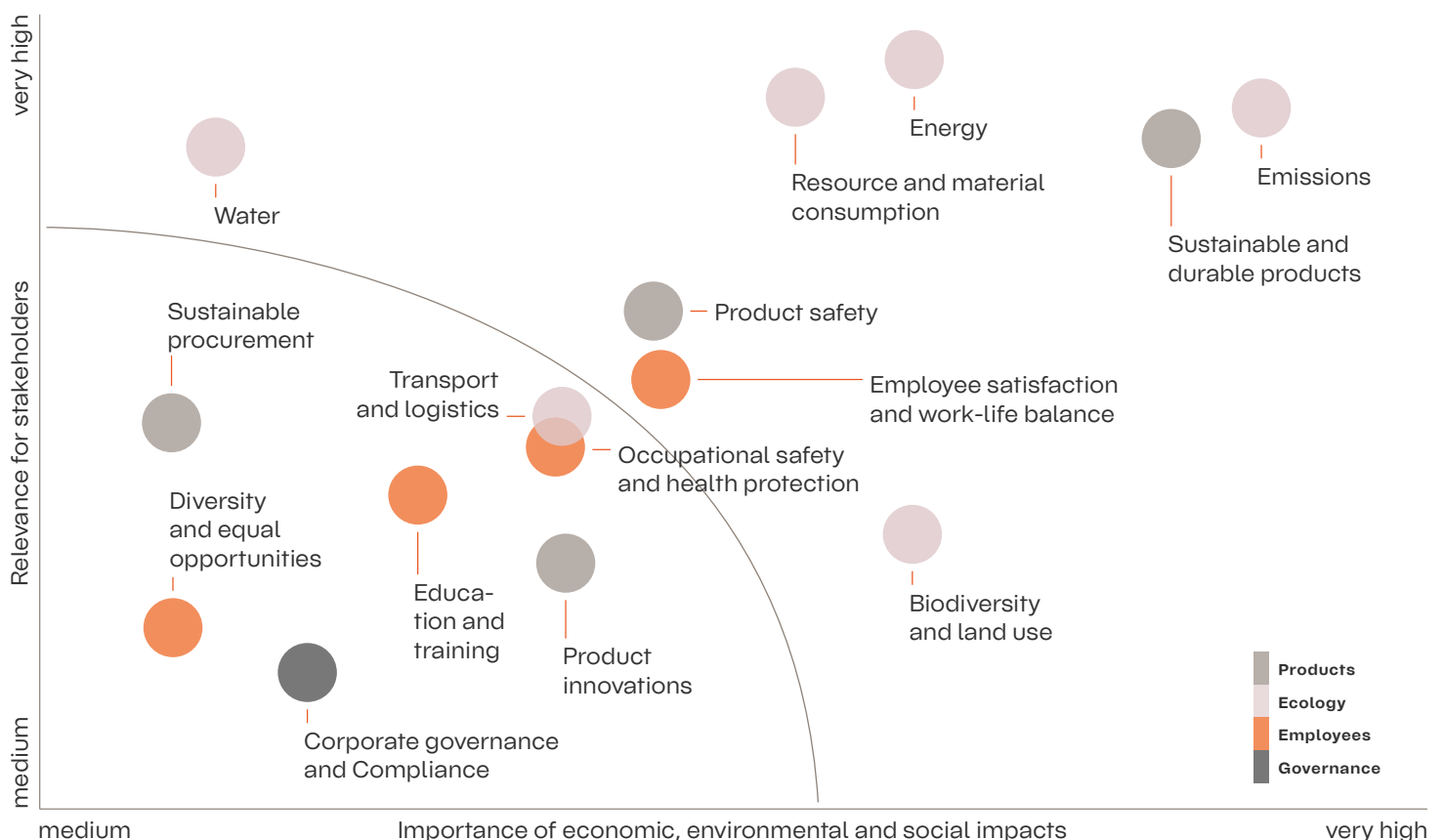
- Energy
- Emissions
- Resource and material consumption
- Water
- Biodiversity and land use

Economic topics

- Sustainable and durable products
- Product safety

Social topics

- Employee satisfaction and work-life balance





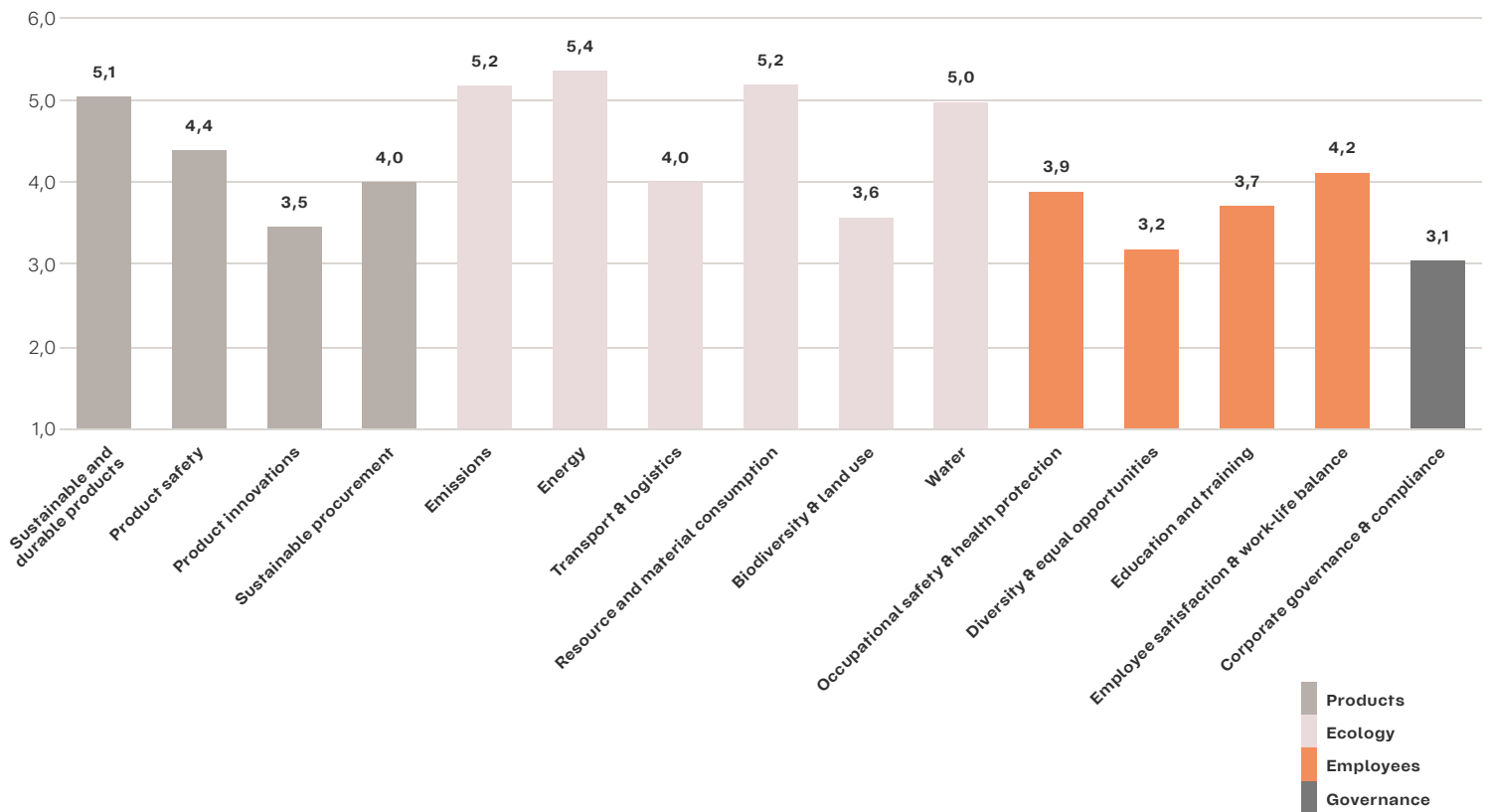
2.3. Getting stakeholders involved

As part of the materiality analysis, various stakeholder groups were involved via an online survey. In addition to employees, external parties such as processors and facade builders, architects, and planners, sales partners, and end customers were also surveyed. The interest of the architects and planners, with a share of 69% of all responses, is the

highest and reflects the main target group. All other stakeholder groups participated in equal numbers. There were more than 350 responses to the survey.

Stakeholders were asked to assess which sustainability issues they considered to be of high relevance for Rieder and thus also have the

greatest expectations for Rieder. The exact question for each individual topic was: 'How important is it for you that Rieder is committed to this issue?' To ensure terms are consistently understood and the individual topics are clearly defined, a description was provided in each case.



Additional communication channels for stakeholder involvement

The Rieder Group firmly believes that the company's goals can only be achieved by working in partnership with others. Relationships with external stakeholders are maintained at all levels and based on topics and occa-

sions. Through regular newsletters, lunch & learn seminars, conferences, (online) training courses and events as part of the Rieder Academy, as well as via online surveys on various topics, Rieder regularly incorporates

stakeholder feedback into the development of its business. Rieder's corporate culture has always been about close contact and exchange.

2.4. Sustainable Development Goals

GRI 2-22

The Sustainable Development Goals (SDGs) of the United Nations set uniform global benchmarks for sustainable development by 2030. The SDGs are intended to motivate governments, businesses and civil society to act in order to achieve common goals

with innovative potential and creativity. These goals support companies such as the Rieder Group in developing and implementing solutions to help master the world's greatest challenges. The core business of the Rieder Group is to implement envi-

ronmentally friendly solutions for the construction projects of its customers. And this is precisely where Rieder would like to make a contribution.

Rieder sees its contribution primarily in the following four goals:



SDG 9

Building a resilient infrastructure, promoting broad-based and sustainable industrialisation and supporting innovation



SDG 12

Safeguarding sustainable consumption and production patterns



SDG 11

Making cities and settlements inclusive, safe, resilient and sustainable



SDG 13

Taking immediate action to combat climate change and its impacts

2.5. Towards a climate-neutral company

GRI 2-25

In 2019, the environmental impact of the Rieder Group was quantified. Climate-relevant emissions, waste and material use were calculated and analysed in detail. Today, the company's proceeds are predominantly invested in projects that reduce its CO₂ foot-

print in the long term. Compared with 2019, by 2025, Rieder aims to reduce primary energy need by 40% and greenhouse gas emissions by 50%. To this end, the company is constantly optimising production processes, supply chains and energy consump-

tion. In the future, the products are to be produced with a CO₂-reduced and, later, a cement-free concrete matrix (**GRI 3-3**).

2.6. Green initiatives for the future

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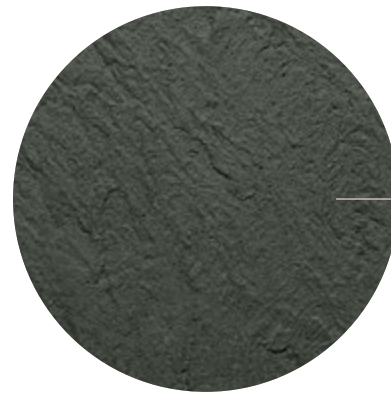
In order to secure the future of the company and preserve a world worth living in for future generations, Rieder has set itself the following objectives

with an ecological focus: the three pillars of the zero-waste strategy (1/3 substitution, 1/3 more efficient processes, 1/3 offset measures) are the

driving forces to achieve the transition to a climate-positive company.

Substitution

Rieder is currently working on the development of a cement-reduced and later a cement-free concrete matrix. Since spring 2022, the first result has been a slate texture on the facade of the new headquarters. This makes the Rieder Group the first facade panel manufacturer with a CO₂-reduced concrete matrix (page 28).



GREEN INITIATIVE #1

GREEN INITIATIVE #2



More efficient processes: pixel and take-back system

A new product was developed to reduce waste in production: the pixel. They are small-format concrete shingles produced from the residual material generated, for example, by cutting large-size panels (page 33). Rieder is also working on an optimised closed-loop system, which means taking back products in order to return them to the cycle via production.

Offset: planting trees

As part of its offsetting activities, 80,000 trees have already been planted in Canada to sequester CO₂ (as of August 2022). The aim is to have planted half a million trees by 2025.



GREEN INITIATIVE #3

The new Rieder Campus

02

BEST PRACTICE



Extraordinary working worlds

When planning the new company campus in Maishofen, Austria, Rieder took a close look at what modern working environments should look like. Communication channels and spatial relations were analysed in workshops and integrated into the architecture of the new offices. The focus was on converting the vehicle fleet to e-mobility, installing sustainable heating systems, saving paper, and avoiding plastic and waste. Another requirement was to always keep an eye on the topics of re-utilisation and mindfulness in everyday working life.

New work in hybrid construction

Exceptional working environments offer quiet areas and areas of creative interaction. The architectural concept features everything from flexible work-places, areas for focused individual work, group coordination, and meeting rooms to informal spaces for breaks and relaxing. A modern campus with lots of green spaces, an integrated e-mobility concept, and a vibrant manufacturing facility with a workshop and Maker Lab where customer-specific samples and mock-ups are produced provide fertile ground for future-oriented innovations. A special highlight is the new production hall, a hybrid construction of wood and concrete that paves the way for a new era that is more sustainable, more digital, and even more international. The glass fibre concrete material with the newly developed fibreC 3.0 concrete matrix envelops the new headquarters on a facade area of 400 sqm. 50% of the cement in the concrete matrix was replaced by alternative materials such as naturally burnt volcanic rock, resulting in a CO₂ reduction of 30%. The new building sets standards in terms of eco-friendliness, ecological construction, and materials.

Making changes to preserve

Using what is there already rather than building something new is known to be the best way to save grey energy and reduce land sealing. An old bus garage became an experimental laboratory for greening and has now become the new Rieder headquarters. The existing building was utilised and many other components were also reduced, reused or recycled. Among other things, concrete columns from old facilities, a massive concrete beam, 150 metric tons of recycled steel girders, wall panelling made of Arolla pine wood, and wooden floors were reused on the modern campus.

** Grey energy is the primary energy required to construct a building. Grey energy includes energy for extracting materials, for manufacturing and processing components, for transporting people, machinery, components and materials to the construction site, for installing components in the building and for disposal. Using local materials and resource-efficient construction methods can minimise the amount of grey energy used in a building.*



- 1 Showroom & studio for sampling and presentations
- 2 Headquarters Glemm21
- 3 R2D hall for experimental work and sample shipment
- 4 RCL hall as wood hybrid construction
- 5 Light-flooded open-plan offices with flexible work zones

4

03

Rieder product world

Rieder

3.1. Raw materials from nature

Wolfgang Rieder's vision was to create a light yet stable facade panel with glass fibre reinforced concrete that can withstand weather and environmental influences, while being both sustainable and aesthetically pleasing. Glass fibre concrete is a natural material.

Its raw materials, derived from nature create a special surface appearance characteristic of concrete. The appearance creates a natural vibrancy on the facade. The combination of large-size panels with shaped concrete elements allows an economical solution for the

entire building envelope. The company aims to successively reduce the CO₂ footprint of its products in the coming years.

3.2. Production process and quality assurance

At the beginning of the fibreC glass fibre concrete production process is the raw material storage. The first manufacturing step is called the concrete provision process. This is followed by extrusion with computer-controlled equipment: The concrete mix is brought into shape. In the first ripening phase that now begins, the previously pourable product solidifies.

The now solid product needs a second ripening phase. In the next step, the protective films are removed, and the surface finishing process – matting or sandblasting – is followed by the cutting phase. Finally, the panels are washed and dried, and the surface protection is applied. The final step is quality assurance. Finally, customised packaging ensures safe storage and

delivery on Euro pallets or recyclable styrofoam forms. The process described here briefly applies to the products concrete skin and öko skin. Special cuts and formed parts require additional flexible processes.

3.3. fibreC glass fibre concrete facades

Inspired by customer requirements, Rieder pushes the boundaries of concrete beyond its protective function:

Rieder meets a wide range of customer wishes and requirements with three product categories. The large-size

panels are produced in Kolbermoor (Germany), the shaped concrete elements in Maishofen (Austria).



concrete skin

The large-size panels combine the advantages of concrete and glass fibre and stretch over buildings like a skin. The elements made of glass fibre concrete with a thickness of only 13 millimetres in various colours, surfaces, textures and shapes open up a wide scope for the design of building envelopes. concrete skin can withstand very high loads, even with large-area panels. Due to their robust properties, the panels are weather-resistant and have a long service life. Ventilated curtain facades offer a number of benefits in terms of building physics, ecology and economic efficiency. concrete skin is attached either visibly or concealed to a metal substructure. The authentic colours blend in well with the landscape and the surrounding countryside.



öko skin

The öko skin facade slats create a lively play of colours and require minimal maintenance due to their different surfaces. The slats can be used as cladding for large-scale building facades and for small projects, such as porches, conservatories, terraces, garden sheds, garages, or fences. Due to their handy format, the slats can be assembled and processed directly on the building site – by skilled craftsmen, carpenters or DIY enthusiasts.



formparts

As monolithic-looking concrete slats, the shaped concrete elements offer a high degree of flexibility and a wide range of design options. The shaped concrete elements with their optimised mounting system enhance glass facades, protect your privacy, and serve as sun protection. The shaped elements are tailor-made as individual pieces and are available as L or U cross-sections, round arches, and special shapes with a length of up to five metres. The low weight of the formparts and their large span widths also mean that less supporting structure is required. Pre-assembly in the factory, independent of weather conditions, guarantees a high quality standard and rapid assembly on site. The elements are simply hooked on and tweaked into place and, together with the benefits mentioned above, offer an economical solution for the building envelope.

3.4. Product properties and the zero-waste strategy

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Zero waste

Residual materials from production can be used as ancillary products, such as filling material for noise barriers or for substructures.

greencrete

Rieder's goal is to reduce and eliminate pre- and post-consumer waste by replacing raw material and by reusing and repurposing offcuts.

scrapcrete

This refers to the reduction of waste through intelligent tools: an inverted design process that is 'created from what you have' and generative material reuse through machine vision (see Best Practice page 33).

Ecological efficiency

Only a small amount of fossil primary energy is used in the production of glass fibre concrete, which in turn results in low CO₂ emissions and a minimal greenhouse effect. In the next 5 years, Rieder is planning to convert its entire production to 100 percent renewable primary energy.

High performance and durability

The fibreC material can withstand the highest loads; it is very durable and can be used individually. The technical properties of fibreC remain unchanged over a service life of more than 50 years in all climate zones. Rieder facades do not require any maintenance over the years and do not need to be sanded or painted.

Passive solar contribution and shading

Rieder's facade products also serve as visual protection and protection from the sun. Especially in buildings with large glass surfaces, the pre-set concrete slats provide protection from heat on the inside. This way, the design of the facade remains open and transparent while also offering protection in the form of shading elements, especially in regions where there is a lot of light and sunlight. The material can contribute to the cooling and heating of facades through thermal activation, which is an efficient as well as innovative method. Building envelopes made of fibreC in light concrete colours do not produce a so-called heat island effect.

3.5. Product safety

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As a building product, Rieder facade panels are subject to strict safety regulations. In Europe, this is regulated by the Construction Products Regulation (EU) 305/2011. A harmonised standard that specifies product safety, product characteristics, and product requirements is DIN EN 12467. This standard specifies the technical requirements and the procedures for inspection and testing, as well as the acceptance conditions for fibre cement panels, facade shingles and formwork. In addition, Rieder has to comply with additional

national approvals, for example, in Germany and France. The overriding premise here is that the product must not pose a risk to humans or the environment. 100% of Rieder products have been evaluated for safety in a rigorous testing process.

Special attention is paid to the safety of the processors on the construction sites. In addition, Rieder has its fibre-reinforced concrete panels tested by an accredited external institute (the Austrian Institute for Construction and

Ecology; or IBO for short) to make sure there are no contaminants. This test analyses eluates and the material. Heavy metal content and radioactivity are important aspects of these tests. The results show negligibly low percentages or percentages below the detection limits. In the year under review, no violations were detected relating to the impact of products and services on the health and/or safety of buildings or people.

03

Modular wood hybrid construction

BEST PRACTICE



Germany's largest wood hybrid building as an open ecosystem

The office building planned by the architects at Tcho-ban Voss, EDGE Suedkreuz Berlin at Schöneberger Linse, is in many respects a showcase for the change that is taking place when it comes to standards for new buildings. The architects and project developers used concrete skin panels for the façade of this imposing wood structure in Berlin. The elements, which are only 13 millimetres thick, complement the well-thought-out concept not only as a design element but also because the requirements for the products installed are particularly high for the DGNB Platinum (German Sustainable Building Council) pre-certified project with regard to environmental and health standards. A look behind the concrete skin facade of the project, which was completed in 2022, shows how the needs of sustainable construction can be combined with many other requirements for a building of this format on 32,000 square metres of floor space.

Impressive environmental and health standards

The use of sustainable building materials, such as the glass fibre concrete elements from Rieder as facade material, is key to the long service life of such a building. The building material wood and the concrete elements by Rieder not only complement each other architecturally, they also advance the same goals regarding ecological construction and the reduction of CO₂ emissions. For the companies involved, this is exactly what the future of building construction looks like: resource-saving, time-saving, and sustainable for people and the environment.





04

Ecology

Rieder

4.1. Environmental management system at the Rieder

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In order to minimise the impact of its business activities on the environment, the Rieder Group focuses in particular on aspects that have been identified as essential for its stakeholders as well as those that have a major impact on the environment and society: emissions, energy consumption, water consumption, resource and material consumption, as well as biodiversity and land use. The group of companies gathers data on environmental performance in

all relevant areas, such as energy and water consumption. Based on the data collection, it identifies areas where there is potential for improvement, and appropriate measures are taken on this basis. All business units of the Rieder Group are certified with an environmental management system in accordance with ISO 14001. To this end, environmental protection measures were integrated into all operational processes. The management regularly

informs the stakeholders of the relevant business units about the latest and upcoming environmental, climate and energy guidelines and regulations, and about progress toward sustainability goals. The Rieder Group is committed to a precautionary approach to the environment, which is designed to prevent long-term environmental damage.

4.2. Energy consumption and emissions

GRI
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Energy consumption

The energy and energy source consumption of Rieder Faserbeton-Elemente GmbH (DE) was determined on the basis of the invoices and meters. Some of the data for 3DM GmbH (AT) for 2019 was not yet fully available for analysis. Energy data therefore only refer to the Kolbermoor (DE) site. Total energy consumption in 2021 amounted to around 3.091 MWh with a net pro-

duction volume of 189.000 sqm, an increase in each case of 24% compared with the previous year.

Energy consumption is largely made up of natural gas, diesel and electricity. Since 2021, 100% of the electricity at the Kolbermoor site has been generated from renewable sources. The site in Austria has also been purchasing 100%

renewable electricity for several years. In order to continuously reduce energy consumption, machines and processes are analysed and efficiency measures implemented. When purchasing new machines, attention is paid to the machine's energy efficiency class.

	2021	2020	2019
Total energy consumption from non-renewable resources			
Natural gas (kWh)	1 716 101	1 270 787	2 021 356
Diesel (kWh)	0	0*	27 902
Electricity (kWh)	0	1 225 439	1 208 614
Total energy consumption from renewable sources			
Electricity (kWh)	1 374 587	0	0
Total energy consumption	3 090 688	2 496 226	3 257 872
Net quantity produced (sqm)	188 951	152 696	162 149
Energy consumption per unit produced (kWh/net sqm)	16.4	16.3	17.2
Standards, methodologies, assumptions and/or computational programs used	Data comes from the controlling department, which uses invoices from the suppliers		
Source of the conversion factors used	Use of the conversion factor of 9.79 kWh/l for diesel		

GRI
302-5
302-1

CO₂-emissions

The data collection shows that the switch to renewable energy resulted in a reduction of approx. 15% of CO₂ emissions compared with the previous year (2020), which corresponds to 4.4 kg CO₂-eq/sqm net product or approximately 840 metric tons CO₂ equivalent in the year 2021 (at approximately 189,000 net sqm). The CO₂ emissions

from Rieder can be divided into two categories: Direct Scope 1 emissions are emissions that occur directly at the site through the combustion of natural gas or other fuels such as petrol. Indirect Scope 2 emissions are emissions that result from the purchase of energy, such as electricity. The total scope 1 and 2 emissions at the Kolbermoor

(DE) site in 2021 were 755 metric tons CO₂ equivalents. This is equivalent to a reduction of around 30% compared with the previous year. The table below shows the CO₂ emissions of the last three years in detail (**GRI 3-3**).

Absolute CO₂ emissions**	2021	2020	2019
Direct emissions, Scope 1 (in metric tons CO ₂ -eq)	343	254	411
Indirect emissions, Scope 2 (in metric tons CO ₂ -eq)	0	537	573
Total scope 1 & 2 THG emissions (in metric tons CO ₂ -eq)	343	791	984

GRI
305-1
305-2

Specific CO₂ emissions	2021	2020	2019
Net quantity produced (sqm)	188 951	152 696	162 149
Total GHG emissions per unit produced (kg CO ₂ -eq/net sqm)	1.8	5.2	6.1

* Transition to electric forklifts, remaining diesel consumption below the materiality limit. Diesel consumption of the vehicle fleet not included as the quantities consumed are below the materiality limit.

** Sources on conversion factors

CO₂-equivalent electricity mix (source: Federal Environment Agency DE), in kg/kWh = 0.474 (2019), 0.438 (2020/2021)

CO₂-equivalents for green electricity (sources: Federal Environment Agency, Energie-Control Austria, last updated: December 2012), in kg/kWh = 0

CO₂-equivalent natural gas and diesel (sources: Federal Environment Agency AT), natural gas in kg/kWh = 0.2 and diesel in kg/kWh = 0.255

Details of emissions calculation

The calculation of indirect Scope 2 CO₂ emissions was based on the average electricity mix of Austria and Germany in 2020 and 2019.

With the complete switch to green electricity in 2021, product-specific emission factors were used.

The calculation is made by IBO (2022) using the ecoinvent database according to EN 15804 - EPD A1-A3 (Scope 1, 2, 3).

CO₂-reduced Matrix 3.0

Cement is a material that, due to its production, leaves a very large CO₂ footprint in Scope 3, i.e. in the upstream and downstream value chain. This is not only due to the energy-intensive production process of cement, but also to the chemical reaction. Rieder had therefore set itself the goal of gradually reducing the amount of cement in its products. Concrete technology research and development has developed new formulations to replace part of the cement or, eventually, all of it with other materials. To this end, the cement-reduced Matrix 3.0 was introduced in 2021. A Matrix 4.0 without cement will follow. In the case of the cement-reduced matrix 3.0 already in use, 50% of the cement was replaced by a natural, hydraulically

active substance that substitutes the binder cement, namely natural and local pozzolana (volcanic rock). This rock powder, which has been used in building construction since antiquity, has excellent properties in terms of structural density and hardening. It is based on the opus caementicium, the cast masonry of the Romans, which is given durability with the pozzolana binding agent (volcanic ash, trass, and similar materials) that is sometimes greater than that of modern concrete. By reducing the cement content, Rieder reduced the CO₂ footprint of the concrete mix by 30% compared with the original matrix. In the product itself, this means a reduction of 23%. The products concrete skin, öko skin and formparts available with the CO₂-re-

duced matrix are available in selected colours from spring 2023. The first CO₂-reduced concrete elements envelop the new Rieder headquarters in Maishofen on a facade area of 400 sqm (page 17). The entire product range is to be converted to a cement-free material by 2025.

Another CO₂ reduction measure lies in the creation of by-products that could be produced from the usable cut-off pieces (page 33).

Noise and dust

Avoiding noise and dust or keeping them as low as possible is also an important goal for Rieder. For this purpose, cutting and grinding processes are done while wet, and manual work

is carried out using suction equipment, and cleaning operations are, wherever possible, done such that they produce as little dust as possible.



4.3. Water consumption, wastewater generation and treatment

Water is needed when cleaning the panels and for cooling during the cutting processes. Reducing the use of fresh water is therefore important and is taken into account as processes are optimised.

Water consumption can be determined using meter readings. However, these readings do not provide information about exact volumes, nor do they provide data on process water flows. Process water flows were therefore calculated in 2019. The mobile Clamp On - deltaxwaveC-P ultrasonic flowmeter was used for this purpose. The measurements were carried out over a few days during production and extrapolated, taking into account the product-specific processes.

Total water consumption amounted to approx. 10,000 metric tons and the sludge volume to approx. 710 tons. After dewatering, the sludge can again be used in cement production. The diagram also illustrates the key processing steps of the wastewater: Sedimentation, flocculation, filtration, and neutralisation. No water is withdrawn from water stress areas. However, a water conservation area borders the plant in Kolbermoor. This is not the only reason why Rieder wants to recycle the water used in the best possible quality.

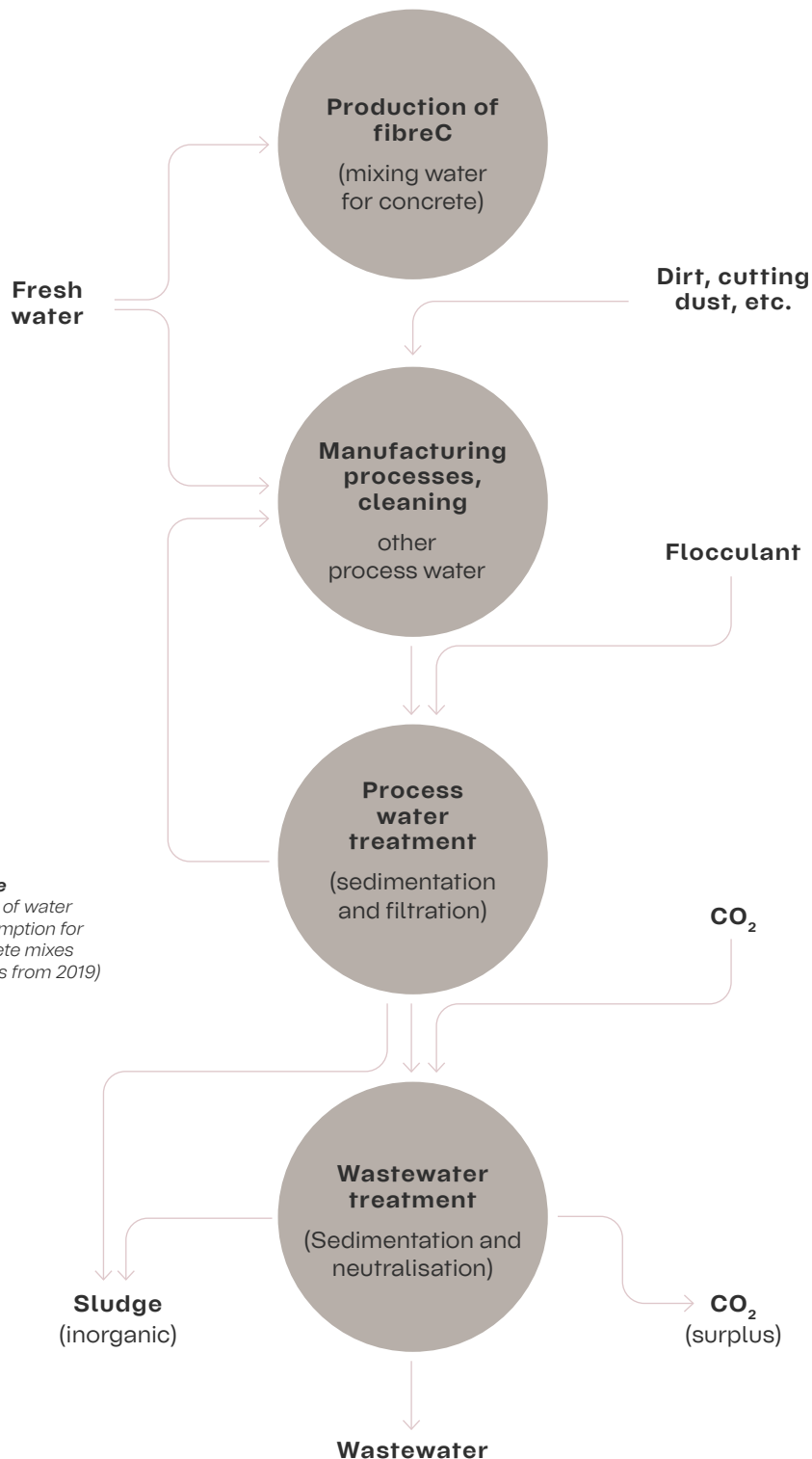


Figure
Result of water consumption for concrete mixes (figures from 2019)

Total water withdrawal	2021	2020	2019
Water from third parties (municipal water supply) in metric tons	10 056	10 358	9 577





4.4. Resource and material consumption

Material ecology

Building materials have an impact on indoor climate, indoor air quality, and the general feel of a room. In addition, throughout its lifecycle, the building material has an impact on the working environment (production and processing) and on the environment (production, distribution, installation, usage, and disposal). For the ecological evaluation of the building materials, in Austria, the

Rieder Group works with the Institute for Construction and Ecology (IBO), which carries out supplier assessments for Rieder. Meeting the requirement for ecological building means finding the best possible solutions under the given technical and economic conditions, taking into account as many of these effects as possible. The IBO certification is updated annually, and re-certification with

verification of all substances used takes place every three years. In Germany, this assessment is carried out by the German Construction and Environment Institute (IBU), an initiative of building product and building component manufacturers who have committed themselves to the guiding principle of sustainability in the construction industry.

Main materials and direct auxiliary materials

Rieder's products are mainly made of mineral materials. The main materials include: Sand, cement, water, pozzolans, colour pigments, additives such as superplasticisers and similar

materials, textile reinforcement and surface protection. The process-related auxiliary materials are selected in the best possible way to allow for recycling, or they are used for other purposes

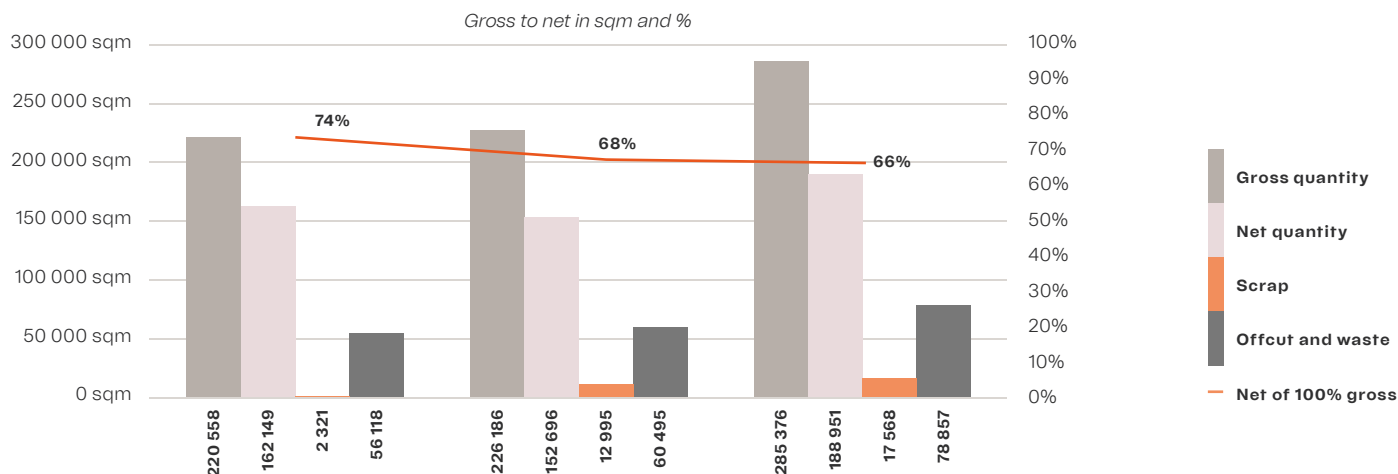
(downcycling). Auxiliary materials include nitrogen for cooling, PP concrete casting film, PP cover film, polystyrene, and special formwork.

Waste data analysis for potential determination

In cooperation with Certain Measures LLC based in Berlin and Boston, the digital manufacturing documents of the years 2017 and 2018 were processed and analysed. With the help of SAD software and specially developed plugins, the quantities could be determined and filtered according to size. It became apparent that the further utilisation

and reuse potential of the offcuts or sections of customer-specific offcuts was strongly dependent on size. It can thus currently be assumed that up to approx. 40% of the waste cuttings and offcuts have the potential for further use and reuse – which is equivalent to approx. 10% of gross panel production. The process-related auxiliary materials

are selected in the best possible way to allow for recycling, or they are used for other purposes (downcycling). Auxiliary materials include nitrogen for cooling, PP concrete casting film, PP cover film, polystyrene, and special formwork.

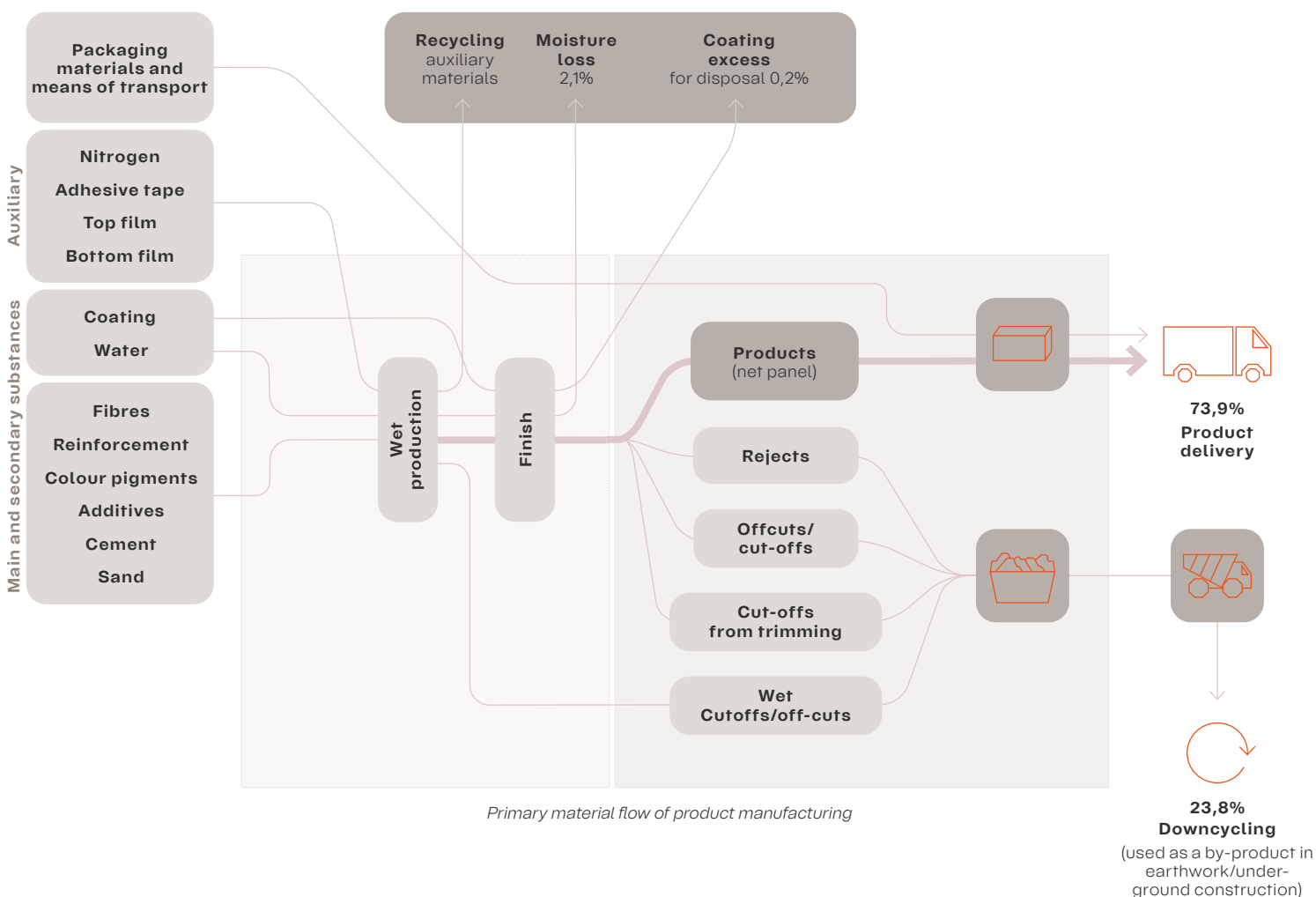


Reduction of offcuts and cut-offs

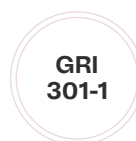
Despite optimised waste planning, the volume of residual material amounts to approx. 30% in relation to the production of raw panels. This is largely due to the scheduling situation of the project and special formats. A major challenge

here is the timing of production planning, with the project often progressing erratically. Rieder has developed a new product called pixel that reduces waste during production and focuses on the recyclability of the residual materials.

Cut-offs, offcuts and rejects can be determined from the residual stockpile records or from production plans.



	2021	2020	2019
Total weight or volume of materials in metric tons used for the manufacture of the main products	8430	6685	6537
Non-renewable materials used	8430	6685	6537
Renewable materials used	0	0	0
Total weight or volume of materials in metric tons used for the packaging of the main products	406	322	315
Non-renewable materials used	44	35	34
Renewable materials used	362	287	281



Waste is predominantly reusable material

Another important point with regard to saving resources concerns waste management. In the future, materials are to be separated more precisely, by type if possible. Major improvements are expected for PP films and waste wood. Residual materials from the panels are

crushed and screened by an external crusher; the fraction from broken concrete is downcycled and reused, e.g. in road construction as filler material, the fibre fraction is disposed of via the residual waste disposal company. In addition, about 710 metric tons of resid-

ual product from wastewater treatment were returned to the cement industry in the form of sludge in 2021. That is around 10% of the six million kilograms of raw materials that Rieder feeds into the concrete every year.

	2021	2020	2019
Total weight of waste generated in metric tons	1 088.89	945.86	2 769.32
Hazardous waste 4 *	60.37	77.29	7.88
Non-hazardous waste 5 **	1 028.53	868.57	2 761.44
Of which recyclable	80%	83%	6%



* Included: Coating residues, compressed gas packages, electrical waste, flammable waste, paint and varnish waste, hazardous operating materials, hazardous material packaging, IBC tanks, cement ** Includes: Absorbent and filter material, construction waste, concrete casting film, concrete cluster with film, barrels, wood, metal scrap, paper, broken boards, PP film, residual waste, inorganic sludge from water treatment, bar film, stretch film/foam film, polystyrene (highlighted materials are recyclable)

4.5. Biodiversity and land use



The Rieder plant in Kolbermoor is located on the edge of a nature conservation and water protection area. Rieder has set itself the goal of not sealing any new ground areas wherever possible and has achieved this in the construction of the new headquarters in Maishofen by relying

on the use of existing buildings, which was implemented. The greatest impact on biodiversity at Rieder comes from raw material extraction. Rieder is trying to minimise its impact by reducing the use of raw materials and making production efficient in order to keep the amount of offcuts and waste

as low as possible. Rieder also relies on the analysis of materials by the Austrian Institute for Building Biology and Ecology (IBO) in order to be able to exclude critical substances with environmental impact in the products from the outset.

Measures

- Looking through the process chain of planning and wet manufacturing and finding ways to increase efficiencies.
- The Maishofen site is to be managed without oil in the future. A heat pump is to be used in the new hall by 2023.
- Set-up of a packaging return system (independent or deposit-based).
- Product packaging: Where it is technically possible and makes ecological sense, there will be a gradual reduction of plastic packaging, some of which will be replaced by cardboard packaging.
- The wastewater neutralisation process will be further automated and the carbon dioxide metering optimised with the aim of achieving more control and an increase in efficiency in terms of carbon dioxide consumption.
- Reducing water consumption and modifying treatment, making it more efficient: Automated wastewater treatment is already taking place.
- Reduction of offcuts and cuttings, use for by-products.
- Increased production efficiency: computer-aided planning with optimised offcuts already during the concept phases.

scrapcrete and pixel

04

BEST PRACTICE



Creating from what you have

GRI
3-3

Construction and demolition waste generates most of the waste worldwide. However, a large part of the material is, in theory, reusable. The scrapcrete product was created in an effort to reduce environmental impact to a minimum and improve resource efficiency. As part of its zero-waste initiative, Rieder, in collaboration with Certain Measures, the developers of the Mine the Scrap software project based in Berlin and Boston, developed a project called scrapcrete. The software uses machine vision and pattern recognition technologies to design new facades that are algorithmically generated from existing manufacturing sections. While traditionally the design comes first and then the individual parts required for it are produced, scrapcrete proposes the reversal of this process: The planning process starts with the existing material. Existing offcuts serve the architects and designers as a resource and thus as a basis for their designs; 'creating from what you have' is the guiding principle of the inverted design process. scrapcrete unleashes the potential of digital technologies to address the urgent need to turn waste into resources. It thus not only generates minimal waste cycles but also develops a new design language that is fundamentally based on existing resources. In other words, this is not just about recycling residual materials; it is also about creating aesthetically appealing designs.

pixel – transformation from waste to design

The pixel production was preceded by a detailed analysis and evaluation of the current material flows, including pre- and post-consumer waste. A waste analysis was used over a period of more than one year to determine what percentage of the material was suitable for reuse. Over 106,000 parts were read in; areas, boundaries, shapes, colours, and textures were decoded and then classed by size and shape. The potential shapes were used to develop the pixel product, a small-format shingle measuring 147 x 240 millimetres. To make the product accessible to the market, an online configurator is being planned that shows the stock levels of the pixels, sorted by colour and surface area. These, in turn, provide the basis for the architects' designs and enable the transformation from waste to design.

05

Employees

Rieder

The majority of the 105 employees of the Rieder Group have been with the company for a long time and make a strong team. The corporate culture is characterised by an independent and responsible working attitude, creative and solution-oriented thinking, a flat hierarchy, and a culture of trust as one of the core values.

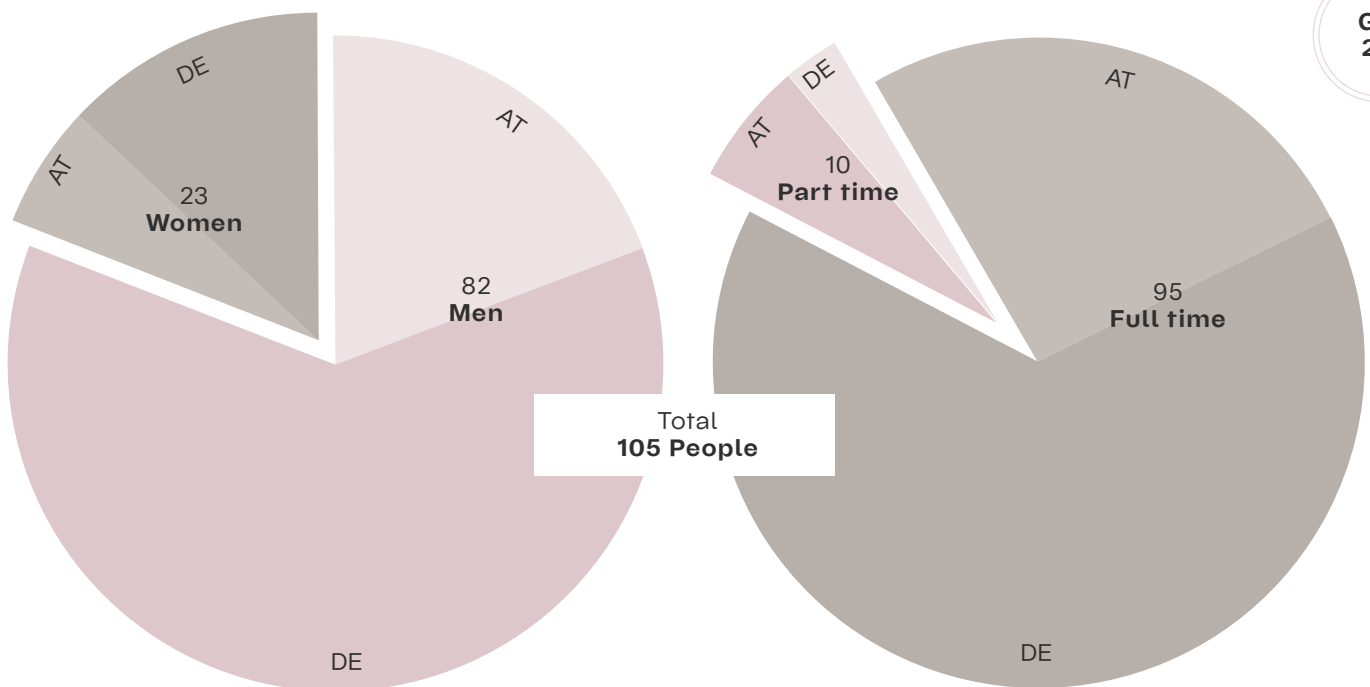
The knowledge and skills of employees and their involvement and participation are crucial to achieving the company's ambitious goals. They are experts in their field and their experience and feedback are crucial when it comes to improving company processes and making them more sustainable. In order to be prepared for the upcoming changes, the Rieder Group places great importance on investing in training and further education, as well as occupational health and safety.

Promoting diversity strategically

Another concern is improving diversity in the company. Rieder firmly believes that a diverse workforce in which everyone is respected and accepted promotes innovation and creativity. People with different backgrounds and strengths should be able to develop their potential in the company in the best possible way. With this in mind, it

is also an aspiration to take a fair approach to the differences between the employees, especially regarding age, gender, sexual orientation, physical characteristics, ethnicity, religion, and ideology, but also, for example, marital status and personal preferences. As a family-friendly company, Rieder supports people who were on parental

leave to return to their job. The promotion of women in management positions is one of the company's diversity goals. At 50%, the proportion of women in management positions is well balanced. The proportion of female executives among salaried employees in 2021 was 44% (4 out of 9).



Employees (incl. apprentices)

Full- and part-time employees

GRI 2-7

5.1. Employee satisfaction and work-life balance

GRI
3-3

It is important for the performance and motivation of employees that they are able to reconcile their professional and private lives. The Rieder Group therefore wants to create suitable working conditions for all employees. The sale of the infrastructure business in 2020 brought far-reaching changes to the employee structure. However,

change also brings uncertainty, which is why it is crucial in this phase to ask employees about how they see things and what they expect. Employee surveys are an essential part of employee involvement in the Rieder Group. These surveys are an important component of the corporate and feedback culture, because they promote an open

exchange between managers and employees. They also show where there is potential for improvement and where Rieder has already made progress through listening and learning (**GRI 2-16**).

Employee surveys and discussions

In December 2021, employee satisfaction was surveyed: Feedback on the past year, suggestions for improvement and wishes for the future were the subjects of the survey. One of the aims of the employee survey was to assess the satisfaction of employees and get feedback on the working atmosphere. One result was that the employees felt that the atmosphere in the company was in general positive, but they wanted more team-building measures to increase the sense of togetherness, especially between the

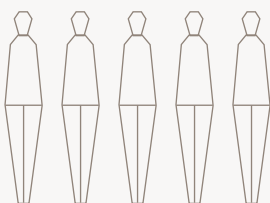
different sites. As a result, a joint workshop for all employees from the offices in Kolbermoor and Maishofen was held in spring 2022 in order to strengthen mutual understanding and create a sense of togetherness. Another result of the survey was specific training courses for the sales staff, such as in the area of sustainability. Subsequently, a number of short Lunch & Learn sessions were hosted on various topics as part of the company's own training scheme. The survey result also showed that people were looking forward to

their new office and the Rieder Campus in general.

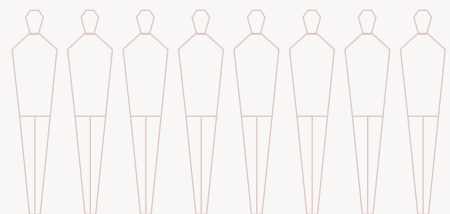
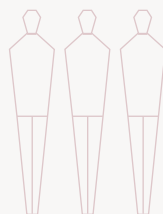
In addition to the employee surveys, annual standardised employee interviews are also held, where, among other things, the need for training and education is determined. An employee interview is conducted with approximately 20% of the staff members at Rieder. The plan is to further standardise the annual interviews and implement them more consistently.

GRI
401-1

AT | 5 women, 3 men



DE | 2 women, 8 men



Total number of new recruits: 18 people

New era offices

The new Rieder Campus in Maishofen ushered in a new era that has a significant influence on the way we work together. The office expresses the identity of the company, and its design has a major impact on our working atmosphere. The office was designed with the aim of creating spaces in which employees find the perfect conditions for well-being and creativity. The goal was to create an environment that would give employees room to

be creative and instil a desire for innovation. Before the office was planned, workshops were held with Vitra International AG to determine the needs of the employees.

Company benefits

Flexitime agreements, individual part-time models, in particular to support employees after maternity leave, home office options, discounted lunch menus and gym membership, staff events,

a financial bonus for new parents, weddings, etc. are among the staff benefits at Rieder. It was not possible to continue some of the employee initiatives due to Covid-19. However, the goal for the new campus is to continue to develop employee health services and create opportunities for social events. In addition, Rieder also has a subsidised rental apartment building for staff in the immediate vicinity of the company premises.

5.2. Education and training

GRI
404-2

Employees generally voice their wishes for education and training informally, as it is part of the corporate culture to support staff interests in education, both personal and professional. Requests for educational leave or flexible working hours to accommodate training are generally supported by the management.

Regular education and training programmes for employees in the areas

of occupational safety, accounting, balance sheet accounting, and payroll accounting, as well as specialised training, such as in concrete technology, are an important focus, as it is necessary for employees and the company to keep up to date with the latest knowledge and skills. Apprenticeships are currently being offered for technical drawing or in IT, such as system administrator. In apprentice training, Rieder focuses primarily on apprenticeships

with the Matura qualification, additional training and driving licences (crane, forklift, etc.), personal support during training to include feedback meetings and support for vocational schools, as well as bonuses for outstanding performance in the vocational school, etc.

Measures

Unfortunately, due to the Covid-19 pandemic, many social events had to be cancelled in 2021. Among the events that had to be postponed, unfortunately, were the annual Fasching curling event, the Christmas party, and the opening event of the new Rieder Campus. At least the annual BBQ on the Rieder Campus took place at the beginning of August. The traditional

Würstelessen dinner in Maishofen with Bavarian white sausages from our Kolbermoor site on the last working day before Christmas was also celebrated with a small group of people. To create a Christmas spirit despite the Covid-19 restrictions, the Rieder Campus in Maishofen and Kolbermoor were decorated with large fir trees and Advent wreaths by the Rieder family person-

ally. A competition with lots of prizes, such as a wellness weekend, ski and thermal bath tickets, and restaurant vouchers, completed the year. The plan is to participate in sporting events such as the Wings for Life Run or the Vienna City Marathon again in the future.

New work: dynamic environments



Resilience as a sustainability factor

The experiences from the Covid-19 pandemic have also led the Rieder Group to think about what modern working environments should look like today in order to safeguard resilience and security in times of uncertainty and upheaval and promote creative cooperation. Rieder has looked into this topic intensively and integrated it into the architecture of the new office at the Rieder Campus. Communication channels and spatial relations were analysed in workshops, some of which were held in cooperation with Vitra International AG.

Making space for innovation

The architectural concept features everything from flexible workplaces, areas for focused individual work, creative work, group coordination, and meeting rooms to informal spaces for breaks and recreation. A modern campus with lots of green spaces, an integrated e-mobility concept, and a vibrant manufacturing facility with a workshop and Maker Lab where customer-specific samples and mock-ups are produced provide fertile ground for future-oriented innovations.

A hub for all

The creation of new dynamic working environments helps Rieder establish itself as an attractive and secure employer able to retain talent. This is especially important given the company's location in the mountains. The central headquarters, which brings together not only the commercial departments but also application technology and R&D under one roof, allows for better coordination and therefore faster product development. As a result, customer ideas are now implemented in the same place where they were developed. And this in turn prevents delays in communication and execution. All these aspects together ensure that the company remains competitive.



06

Social and cultural commitment

Rieder

Part of Rieder's cultural mission is to support the work of designers, artists and architects. The creative input and the solutions that are developed together with architects and artists also improve the Rieder facade product and are a source of inspiration for new projects.

Cultural mission: Together for better architecture

For Rieder, the intense dialogue with architects means depth and forging identity and meaning. The promotion of young talents from the architectural scene, such as students of architecture schools like the TU Vienna, the AA School in London, Harvard GSD, or the collaboration with young or established artists, are an important part of Rieder's corporate strategy. The continuous development of glass fibre concrete and the knowledge transfer between designers and the

company not only helps to position glass fibre concrete as a classic facade, it above all emphasises the design character of the material.

This commitment reflects the relationship that Rieder, as an international company, has with all cultural and design projects: Artists introduce their creativity, foresight and often abstract and analytical thinking into the company's development department. In return, Rieder gives free rein

to the artists' imagination. Cultural projects, pavilions and exhibitions have always been an integral part of Rieder's history. And this close contact with students, artists and architects is a reflection of the corporate culture of the Rieder Group.

Daring to experiment

'Ever tried. Ever failed. No matter. Try again. Fail again. Fail better.' Samuel Beckett's quote gets to the core of what drives Wolfgang Rieder, namely to dare to do and produce new things that people like and that bring new benefits. A project as a vision and a built prototype must also be allowed to fail. By being bold and willing to experiment, an architectural venture can contribute to improving our living space.

Through Rieder's contribution at documenta13 in Kassel for a Grüner Punkt and Green Building Group project,

Wolfgang Rieder met the artist Theaster Gates (www.theastergates.com) and they became friends. With his Rebuild Foundation, Gates revitalises formerly vacant buildings in deprived districts, such as the South Side of Chicago, Detroit and in Omaha, and turns them into places of inspiration for these neighbourhoods, places where local residents and creative artists can meet. His activities encouraged Wolfgang Rieder to do more for public welfare and the design of places.

Rieder's acquaintance with the Canadian artist Ron Terada also influenced

his actions and guiding principles. His visual poetry 'Stay away from lonely places' underpins Rieder's ambition to create places for society and culture through the design of spaces. Rieder understands the building envelope as the versatile organ of a building structure, which, like the human skin, is capable of interacting with the environment. Rieder's contribution is to play a real role in the implementation of ideas with his products and solutions.

Estelita's Library in Seattle

06

BEST PRACTICE



Craft as a future initiative

The non-profit organisation Sawhorse Revolution has a clear mission: the promotion of pupils' and young people's manual and craft skills to improve their career prospects. For the project implemented in 2021, the Estelita's Library in Seattle, girls from the local grammar school worked with female architects and carpenters to build a bookshop with an attached library that focuses on social justice.



A joint change of perspective

Rieder played a proud part in this project by providing its öko skin facade panels. This meant that Rieder made an important contribution to the realisation of the building. 'At the heart of our work is the idea that young people can and should help shape their own neighbourhoods,' says Sarah Smith, managing director of Sawhorse Revolution. All participants in the project were women: two-thirds of the students were women of colour and three-quarters were from low-income backgrounds. Estelita's project showed the students how creative design and construction projects can change your own perspective and that of your community. Today, Estelita's welcomes all people and is committed to social justice.

07

Appendix

Rieder

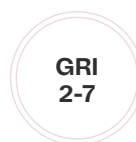
About this report

This sustainability report was published for the first time in 2022 for the year 2021; it was drawn up with reference to the GRI Standards 2021. The report covers Rieder Sales GmbH, Rieder Faserbeton-Elemente GmbH, 3DM GmbH and includes the sites in Maishofen (Austria) and Kolbermoor

(Germany). The employee data was compiled at the end of the reporting period and refers to the date of 31 December 2021. The data for the indicators are taken from internal records or internal company calculations. The ecological figures, due to availability, only refer to the Kolbermoor site.

For the next revision of the sustainability report in 2022, the plan is to include the site in the USA (Rieder NORAM Inc.) and an expansion of the key figures to include Maishofen. The ultimate goal is to establish an annual reporting cycle.

GRI Indicator	2021		
	AT	DE	Total
Total employees (incl. apprentices) (number of employees)	37	68	105
Women	16	7	23
Men	21	61	82
Up to the age of 30	6	2	8
Between the ages of 30 and 50	23	42	65
Above the age of 50	8	24	32
Total number of employees with permanent contracts (no. of employees)	37	58	95
Women	16	5	21
Men	21	53	74
Total number of employees with fixed-term contracts (no. of employees)	0	10	10
Women	0	2	2
Men	0	8	8
Total number of full-time employees (number of employees)	30	65	95
Women	9	5	14
Men	21	60	81
Total number of part-time employees (number of employees)	7	3	10
Women	7	2	9
Men	0	1	1



GRI Indicator	2021		Total
	AT	DE	
Total number of new recruits	8	10	18
Women	5	2	7
Men	3	8	11
New recruits rate for women (in relation to total female workforce)	31.3%	33.3%	
New recruits rate for men (in relation to total male workforce)	14.3%	13.1%	
New recruits up to the age of 30	3	1	4
New recruits between the ages of 30 and 50	5	4	9
New recruits above the age of 50	0	5	5
New recruits rate up to the age of 30	50%	50%	
New recruits between the ages of 30 and 50	21.7%	9.5%	
New recruits rate up above 50	0%	21.7%	
Total new recruits rate (in relation to total workforce)	21.6%	14.9%	
Total number of people leaving	7	8	15
Number of women leaving	2	1	3
Number of men leaving	5	7	12
Rate of number of women leaving (in relation to total female workforce)	12.5%	16.7%	
Rate of number of men leaving (in relation to total male workforce)	23.8%	11.5%	
Number of people leaving up to the age of 30	3	2	5
Number of people leaving between the ages of 30 and 50	4	4	8
Number of people leaving over 50	0	2	2
Rate of number of people leaving up to the age of 30	50%	1%	
Rate of number of people leaving between 30 and 50	17.4%	9.5%	
Rate of number of people leaving over 50	0%	8.7%	
Total rate of number of people leaving (in relation to total workforce)	18.9%	11.9%	

GRI content index

Usage declaration

Rieder reports for the period from 1 January 2021 to 31 December 2021 with reference to the GRI Standards.

GRI Code	Standard declaration	Page	Omissions/ explanations
GRI 1: Base (2021)			
GRI 2: General data (2021)			
The organisation and its reporting practices			
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