



Performance review

Performance review

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Introduction to the Performance review

Vetropack has followed the basic concept of integrated reporting since 2019. Integrated Reporting (IR) is a holistic concept that combines conventional financial reporting with non-financial reporting elements, wherever this is possible and provided that it contributes to better understanding.

The structure of the Performance review is based on the dimensions of the "six capitals" of integrated reporting:

- Customers and suppliers →
- Finances →
- Innovation and intellectual property →
- Production and products →
- Employees →
- Environment →

Within these subject areas, our reporting is aligned to the defined material topics. This also corresponds to the recommendations of the GRI Standards 2021. By way of introduction, we explain our long-term management approach to each of these topics (GRI Disclosure 3-3, Management of material topics) and then focus on events and progress in the reporting year. As appropriate to each topic, we add further information in accordance with the GRI Standards 2021. This results in a slightly changed structure as compared to the Integrated Annual Report for 2021 (chapter: «[Introduction to sustainability reporting](#)»). The new presentation, structured according to material topics, aims to make it easier for readers to gain a wide-ranging picture from the Performance review of how things stand in relation to the material topics.

Customers and suppliers

Active stakeholder engagement

We believe that it is important to maintain close and regular exchanges with our stakeholders. By doing so, we learn at first hand what they require and expect from us; we become aware of relevant trends that could have a positive impact on our business, and we come to understand where our strengths lie and where we have potential for improvement.

We are mindful that our business is influenced by a large number of stakeholders. They include providers of funding (equity or borrowed capital), customers (primarily food and beverage manufacturers), suppliers (mainly of raw materials and plant), as well as employees or their representatives. We also include society in general among our stakeholder groups – represented by supervisory authorities, legislators, trade associations and non-government organisations. In the interest of long-term value creation, we maintain open and transparent dialogue with all these stakeholders. This is because active stakeholder management can have a positive impact on stakeholders' attitudes in general, and also towards Vetropack.

Our Code of Conduct and Business Ethics Policy set out the framework for our active engagement with stakeholders. We meet the regulatory requirements by publishing annual and semi-annual reports, and by holding annual general assemblies. We also communicate proactively about our strategic goals, and we publish a half-yearly financial report. The management at each of our various production sites is responsible for interacting appropriately with customers, employees, authorities and neighbours.

Both the CEO and the CFO maintain relationships with investors and are responsible for responding to their questions and enquiries. These exchanges take place at meetings or during plant visits. Other managers also share responsibility for maintaining relationships with stakeholders. For example, the CSCO, Head of Procurement and CTO are responsible for maintaining contact with suppliers.

As well as interacting with our customers on a daily basis, we conduct surveys at four-yearly intervals to learn about our customers' requirements and satisfaction levels; the last such survey took place in 2019. In view of the current situation, we are planning to conduct a customer survey next year.

[Chapter customers and suppliers](#)



To communicate with our extensive and diverse group of internal and external stakeholders, we make use of a varied range of communication media: the core channels are our company website, our intranet, our online employee magazine, brochures, our Vetrotime magazine for customers and – to a growing extent – LinkedIn as our preferred social media channel.

[Vetropack Group website](#)



[Vetrotime customer magazine](#)



[Vetropack LinkedIn channel](#)



Progress and events in the reporting year

Constantly improving the transparency of our ESG reporting

ESG issues are constantly gaining importance for our customers. Packaging is a subject that attracts close attention from consumers as well as regulatory bodies, so our customers are increasingly approaching us with their requirements for information on this topic. We have substantially improved our transparency as regards ESG issues by creating the new position of Group Sustainability Manager. He communicates knowledge about practice-related ESG topics within the company, thus helping to raise our employees' awareness of these issues. This new specialised knowledge plays a particularly valuable part in our dialogue with customers: it allows us to provide expert explanations of Vetropack's ESG engagement, and it also helps us to develop solutions for problems in this area.

Responding to the challenges of the energy market through dialogue

The value of good communication often becomes apparent in crisis situations. During the year under review, our relationships with customers were put to the test by the unexpected and unpredictable developments on the energy market. Thanks to our engagement with our customers, underpinned by transparency and partnership, we were able to conduct the difficult discussions about the price increases related to energy costs on a basis of trust. The result was that we lost none of our customers. On the contrary: we firmly believe that relationships with our customers have been strengthened in the long term by our joint efforts to overcome this difficult situation.

[Chapter multi-supplier strategy](#)

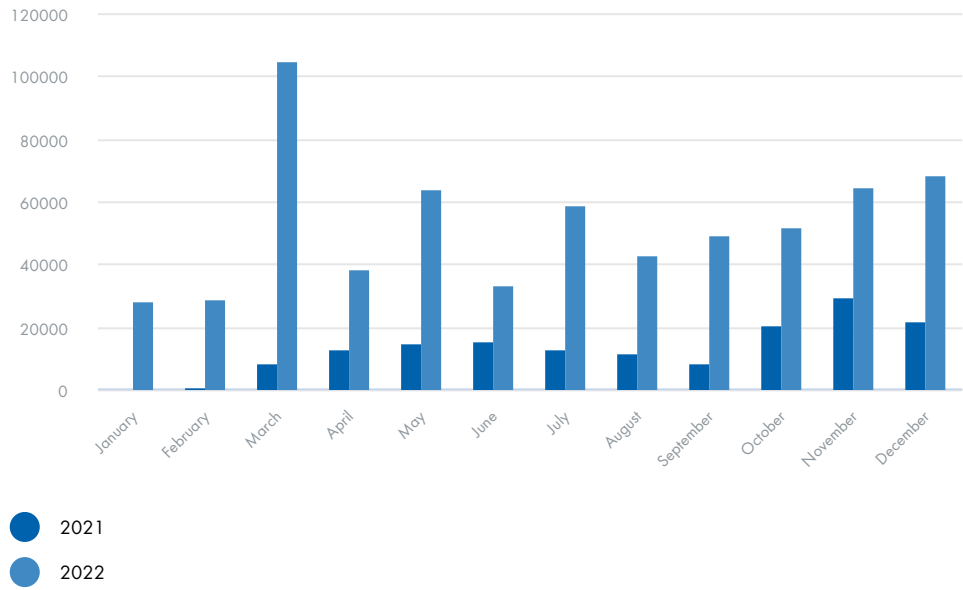


Gap in social media communication closed

At Vetropack, we cultivate concise communication based on facts. This yields benefits for us in our communications with the capital markets. To reach additional stakeholder groups – including potential employees in particular – we want to offer more insights into everyday life at Vetropack, covering a variety of subjects; where appropriate, we would even like to initiate dialogue about these topics. To achieve this, we invested in active management of our LinkedIn channel during the year under review. The mix of official Group communications and posts by sites and their employees from all over Europe has proven successful for this purpose. Within one year, we have more than quadrupled the number of views (impressions) per month for our LinkedIn posts.

LinkedIn statistics: growth within one year

Impressions



You can find more information about stakeholder engagement in the following sections of this report:

[Exchange with employees: employee engagement](#)



[Collaboration with suppliers: multi-supplier strategy](#)



[Customer relationships: customer-specific products](#)



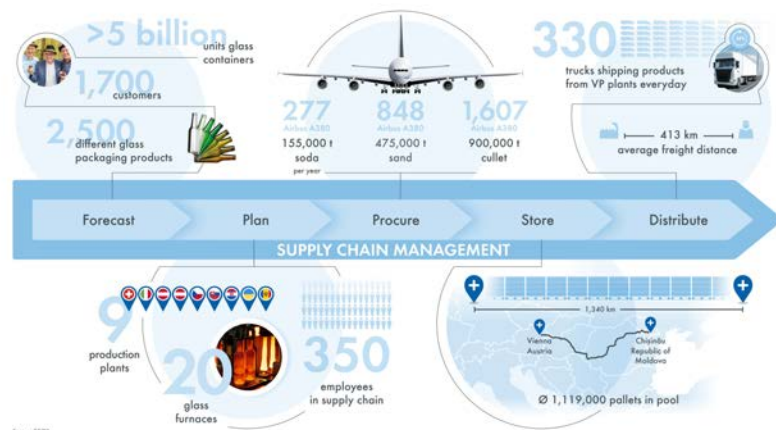
Multi-supplier strategy

Collaboration with our suppliers is a core element of the new supply chain management system we established in the reporting year. By taking this step, we are pursuing a strategy based on having multiple suppliers in place for central resources. As well as ensuring our supplies of raw materials, equipment and plant, this multi-supplier strategy minimises risks in the supply chain.

Professional supply chain management is the foundation for a smooth flow of goods, so it provides the basis for economic efficiency and customer satisfaction. Recent years have seen global supply chains facing vast numbers of challenges that have highlighted the key part played by supply chain management in business success.

We too were aware that precise control of the supply chain, geared to resilience, is a valuable asset. This prompted our decision in 2021 to take various steps aimed at strengthening our supply chain management: these included positioning our Corporate Supply Chain Management at Group Management level. The supply chain management approach we implemented in 2022 (shown in the graphic below) is based on forecasts compiled in great detail, and it extends as far as warehousing and distribution.

The core element of our supply chain management is the procurement of the materials needed to manufacture over five billion glass containers each year. In specific terms, these amount to around 900,000 metric tons of cullet (used glass), 475,000 metric tons of sand, and 155,000 metric tons of soda. As well as these materials, we have to procure the machinery, plant, tools and energy needed to produce glass from them; we also have to ensure the provision of upstream and downstream services, especially in the transportation sector. To achieve these goals, our supplier management focuses on establishing, developing and maintaining partnerships with suppliers of energy and transportation services as well as primary and secondary raw materials. For goods and services of central importance, we implement a multi-supplier strategy based on the principle of multiple suppliers for central resources. By pursuing our multi-supplier strategy, we reduce the risk of interruptions to the production of glass packaging while supporting reliable deliveries of our products. Although this procurement strategy is initially more complex and costly, it ultimately offers the advantages of either reducing procurement costs or increasing the stability of the supply chain, depending on the market environment.



As part of our annual management reviews, we measure progress with the multi-supplier strategy on the basis of internal Key Performance Indicators (KPIs) such as the number of active suppliers per category and the number of long-term contracts in place.

Progress and events in the reporting year

Due to the severe pressure placed on Vetropack's supply chain by the war in Ukraine and the subsequent energy crisis, most of the new strategic and operative measures planned for the reporting year had to be extended into 2023.

Position of Chief Supply Chain Officer established

In 2021, Vetropack's Board of Directors decided to create a new position at Group level to focus on Corporate Supply Chain Management. On account of the acts of war in Ukraine during the year under review, however, the Chief Supply Chain Officer was not able to develop his area of responsibility to the extent originally planned. The majority of his activities were therefore focused on reducing the losses in Ukraine and managing the energy crisis.

[Press release: «Board of Directors appoints Stephen Rayment as new Chief Supply Chain Officer at Group level» \(17.11.2022\)](#)



Maximum flexibility in energy procurement

Delays and interruptions to global supply chains presented a huge challenge for supply chain management in 2021, while energy prices in the reporting year were characterised by sharp increases and volatility. Natural gas is by far the most important source of energy, accounting for around 80 percent of the total. The rest of our energy demand is met by electricity. We leveraged the full scope of our flexibility in procurement and production here so as to keep the best possible control over cost increases and the risks of an energy shortage. To achieve this, we adopted a strategy comprising a mix of hedging and spot market transactions.

Supplier and capacity management following the shutdown of our Ukraine plant

The shutdown of our production in Ukraine meant that we lost significant capacities. To the best of our ability, we overcame the major challenges involved in fulfilling orders for customers who would normally be supplied from Ukraine. The suspension of production there also had a direct impact on our Group-level and local suppliers, some of whom saw unexpected losses of sales.

Long-term collaboration and shared basic values

Wherever possible, we endeavour to focus our collaboration on proven suppliers of many years' standing with whom we often share fundamental values. Sustainability issues are set to gain importance. In this context, we would like to hold our suppliers more accountable, but we aim in particular for commitment underpinned by a spirit of partnership. During the year under review, we created a dedicated position in Purchasing to develop this type of collaboration with our suppliers. The postholder maintains close dialogue with the Group Sustainability Manager.

Strong supplier base compensates for loss of Russian and Belarusian suppliers

Collaboration with suppliers in Russia and Belarus was terminated in the reporting year on account of the Ukraine war. We have been able to compensate for the elimination of these suppliers thanks to our extensive and proven supplier base.

Health and safety of customers and consumers

We supply the food and beverage industry with products used by millions of consumers, so we regard it as essential to ensure the health and safety of our customers – and of all consumers who use our products – at all times.

Packaging can have both positive and negative effects on the health and safety of everyone who comes into contact with it (including logistics personnel, customers and consumers, and many others). As a stable material that provides good protection for products, glass can help to improve safety during use as well as consumption. Because the weight of glass is comparatively high and it is relatively fragile, glass packaging entails certain risks; however, these can be minimised by adhering to established quality standards.

Being a «Leader in Quality» is a key objective in Vetropack's Strategy 2030. Certified processes provide the basis for high quality and product safety. This is why we have set ourselves the goal of bringing all our business units into compliance with the ISO 9001 and ISO 22000 standards by 2023. At present, only three sites do not yet have the relevant certifications: Gostomel in the Ukraine (due to the current political situation), Trezzano in Italy (due to a change of plant), and Chişinău in the Republic of Moldova.

Quality and safety are essential factors that must be considered in every product development, according to clearly defined criteria. In our production, seamless quality testing is central to the safety of our products. Therefore, 100 percent of our glass containers are inspected to guarantee consistently high product quality and safety. This practice also ensures compliance with all legal and customer specifications.

To measure progress, we use quality indicators such as the number of complaints per glass container sold and the number of internally identified critical defects. For reasons of competitiveness, however, we refrain from publishing these quality indicators.

Progress and events in the reporting year

Latest inspection technology in Croatia

Harmonisation and standardisation of quality assurance processes within the Vetropack Group continued again in 2022. Decisions on the testing technology used are planned and implemented on this basis. The goal is to ensure customer-specific quality requirements with the most efficient processes and the latest testing technology.

FSSC certification for innovative production technology

Echovai, the first returnable bottle made of tempered lightweight glass, is the next generation of returnable glass packaging. This innovative product is based on a special production technology that allows thermal hardening of glass bottles for the first time ever. Since the reporting year, an FSSC certification has proven the safety of this technology. This opens up access to additional markets for Echovai.

[Further information on Echovai](#)



Disclosures

GRI 416: Customer Health and Safety 2016

416-2 Incidents of non-compliance concerning the health and safety impacts of products and services

No incidents of non-compliance concerning the health and safety impacts of Vetropack's products and services on customers were notified during the reporting period.

GRI 418: Customer Privacy 2016

418-2 Substantiated complaints concerning breaches of customer privacy and losses of customer data

There were no substantiated complaints during the reporting period.

Finances

Cash flow and profitability, sustainable growth and market position, sustainable return on capital

Vetropack's strategy aims to achieve long-term development of the company, taking account of its stakeholders' concerns. This approach is in line with the expectations of our majority shareholders. Since a significant part of Vetropack's growth is financed from our own balance sheet, we accord high priority to improving cash flow and profitability. This ensures financing for the company's continuous development. Long-term supply and purchase agreements help us to achieve a good degree of certainty in our financial planning so that investments can be targeted to our objectives.

Sustainable growth is our overriding goal. We view this as a Group-wide responsibility. We manage our business in compliance with ecological principles by setting targets for a sustainable Return On Operating Capital Employed (ROOCE) to promote long-term growth. In doing so, we take account of the interests of our stakeholder groups, and of the social, economic and environmental impacts of our business activities.

We have defined the following medium-term targets for the key financial indicators that we regard as central:

- ROOCE (Return On Operating Capital Employed) of 20 percent
- Sales of CHF 1.4 billion

Growth generates the resources needed for investments that will secure our successful market position. We focus our investments on improving production capacity and increasing efficiency.

Progress and events in the reporting year

Investment during the crisis

The long-term average for Vetropack's annual investments amounts to about ten percent of sales. Crisis-related events influenced Vetropack's investment behaviour during the last three years. In the first year of the pandemic, and especially at the outset, we invested somewhat cautiously on account of the major uncertainties. Then in 2021, investments reached the record level of CHF 119.2 million. This was based on our conviction that companies which show strength and continue to pursue their strategy in such situations will be able to gain an innovative lead and generate market edge from them. In line with this thinking, above-average investments were also planned for 2022. Total investments in 2022 ultimately amounted to CHF 194.6 million – another record figure.

The largest investments during the reporting year were made in Italy. Vetropack accords the highest priority to the greenfield project in Boffalora which, at over CHF 400 million, is the largest investment ever made in the company's history. Next to Austria, Italy is Vetropack's largest market: this is why Italy is of central importance, and why it plays a dominant role in our strategy. The high-quality specialities to be produced in our new plant will open up access to new markets for us. Commissioning of the plant is planned in the second quarter of 2023. Start-up is now scheduled slightly later than the originally planned date, due to delays in construction material supply chains. Additional costs must also be expected because of the extended project duration and dramatic increases in prices of raw materials and energy. Nevertheless, we are convinced that we can recoup this additional financial burden in the medium term thanks to the new plant. It will incorporate a highly efficient, cutting-edge production facility that will open up additional opportunities for growth in the Italian market as well as in neighbouring countries.

Chapter environment



Slovakia was another focus of our investment activities in 2022. We invested substantial resources in the reconstruction of the recycling line at our existing plant in Nemšová. The reconstruction aimed not only to increase capacity for separating out valuable white glass, but also to maximise the yield of used white glass. To achieve these goals, we invested in an additional sorting unit to clean the white glass and separate out any remaining glass-ceramic and leaded glass. The plant has now increased its processing capacity by 50 percent, thus saving about 4,100 metric tons of raw material and reducing procurement costs by a corresponding amount.

Chapter environment



We are also continuing to invest in the digitalisation of our production and processes, because ongoing development of information technology (IT) combined with the digitalisation of business processes are essential elements of the Vetropack Group's Strategy 2030.

Chapter digitalisation and automation



Market position in 2022 – the crisis year

Although production capacity in our Ukraine plant was lost due to the war, Vetropack achieved sales growth of over 10 percent in the reporting year as compared to the prior year. Profits decreased to CHF 40.7 million. At best, this development allows conclusions to be drawn about the short-term impact of the Ukraine war and the energy crisis on our 2022 business result. However, the strategically critical factors for us are the medium-term effects on the company's growth and market position.

While rising energy costs are affecting the entire industry, the Ukraine war is impacting us more severely than any other glass manufacturer. The closure and long-term unavailability of our plant in Gostomel near Kyiv due to the war have not only led to lost sales and a significant value adjustment; these developments also had the potential to jeopardise our sustainable growth target and our market position. For example, we lost sales because products normally coming from Ukraine could not be manufactured at another site outside Ukraine (or could only be manufactured there with major delays), and also because our customers in Ukraine were forced to cease or massively scale down their operations. Thanks to good planning, we were partially able to compensate for these sales losses with the result that we shall be able to maintain our market position in the medium term. It would be technically possible for us to resume partial operation of two of the three furnaces in the Ukraine plant in 2023. However, this requires clear de-escalation of the warlike acts as well as stable supplies of operating materials and energy for the plant. As things stand today, these conditions have not yet been met.

Report of the Board of Directors



Energy problem is affecting the entire industry

Market positions are not merely an outcome of individual corporate strategies nowadays; to some extent, they also reflect how individual companies are impacted by various influencing factors. During the year under review, the entire glass production industry had to struggle with the problem of rising prices, caused largely by soaring and volatile energy prices.

This presented a crisis management task – and to accomplish it, we set up a Pricing Task Force in the reporting year. It comprises several departments: Finances, Group Sales, Local Sales, Supply Chain Management, and Legal. The Task Force focused on all the aspects relevant to pricing policy, with the goal of keeping Vetropack on course for sustainable growth.

Although our entire industry is impacted by rising costs, we also believe that there is potential in the approach we take to this challenge in relation to our customers. This is why we felt that it was important to be transparent when passing the price increase on to our customers.

[Chapter multi-supplier strategy](#)



Developing potential in Chişinău

One key element in the future development of our market position is the plant in the Republic of Moldova. Its acquisition was already completed at the end of 2020, followed by gradual integration into the Vetropack Group and our processes. In 2021, we renovated and expanded the capacity of one of the two furnaces at the Chişinău site, each of which has three production lines.

Vetropack Chişinău manufactures an extensive product portfolio of glass packaging for the beverage and food industry. Its products include glass bottles of various shapes that perform many different functions, as well as wide-neck jars. They are sold not only to the growing domestic market but also to over 20 export markets. About 60 percent of local production is exported to regional markets, with the vast majority going to Romania. From Chişinău, we were also able to compensate for some of the shortfall in Ukraine within a short period, thus protecting our market position and earnings.

[Vetrotime article: «Integration course successful – new Vetropack site» \(Vetrotime 01.2022\)](#)



Joint development with key customers

A company's market position is essentially the result of its relationships with its customers. This knowledge prompted Vetropack to launch its Strategic Account Programme in 2021. The programme comprises data analysis, teams with special responsibilities, and premium services for selected major customers of particular importance for Vetropack's market position. Five key customers were enrolled in our Strategic Account Programme during the year under review; next year, we plan to expand the concept and serve 20 major customers in this way.

[Chapter customer-specific products](#)



Disclosure

GRI 201: Economic Performance 2016

201-1 Direct economic value generated and distributed

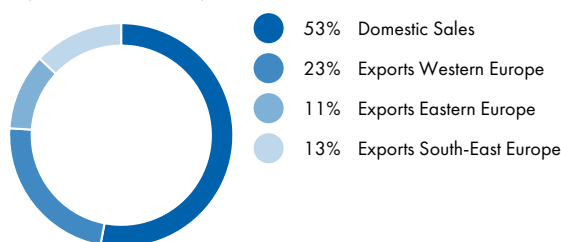
Key figures 2022

		+/-	2022	2021
Net Sales	CHF millions	10.2%	899.4	816.5
EBIT	CHF millions	9.2%	89.1	81.6
Consolidated Profit	CHF millions	- 36.2%	40.7	63.8
Cash Flow*	CHF millions	- 7.7%	142.2	154.1
Investments	CHF millions	63.3%	194.6	119.2
Production	1 000 metric tons	- 7.7%	1 503	1 629
Unit Sales	billion units	- 10.6%	5.26	5.88
Exports (in unit terms)	%	-	47.2	45.5
Workforce	FTE	- 8.6%	3 561	3 896

* operating cash flow before change of net working capital

Sales by markets 2022

(total 5.26 billion units)



Key figures in the Financial Report 2022



Compliance

One of our fundamental principles is ethical and legally compliant conduct which prohibits practices such as bribery, corruption and discrimination, amongst others. This is essential in order to secure the trust of customers, suppliers and authorities. Vetropack regards it as axiomatic to comply with all applicable laws, regulations and industry standards, and to respond immediately if any deviations are identified.

Compliance with legal regulations and international standards – in respect of human rights, for example – is fundamental in order to secure the trust of international key customers in the beverage and food industry, and is therefore a prerequisite for Vetropack's long-term success. We also regard ourselves as both able and obliged to set an example of ethical and fair conduct so that we can exert a positive influence on our own industrial sector.

In order to embed an awareness of fair business practices in our corporate culture, we rely on binding policies as well as regular training and awareness-raising measures as appropriate to the various levels and topics.

Code of Conduct

The basis is the Code of Conduct, applicable to all employees of the Vetropack Group, which enshrines the values of integrity, reliability, transparency, responsibility, safety and security, and leadership both in terms of quality and anticipation of changes. Employees in key positions receive more extensive guidelines on interacting with competitors and on implementing the anti-corruption policies. Moreover, decision-makers receive in-depth briefings on corporate ethics, including discussions on the topics of combating corruption, bribery and discrimination.

Environmental, social and human rights concerns

Vetropack is aware of the responsibility it bears for the upstream stages of the value chain, so our Supplier Code of Conduct defines the core principles of sustainable procurement. These contractual conditions are agreed with every new supplier, and also with a growing number of existing suppliers. Acceptance of the Supplier Code of Conduct is mandatory; it usually has to be signed unless a supplier can prove that its own code of conduct – which must be at least equivalent to our own – is already in place. Moreover, the contract explicitly incorporates clauses regarding environmental protection, working conditions and compliance with human rights if relevant goods or services are involved. Rather than merely relying on agreements, we also conduct regular on-site audits of environmental and social risks at our suppliers' premises. In addition, we regularly assess whether suppliers are adhering to the Supplier Code.

Conflict minerals

We also review our supply chain in respect of risks involving conflict minerals: our aims here are to minimise these risks and ensure compliance with the applicable regulations relating to conflict minerals.

Data privacy and data security

In respect of data privacy and data security, we comply with the principles of the EU General Data Protection Regulation (GDPR), and we implement the necessary updates on a continuous basis in accordance with legislation. We have responded to the global increase in cyber attacks by continuously introducing technical measures to improve information security, including more secure solutions for suppliers. For example, we have remodelled our network architecture and established new solutions for external connections and our external security rating. These and other measures are leading to a significant improvement in our security rating.

Whistleblowing

We have a [whistleblowing system](#) in place that can be used to report any suspicions of anti-competitive behaviour. The local Compliance Coordinator, the management, the Compliance and Legal Department (compliance@vetropack.com) or the CEO of the Vetropack Group can also be informed in case of such breaches. We urge all employees to report suspected cases, while bearing proportionality in mind. At Vetropack, awareness of conduct in compliance with regulations is deeply entrenched throughout the company.

Guidelines, policies, supervisory and control instruments

- Code of Conduct
- Business Ethics Policy (BEP)
- Antitrust Policy
- Provisions on accepting and giving gifts and invitations
- [Supplier Code of Conduct](#) to ensure respect of human rights in the value chain
- [Vendor Self-Assessment \(VSA\)](#)
- Sedex Members Ethical Trade Audit (SMETA)
- Regular internal inspections (e.g. in the Accounting and Purchasing areas) to reduce the risks of corruption and bribery
- Internal training courses to prevent anti-competitive conduct
- [SpeakUp hotline](#)

Progress and events in the reporting year

- Sedex Members Ethical Trade Audits (SMETA) were conducted at these sites: Vetropack Nemšová s.r.o., Nemšová (SK), Vetropack Moravia Glass, Kyjov (CZ), Vetropack Austria GmbH, Pöchlarn and Kremsmünster (AT), VPA
- Improved procedures for collaboration with the subsidiaries on compliance
- Ongoing development of local Data Protection Coordinators

Disclosures

GRI 2: General Disclosures 2021

2-16 Communication of critical concerns

Via the [SpeakUp](#) hotline

2-26 Mechanisms for seeking advice and raising concerns

Via the [SpeakUp](#) hotline

2-27 Compliance with laws and regulations

During the reporting period, there were no breaches of the law that could have led to significant fines or non-monetary sanctions.

GRI 205: Anti-corruption 2016

205-2 Communication and training about anti-corruption policies and procedures

Employees and suppliers are briefed regularly on our anti-corruption policies. These measures and procedures are primarily based on the Vetropack Group's Business Ethics Policy (BEP).

GRI 206: Anti-competitive Behavior 2016

206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices

There were no legal actions on account of anti-competitive behaviour, anti-trust or monopoly practices in 2022.

GRI 408: Child Labor 2016

408-1 Operations and suppliers at significant risk for incidents of child labor

Vetropack is not aware of any operations or suppliers at risk for incidents of child labour.

GRI 409: Forced or Compulsory Labor 2016

409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor

Vetropack is not aware of any operations or suppliers at risk for incidents of forced or compulsory labour.

Innovation and intellectual property

We work continuously to optimise the traditional craftsmanship involved in glass production. By doing so, we aim to meet our customers' requirements by developing innovative, environment-friendly products and services of high quality, thus ensuring long-term business success. In our Strategy 2030, we defined this approach as "Drive innovation" – one of the five strategic thrusts that will shape our evolution.

Innovation strategy and portfolio

With our Strategy 2030, we are underscoring the highly relevant part that innovation plays in our company. As well as focusing on product development, our open innovation strategy aims to achieve holistic and ongoing development of container glass production along the value chain. A combined approach will lead us to this goal: as we introduce innovations throughout our manufacturing processes and technologies, we will also take advantage of new digital marketing and sales channels, improve our planning processes, and optimise our organisation.

We intend to step up our efforts to foster innovation throughout the Group. Our Technology and Production division is tasked with realising this ambition. This division is responsible not only for supporting production in our plants, but also for developing processes and technology across the entire Group. Knowing that this requires an approach geared as precisely as possible to the objectives, we have subdivided this area into three organisational units, each with clearly demarcated responsibilities:

- The Technology and Projects unit focuses on technological developments both within and outside the Group. The applied technologies are used to implement production processes across the entire Vetropack Group, with the focus on three key issues: digitalisation, innovation and sustainability. We examine known and proven technologies in the relevant fields to assess their suitability for Vetropack – and where appropriate, we introduce them into our company.
- The Performance unit is responsible for our production processes. Attention here is focused on analysing the processes, standardising and consistently optimising Vetropack's process landscape, and on benchmarking both within and outside the Group so as to improve operative performance. We make regular use of continuous improvement (CIP) tools such as Lean and Six Sigma in this context.
- The Innovation unit develops the processes and products of the future. The Innovation Centre inaugurated at our site in Pöchlarn (Austria) in 2020 was integrated into the organisation of the Technology and Production division as from January 2022. Research at the Innovation Centre focuses on process and product development as well as digitalisation.



The furnace of the future

Very high temperatures – and therefore large quantities of energy – are needed to manufacture packaging glass from sand, soda, dolomite, lime and other raw materials. The furnaces used for this purpose are usually heated with natural gas. Optimising conventional technology will not be enough on its own to make our production greener (and more economical, given the high level of energy prices): we also need innovative concepts for the "furnace of the future". All our Technology and Production units are playing their part in reducing our CO₂ footprint and minimising the energy consumed by our production operations.

In our Technology and Projects unit, we are currently driving technological development ahead towards the goals of lower energy consumption and the replacement of natural gas with electrical energy, using systems already available on the market. By selecting and investing in appropriate technologies, our near-term objective is to lower the energy consumed by our melting processes and reduce the CO₂ footprint of our production. Using regenerative energies instead of fossil fuels should cut CO₂ emissions by up to 20 percent going forward. To this end, we are examining technologies such as alternative furnace concepts (e.g. hybrid oxy-fuel furnaces) or pre-heating of raw materials.

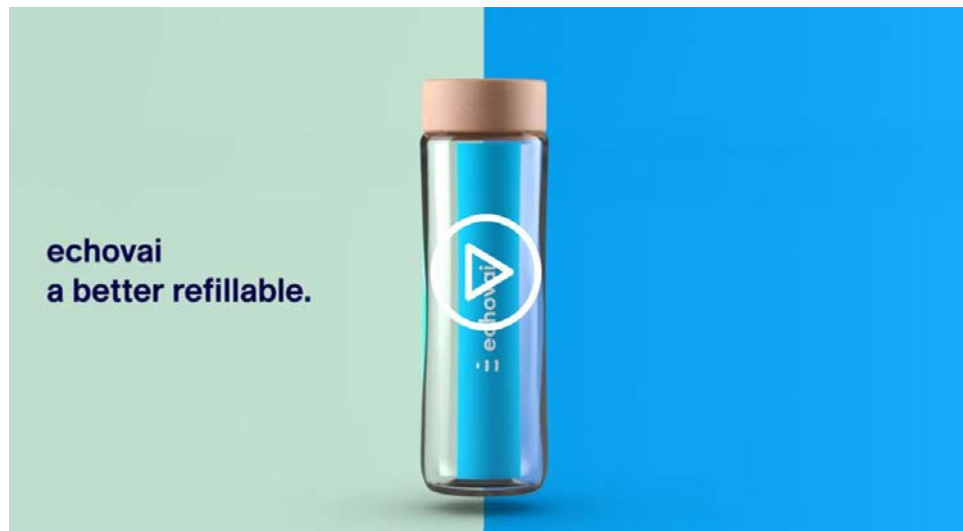
Our Performance unit is working on issues such as yield optimisation, combustion processes and use of raw materials to reduce energy consumption and the carbon footprint. Best practices from individual Vetropack plants are integrated into Group standards and applied at other sites.

The concepts for the future are being developed in our Innovation unit, which also coordinates Vetropack's active participation in various international initiatives. These include the "Furnaces of the Future" project launched by FEVE (the European Container Glass Federation) and "Zero CO₂" in collaboration with the IPGR (International Partners in Glass Research) network and RWTH Aachen University (Germany). Key topics in research work include innovative furnace concepts and the use of CO₂-free raw materials. Intensive work is also under way on digitalisation of the entire value stream in the context of a Smart Factory approach.

Progress and events in the reporting year

Second phase of market launch for Echovai returnable lightweight glass

Studies have proven that returnable containers made of glass number among the most sustainable and environment-friendly types of packaging. In the past, glass bottles were viewed as having only two weak points: their weight, and their resilience. We are the first glass packaging manufacturer in the world to develop a solution that significantly improves these aspects: its name is Echovai. This is an exceptionally stable type of lightweight glass bottle that is also very economical on materials. It is up to 30 percent lighter than a conventional returnable bottle – but at the same time, it is more resistant to abrasion.



Echovai needed about ten years of development work at the Vetropack Innovation Centre. As yet, these stable lightweight glass containers are only being produced at our plant in Pöchlarn, Austria. In the last three years (phase 1), millions of the bottles were successfully sold and refilled by our pilot customer, the Mohrenbrauerei brewery. Exhaustive tests have confirmed the extended lifetime and durability of the Echovai bottles. We are now about to embark on phase 2, when selected new projects will indicate which additional Vetropack plants need to be made ready for Echovai production, and how this is to be achieved: an essential requirement so we can meet demand for Echovai bottles throughout Europe. This will be followed by a third phase involving discussions about possible licensing of the technology and our know-how to third parties as the key to wide-scale introduction of Echovai on the market.

[Media release: «Echovai by Vetropack: world's first returnable bottles made of thermally tempered lightweight glass»](#)



Processing our own cullet as a future competitive edge

Increasing the share of cullet in our production ranks as one of our most important objectives. This is prompting us to drive relevant projects ahead at various sites.

[Chapter circular economy and resource efficiency](#)



We have already made targeted investments to improve internal cullet processing at various plants. These past projects led to a significant increase in the share of cullet at the relevant plants – over 85 percent in some cases. Investment in a new cullet processing plant is currently under review in Croatia. Initial funding for a technical feasibility study has been approved in the investment plan, and market studies on procuring the raw materials are being undertaken. The goal is to develop state-of-the-art plant technology that can be used as a blueprint for all subsequent projects of this sort.

Italian plant features cutting-edge technology

We are investing over CHF 400 million in our new plant in Italy. This new high-tech facility offers greater production flexibility combined with higher capacities and a focus on sustainable processes. We are investing in high-performance smart technologies that will make production more flexible, individual and resource-efficient. All the glass production processes are based on the Vetropack Group's expertise, and they incorporate cutting-edge technology. The plant and equipment for this purpose were jointly selected and procured by the project team and the Technology and Projects team during the year under review. In 2023, the focus will shift to commissioning.

Media release: «Vetropack builds new facility in Italy: more modern plant and more sustainability» →

«Know your bottle»

Glass is an exceptional material. It can be melted down time after time, with no loss of quality. A returnable glass bottle can be re-used as many as 50 times before it needs to be melted down again. Inspection and cleaning between the cycles are particularly complex and time-consuming stages of this loop. Traceability of each single bottle can make it easier to keep track of the bottles. We see potential here for the use of data matrix codes engraved onto the bottles. All possible information about the bottle can then be stored in this code – including where and how often it was filled.

Developing «Dry Glass Forming» as an industrial application

Mould lubrication is a fundamental step in the production of glass. Products known as mould release agents are used to improve separation of the glass from the mould material. Mineral oil-based lubricants are used for this purpose. Each year, we need about 54 metric tons of these products: they have to be applied at regular intervals, either manually or by a robot. Seeking out alternative solutions therefore makes sense in terms of ecology as well as efficiency. Furthermore, application of the mould release agent can generate smoke and harmful vapours, or may involve injuries to employees.

Since 2021, we have been working on a new technology for coating the moulds used in glass production that removes the need for lubrication. According to preliminary tests, the coated moulds developed by the Innovation Centre can perform their function for several days without lubrication. After this, a new coating is applied again in the workshop. This completely eliminates the process of lubrication.

Together with Montanuniversität Leoben (Austria) and International Partners in Glass Research at RWTH Aachen University (Germany), the team is focusing on bringing the mould coating process to industrial maturity. The goal: to make glass production safer, more sustainable, and more efficient.

Introducing regular performance tests

We see that systematic data analysis harbours significant potential for optimising our production processes – but in many locations, we are still only in the initial stages of implementing it. We launched performance reviews on a wide scale during the year under review. Our goal here is to gain an overview of the technological status of our plants and an understanding of the central production processes. On this basis, we will move on to the next step of establishing process standards and defining and measuring KPIs: this will allow us to target our future investments more accurately. But even in the first months of data analysis, it is already clear that specific potential for optimisation is being revealed.

Manufacturing process innovation with suppliers

Boosting efficiency in the glass production process, organisational improvements and even product development – in virtually every area of strategic innovation, we are reliant on collaboration with our suppliers. Their efforts to step up digitalisation are also supporting similar processes at Vetropack.

As part of the innovation strategy, we also encourage innovations by suppliers, customers and international research associations: for example, through our collaboration with the IPGR (International Partners in Glass Research) association.

Our CEO gives his backing to the innovation strategy as an integral element of Vetropack's overall strategy. He is supported in this regard by the CTO, who focuses particularly on driving process innovations ahead with suppliers. Industry 4.0 is our declared objective in the world of digital innovation. Interconnected industrial production will be achieved with the help of cutting-edge information and communication technology. Intelligent, digitally networked systems provide the technical basis for realising this ambition. Networking should make it possible to optimise an entire value chain, rather than just one production step as at present. What is more: the network should include all phases of the product's lifecycle – from the initial product idea, its development, production, use and maintenance all the way through to recycling.

Progress and events in the reporting year

Specific innovations during the year under review are described in our reporting on the material topic [Innovation strategy and portfolio](#).

Production and products

Sustainable product solutions

Sustainable consumption is gaining importance in all areas. Particularly in the case of consumer products, consumers are paying a great deal of attention to packaging. The topic is correspondingly important for our customers. We strive to provide sustainable product solutions by offering all-round sustainable glass packaging. In this context, we see sustainable product solutions as the sum of all our efforts towards sustainability – in our own operations as well as in the upstream and downstream value chain.

Packaging is one aspect that is attracting much attention in the context of sustainability, given that packaging numbers among the triggers of resource and waste problems. Quite often, however, the focus on packaging aspects is at odds with the effective share of packaging in the environmental impact of the product as a whole. Be that as it may, consumers are becoming much more attentive to the packaging of the products they consume – and regulations in this area are also on the increase. This consumer demand for products with sustainable packaging is passed on to us via our customers, such as food and beverage producers. So that we can meet this need, we are reducing our greenhouse gas (GHG) emissions, increasing the share of cullet (recycled glass) in our production, lightweighting our glass packaging, and offering more refillable bottles. We are also contributing to an industry-wide transformation by participating in various research projects on new technologies that can be utilised to minimise GHG emissions in glass production. To take two examples: Vetropack is a member of the International Partners in Glass Research (IPGR) association, and we can also provide sound data on the environmental impact of our products according to the specifications of the European Container Glass Federation (FEVE).

[Website International Partners in Glass Research \(IPGR\)](#)



[Website The European Container Glass Federation \(FEVE\)](#)



Glass containers can be refilled multiple times, and glass itself is infinitely recyclable. Thanks to these attributes, we are convinced that – with our products – we can encourage sustainable consumption patterns in line with the UN's Sustainable Development Goal (SDG) 12: "Responsible Consumption and Production".

Transparent practices

Our customers increasingly require information about the environmental footprint of the glass packaging they use. We want to meet this need with communication and transparency. We see it as important to provide correct evidence of our progress in limiting our negative impacts, and to ensure that they are properly communicated to our customers. For these purposes, we review the attainment of our environmental goals according to various indicators for which annual targets are defined. These indicators include data on energy consumption, greenhouse gas emissions, water consumption, and waste production. We evaluate our environmental management activities by conducting internal inspections and audits; where legally applicable, inspections are also undertaken by certified external institutions.

Sustainability along the entire value chain

Sustainable products represent the sum total of all our sustainability efforts – not only in our own operations, but also in the upstream and downstream value chain. You can find detailed information in the reporting on our material topics, each of which describes an element of sustainable business activity.

[Chapter energy efficiency and lower GHG emissions](#)



[Chapter circular economy and resource efficiency](#)



[Chapter compliance](#)



Progress and events in the reporting year

Echovai: pioneering glass technology

«Clearly Sustainable» is the strategic thrust that spearheads our Strategy 2030. We aim to position ourselves as an industry-wide leader in environment-friendly production. To achieve this objective, we intend to boost the share of cullet in our production to 70 percent and also to introduce lighter refillable glass containers to conserve natural resources: we are already advancing towards this goal with our Echovai solution, the world's first returnable bottle made from tempered glass. Echovai is an exceptionally robust type of glass bottle that is also very economical on materials; it is up to 30 percent lighter than a conventional returnable bottle, and is also more resistant to abrasion. These advantages ultimately result in higher circulation rates that reduce the logistics effort and CO2 emissions per bottle. A first pilot of the product with Mohrenbrauerei, the Austrian brewery, has confirmed the practicality and future viability of this product concept.

[More about Echovai](#)



Continuous quality improvement along the value chain

Continuous improvement of processes along the value chain is a core element of Vetropack's corporate philosophy, and one of the five strategic thrusts outlined in our Strategy 2030. Driven by the "Leader in Quality" vision, we aspire to meet rising customer expectations, increase our production efficiency, and secure long-term competitive advantage. We are pursuing these goals against the backdrop of growing consumer interest in sustainable products which, in turn, is increasingly causing our customers to prioritise the issue of sustainability. We respond by endeavouring to meet the demand for sustainable packaging solutions backed by transparent information about their environmental footprint.

We strive for comprehensive, continuous improvement of our products. Ensuring product quality always has top priority in this context but, going beyond this, we are also optimising all the processes along our value chain. This is essential if we are to satisfy our customers' increasing requirements and constantly boost our efficiency.

As well as positively impacting our products, however, continuous quality improvement along the value chain can also have a positive influence on occupational safety and reduce environmental pollution. Seen in this light, improvements of this sort contribute actively to sustainable industrialisation in keeping with the UN's Sustainable Development Goal (SDG) 9: Industries, Innovation and Infrastructure.

Quality enhancement task force

Our management team is responsible for continuous quality improvement – with support from the entire workforce to accomplish this mission. Implementation is facilitated by the lean management approach in line with the Six Sigma model, which is well established at our plants. In keeping with our “Leader in Quality” strategic thrust, a cross-sectoral specialist group – Technical Performance, Technology and Quality – is responsible for enhancing quality (and therefore product quality). However, several internal specialist groups at various facilities also work on projects to promote occupational safety, environmental protection, and quality assurance.

Progress and events in the reporting year

Step-by-step rollout of our lean management approach

In order to minimise waste and propel continuous improvements, we have introduced a lean approach to quality management: the «Vetropack Production System» (VPPS). The rollout of VPPS has already led to adjustments in project positions and project assignments. For example, Lean engineers have already been recruited in several plants. The reorganised Technology and Production division coordinates ongoing improvement activities such as Lean and Six Sigma at Group level.

Additional resources for performance projects

To encourage a more uniform approach to performance projects throughout the Group, we have created a dedicated position for this purpose in the Performance division. This will allow us to step up knowledge exchange across the boundaries of our organisational units.

Improved defect detection thanks to higher-performance testing equipment

In the 2022 reporting year, we replaced testing devices – for example at our facility in Trezzano (Italy) – with alternatives that deliver higher performance and enable better detection of defects.

Improved traceability

To improve traceability, we made further investments in laser marking machines in our plants at Pöchlarn (Austria) and Hum na Sutli (Croatia).

Digitalisation and automation

«Drive Innovation» is one of the five strategic thrusts in our Strategy 2030. We intend to exploit the opportunities offered by new technologies to continue developing our processes, and we aim to achieve efficiency gains by implementing automation solutions. Developments along these lines are entirely in keeping with sustainable business development.

Ongoing development of information technology combined with the digitalisation of business processes are essential elements of our Strategy 2030. Automation and digitalisation are crucially important issues for us as we continue to develop our production operations and the related upstream and downstream processes. Digitalisation of our entire business processes opens up the possibility of processing the acquired data rapidly and transparently. This puts us in a position to evaluate or optimise process flows – or even to redesign them completely. Intelligent automation concepts allow us to generate and evaluate data in real time – including data from production processes in particular.

We aim to make consistent use of the opportunities afforded by digitalisation and automation so as to boost quality and productivity while cutting our costs. This approach yields even more advantages: employees are relieved of routine activities and physically demanding work, occupational safety is enhanced, and efficient data exchange with suppliers and customers is guaranteed.

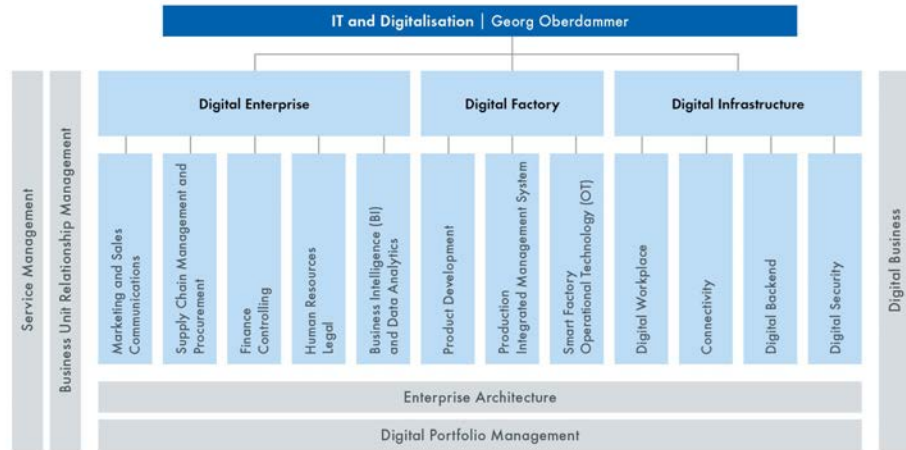
Responsibility for driving digitalisation and automation projects ahead is assigned to the Heads of Finance, Controlling, Procurement and Sales, together with the Head of Technology & Production in collaboration with IT. We are realising potential for process optimisations by launching investment projects in those cases where an adequate return on investment (ROI) can be expected. Key factors in successful implementation are Group-wide harmonisation of work and process flows in conjunction with continuous basic and advanced training of employees whose requirement profiles change substantially due to digitalisation.

The gains we expect from our automation and digitalisation efforts are not limited to a medium-to-long-term contribution towards securing our market position and business success: we also anticipate direct improvements to production. By defining specific performance indicators closely linked to our production and our customers, and by assessing and reporting on them at regular intervals, we can evaluate the performance of our plants and central functions in relation to internal and external competition; this enables us to intervene as necessary to exercise control. Relevant indicators to assess our process efficiency include the customer complaint rate, the customer satisfaction level, production losses, critical defects identified internally, and the occupational accident rate.

Progress and events in the reporting year

Realignment of our own business processes

During the year under review, our principal focus has been on the realignment of our own business processes. To drive this initiative ahead, we established three units to advance digitalisation at Vetropack, with effect from May 2022: Digital Enterprise addresses office-related functions; Digital Factory brings together the IT functions for production-related processes; and Digital Infrastructure combines the processes linked to digitalisation and IT. We have also appointed IT Product Managers for each business process and some additional central functions. The Product Managers collaborate closely with the specialist areas.



Introduction of Group-wide «performance reviews»

To optimise our production processes and control investments in line with our goals, we have introduced regular "performance reviews" with the plants. Based on key technical indicators that are defined and standardised throughout the Group, we evaluate the performance of our production plants and develop action plans to improve operative performance in collaboration with the plants. With the help of these key figures, we are able to single out differences between the various plants' production processes and identify «best in class» processes. Standardisation of production processes following the identification of these «best in class» processes plays a particularly important part here. The aim is to combine the technical improvement measures in one Group-wide «Performance Improvement Programme» that will transfer improvements in our production processes onto the Group's balance sheet. In future years, the cost savings identified by the «Performance Improvement Programme» will become a fixed component of the budgeting process for the plants.

MES project redimensioned

In 2021, we decided to introduce a Manufacturing Execution System (MES) that would harmonise our production data across all facilities, thus ensuring comparability of the data. As a consequence of the crisis-related events in Ukraine during the reporting year, it was decided that only some elements of an MES would be implemented as the first step, in the form of pilot projects.

Customer-specific products

We aim to create added value and firmly establish our brands by offering our customers glass packaging that is innovative, distinctive, and sustainable. Ensuring a high level of customer satisfaction is crucial if we are to maintain our leading position in our European core markets and achieve steady, profitable growth.

Packaging gives the food and beverage industry a way of differentiating its products to consumers. By offering innovative glass packaging that is both distinctive and sustainable, we support our customers with their product design. The success of these efforts must be reflected in a high level of customer satisfaction – because this is the key to constant, profitable growth. Our sales team is responsible for developing a customer-oriented sales and marketing strategy that will achieve this aim. Information needed for this purpose is acquired from market research and daily interaction with customers, and also from regular customer surveys: one key finding from these sources is that many of our customers attach growing importance to ecological issues. For us, offering customer-oriented products therefore means that we must provide products that include a contribution to more responsible consumption and sustainable production. In this respect, we – and our customers – are supporting the objectives of UN Sustainable Development Goal 12: "Ensure sustainable consumption and production patterns".

Product innovation

We are convinced that joint development of new products through collaboration with our customers is one of the keys to long-term success. As well as allowing products to be adapted to specific customer needs, this approach enables both parties to improve their skills and know-how on a mutual basis. In doing so, we do not focus exclusively on the development of new products. With a view to our long-term success, the comprehensive improvement of the product mix is a strategic focus for us. If possible, we develop low-margin products until they become economically viable. Ongoing development work of this kind can be undertaken in collaboration with customers so as to improve value creation for both parties.

Progress and events in the reporting year

Product presentation at fairs and exhibitions

Drinktec is the world's largest trade fair for the beverage and liquid food industry. It takes place every four years – most recently in September 2022. Our presence there offered a good opportunity to present our Echovai innovation and – at long last – to make face-to-face contact with customers again.



«Proof of Concept» with Mohrenbrauerei

We have high expectations for our innovative Echovai product. The pilot project with the Mohrenbrauerei brewery of Vorarlberg (Austria) is now delivering impressive proof of the sustainability of tempered lightweight glass.

Over the past three years, millions of these bottles have been delivered to Mohrenbrauerei, the pilot customer. Following extensive testing and after the Echovai bottles have already been reused twelve times, Mohrenbrauerei gives them an excellent report card – especially in terms of sustainability. Not only are the new bottles more robust: they also reduce logistics effort and costs, so CO₂ emissions per bottle are substantially lower. Even though the Echovai bottles have been reused as many as twelve times, their contact surfaces are still showing virtually no signs of wear. Many of these bottles can still be classified in 'as new' condition – which would no longer be the case for standard bottles after so many filling cycles.

The Echovai project can now move into its second phase for us: this involves exploring which additional Vetropack plants are suitable for Echovai production, and how they can be made ready for this purpose as quickly as possible. Because: we anticipate a rapid rise in demand. Then in the third phase of the project, the aim is to share the technology and know-how with third parties.

Customer survey postponed

Due to rapid inflation and supply disruptions caused by the war in Ukraine, we had to postpone the customer satisfaction survey planned for the reporting year until next year.

Employees

Vetropack's long-term success depends largely on its employees. It is they who make the critical difference between us and our competitors. Given that the shortage of skilled professionals is becoming more acute, human resource management is set to become an even more important factor going forward. This is prompting us to strengthen our employer brand in keeping with our strategic thrust – «Employer of Choice» – both within and outside our own industry. In this context, we view our «learning organisation» culture as a significant advantage. This is a culture that encourages employees to continue developing themselves, their context and environment, and their area of responsibility so as to generate value in multiple ways, both for each individual and for the company as a whole. The cornerstones of this culture are safe and healthy workplaces, fair employment conditions, and mutual respect.

Progress and events in the reporting year

Strengthening our employer brand through communication

We took major steps to ramp up communication of our employer brand in 2022. Vetropack's brand as an employer has gained overall visibility and our presence on social media is looking strong. As the outcome of these efforts, we are receiving higher numbers of applications whenever job advertisements are posted.

[Vetropack's LinkedIn channel](#)



Employees as recruiters

In the year under review, we launched a pilot project for an employee recommendation programme in Italy. Our employees there are actively taking on the role of ambassadors for Vetropack as an employer. If applicants are hired and complete their probationary period successfully, the employees who recommended them receive a bonus. The result: recommendations by our employees accounted for over 20 percent of new hires.

Key indicators employees

Composition of the workforce (at year-end)	2022	in%	2021	in%
Number of employees in full-time equivalents (excl. apprentices, interns, trainees, contract workers, temporary workers)	3 598		3 524	
Total number of employees (excl. apprentices, interns, trainees, contract workers, temporary workers) ¹⁾	3 626		3 562	
Apprentices	37		42	
Interns	–		N/A	
Trainees	55		N/A	
Contract/temporary workers	87		N/A	
Permanent employees by employment type				
Full time (excl. apprentices, interns, trainees, contract workers, temporary workers)	3 490	96%	3 474	98%
Women	796		771	
Men	2 694		2 703	
Part time (excl. apprentices, interns, trainees, contract workers, temporary workers)	136	4%	88	2%
Women	92		65	
Men	44		23	
Total workforce by gender				
Number of employees (excl. apprentices, interns, trainees, contract workers, temporary workers)	3 626		3 562	
Women	888	24%	838	24%
Men	2 738	76%	2 724	76%

¹⁾ Workforce data in 2021 was not including Chisinau, and in 2022 Vetropack was forced to cut jobs in Ukraine due to the war situation and damages at the plant

Disclosures

GRI 2: General Disclosures 2021

2-7 Employees

Key indicators employees



GRI 401: Employment 2016

401-1 New employee hires and employee turnover

Key indicators employees



401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees

We adhere to the provisions of labour law and take account of customary remuneration practices in each country. In general, no significant benefits are provided to full-time employees that are not offered to part-time employees as well.

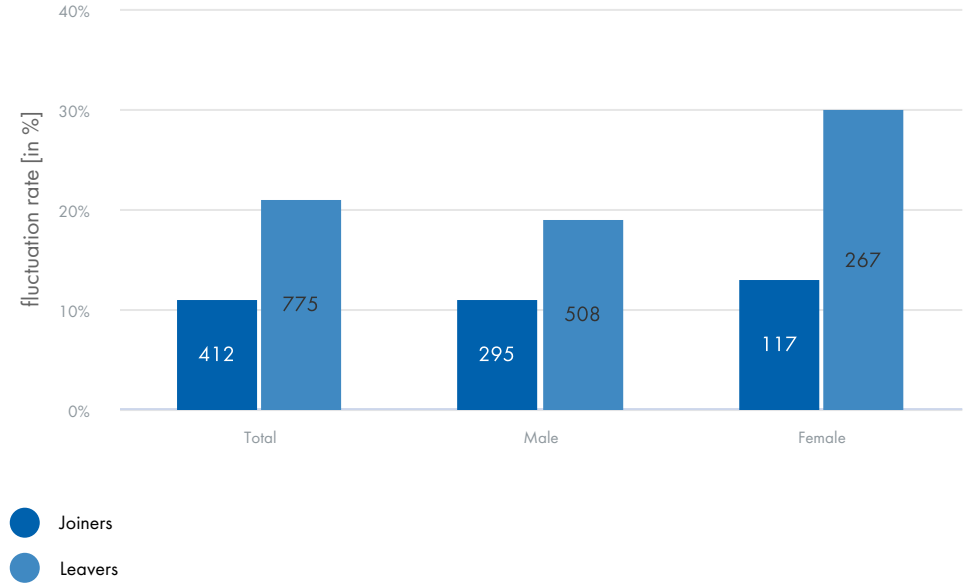
GRI 402: Labour/Management Relations 2016

402-1 Minimum notice periods regarding operational changes

Vetropack regards transparent communication as a top priority. All regulatory requirements for notification periods were observed in 2022.

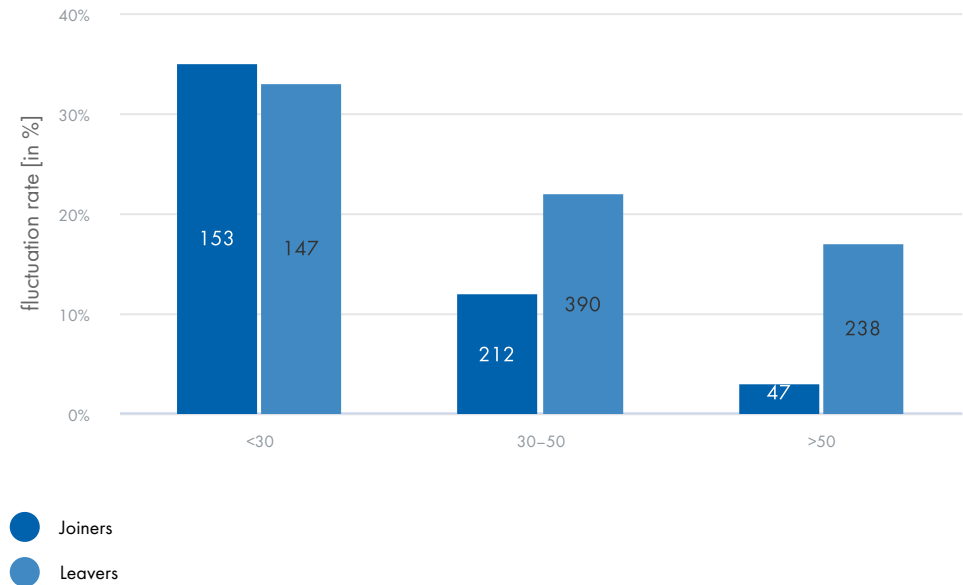
Fluctuation by gender

(rates and absolute numbers)



Fluctuation by age group

(rates and absolute numbers)



Talent management

There is an increasingly competitive landscape for recruiting and retaining talented employees. This makes it essential for Vetropack to identify and develop employees with potential at every level across all areas of activity, and to retain them in our company. To achieve this, we took action by making qualified personnel resources available at Group level, allocating additional financial resources, and updating our processes and tools. We are focusing particular attention on selecting and developing candidates for management positions, because they constitute the foundations of our culture.

Given the worsening shortage of skilled professionals, we decided to elevate talent management to the strategic level in 2020. We put the first measures into practice in 2021. Consequently, this issue was accorded more importance in terms of organisation, and additional resources were allocated to it by creating three strategic Group functions: "Talent Acquisition", "Training and Development", and "Talent Management". A new process was also defined: the Talent and Organisational Review (TOR) programme, which helps to identify ambitious employees who are eager and willing to advance their personal development. The annual TOR process focuses on the company's top three organisational levels and comprises two parts:

- The Talent Review is where we identify employees who have leadership potential or unique expertise to support the company's strategy. To accelerate the development of our future leaders and equip them better going forward, we have developed a framework programme that offers all participants the opportunity to advance their own careers by providing them with the tools, support and encouragement they need to do so.
- The Organisational Review involves assessing whether our organisation is also sustainable in the long term. We evaluate the organisational structure and review our succession plans. In addition, we proactively seek to identify future needs and what they mean from an organisational perspective. One element of this process is continuous assessment of mission-critical positions within the Group, taking account of HR talent data trends: this provides the basis for the Group to align its strategy and launch initiatives.

Key performance indicators (KPIs) play a critical part in our professional talent management. Examples include talent retention rates, training costs, the percentage of internally filled management positions, and the internal promotion rate: targeted assessment of these indicators is now being implemented.

«SAP SuccessFactors» has been in place since 2021 to provide system-based support for our professional talent management processes. The HR Department has been using this platform for the last two years to manage employee data and recruitment. The «Performance and Goals» and «Succession and Development» modules are now in the implementation phase and will go into productive use for the first time in 2023.

By gradually digitising our processes, progressively reducing paper and bureaucracy, and by making information more transparent and accessible to everyone, we are supporting our strategic pillar: «Employer of Choice».

Progress and events in the reporting year

Standardised performance management process introduced

We began to introduce a standardised performance management process in the reporting year. This will provide a more transparent overview of talent development at Vetropack. Implementing the «Performance and Goals» module in SAP SuccessFactors gives managers and employees the ability to set and adjust key goals, appraise performance on a regular basis, and seamlessly create development plans. The objective is to bring more structure, alignment and transparency to the entire performance management process.

Proactive talent acquisition

Our various sites are adopting different strategies in their active efforts to alleviate the shortage of skilled professionals on the market and present Vetropack as the attractive employer that we actually are. In the Czech Republic, for instance, we organised Open Days for prospective future talents during the year under review. In Italy, we collaborated with the Adecco recruitment agency to stage a Recruiting Day for our new plant, under the patronage of the Commune of Boffalora sopra Ticino. The search for talents covered a wide range of job profiles, including specialists in mechanics and mechatronics as well as electrical and electronics engineers. We are stepping up our involvement at various universities and schools elsewhere to raise awareness of our company, culture, and attractive career opportunities.

Disclosures

GRI 404: Training and Education 2016

404-3 Percentage of employees receiving regular performance and career development reviews

We currently have a process in place to conduct performance reviews for all our white-collar workers, who represent around 40 percent of Vetropack's total workforce. We were not able to determine the exact percentage until now, but integration of the "Performance and Goals" module in SAP SuccessFactors will make this possible from 2023 onwards.

Employee engagement

Employees' engagement is closely related to their wellbeing at the workplace. Knowing this, we place great value on close relationships with our employees – through communication and dialogue as well as satisfaction surveys and actions derived from them. Our employees recognise and appreciate these continuous efforts, as evidenced by a noticeable increase in their motivation.

A transparent and open communication culture is a way of expressing appreciation for our employees, and it plays a key part in making them aware of the overarching objectives. This understanding of a shared goal then boosts the sense of belonging, motivation, satisfaction and integrity. Employees who are involved and motivated impact our company in many positive respects. They help to improve efficiency, profitability and quality of work – aspects that have a positive influence on Vetropack's long-term success. Moreover, motivated employees who understand how their work contributes to overall corporate performance are our company's best ambassadors to customers, suppliers and potential employees.

Our communication provides crucial support for our employee engagement. It includes internal communication channels and surveys as well as formats of every kind for dialogue and exchange: employee events are just one example.

Employee engagement is a management responsibility

All management functions share responsibility for supporting and motivating our employees. Managers are tasked with strengthening employees' loyalty to the company and with identifying and developing talents. The HR Department is putting the Group-wide «Employer of Choice» strategy into practice.

One key element of this strategy is the «Great Place to Work®» certification. Vetropack sees this award as a cornerstone of our efforts to continue enhancing our workplace quality. For this reason, the «Great Place to Work® Trust Index» is one of our most important KPIs and is included in the scorecard Vetropack has developed for our Strategy 2030. The Bülach site already received this award in 2020, and plans are in place for all Vetropack sites to obtain the same certificate going forward.

["Great Place to Work®" website](#)



Systematic employee satisfaction surveys

Once every three years, we conduct a survey at Group level to determine our employees' satisfaction and get valuable feedback on how we can continuously improve our working culture: the last one was in 2019. We always ask for employees' opinions about our company's strengths and weaknesses. We decided to postpone the employee survey scheduled for 2022 until 2023, due to COVID and the war in Ukraine. The surveys of our organisation for the "Great Place to Work®" certificate have also been deferred for the same reason.

Progress and events in the reporting year

Agility Scouts help to breathe life into our corporate culture

A supportive corporate culture is essential for the successes we aim to achieve with our Strategy 2030. Such a culture is generally entrenched in a company's objectives, roles, values, processes and behaviour patterns. We also aim to continue developing our corporate culture to support our evolution as an Employer of Choice. One example of this is the network of «Agility Scouts» that we set up in summer 2022. It comprises 12 employees from different locations and in different functions who are committed to playing their part in shaping Vetropack's corporate culture. Their understanding of their mission is expressed in these words: «For a working culture as transparent, sustainable and natural as our glass.» Their role is literally to «scout out» new approaches and try out new ideas so as to advance our corporate culture.

During 2022, they contributed practical suggestions for improving everyday meetings (both in-person and virtual). They also focused on making the importance of our employees more visible as an element of our strategy, and they had the chance to present and lead a discussion on this topic with all the company's top management at our annual Group Conference in December. The Agility Scouts will move on to address other issues such as feedback culture and job rotation, so practical suggestions on these topics can also be expected.

Activities for employees

We put our commitment to our employees into practice in many different ways, as evidenced by the various employee events and activities that were organised at different sites in 2022. Examples include: "Bike to work" at Bülach and the «Open Days» in Slovakia and the Czech Republic. As well as fostering a sense of solidarity, these events were aimed at achieving an impact outside the company.

[Vetrotime article: "Bike to work for Ukraine" \(Vetrotime 01-2022, p. 15\)](#)



Help for employees in Ukraine

The war in Ukraine is having various short- and long-term consequences for Vetropack, but what has touched and motivated us most of all is the personal predicament of all our employees in Ukraine. To bring some degree of stability to the situation – at least on the financial side – our entire workforce in Ukraine continued to receive their salaries until the end of May in the reporting year. In cases where we are no longer able to guarantee jobs, we continued paying the employees additional monthly salaries beyond the legally required period of three months.

It was also impressive to witness the solidarity shown by our international workforce, who became involved in various initiatives to assist their colleagues in Ukraine. Thanks to these efforts, we were able to provide support for many people who were in urgent need of help due to the war. We have set up a foundation to provide targeted assistance. The company doubled donations received from employees up to the end of September 2022. Through this foundation, we intend to continue providing support for employees affected by the war in Ukraine to the best of our ability. It took us longer than originally expected to clarify the legal details involved, but this was necessary in order to establish the foundation. Insofar as feasible, we aim to co-finance reconstruction after the military confrontations have ended. This endeavour also inspired a movement that has united our employees and lent added strength to our sense of community. Many people felt that it was a great honour to be part of an organisation where all of us take time out to help our colleagues, even though many of us are also experiencing difficult and challenging times at present.

News: «Vetropack supports employees in Ukraine» (12.12.2022)



Knowledge management and learning organisation

Our employees, their experience, cooperative working culture, know-how and expertise: these are the essential elements that give Vetropack its competitive edge. Knowing this, we endeavour to create optimal overall conditions for a learning organisation so we can continue to develop and strengthen ourselves from within. To this end, we are embedding a mentality of continuous learning throughout the length and breadth of Vetropack: a mindset that will benefit the company and every single employee.

Know-how is not an abstract concept at Vetropack. We link it directly to every individual employee: with their knowledge about Vetropack and their own areas of expertise, each one represents a unique wheel in the finely-tuned mechanism that keeps our operations running. Seen in this light, our employees' knowledge is a key element of all our internal processes and procedures. Retaining and developing this know-how within the company is essential for our long-term success. This is why we accord such high priority to creating attractive working conditions and development opportunities for our employees. From this year onwards, investments in employee training will be a strategic KPI.

Vetropack's code of values integrates the continuous learning concept directly into the corporate vision. This shows our awareness of the entrepreneurial dimension of ongoing employee development – but we are equally mindful of its importance for every individual employee: for their employability as well as their personal satisfaction. For all these reasons, the goal of being an "Employer of Choice" should also be understood as a contribution towards achieving the UN's Sustainable Development Goal 4: "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all".

Vetropack Training Centre and Vetroademy

Our extensive learning infrastructure fosters the development of both hard and soft skills for our managers. When it comes to industry-specific expertise, a key part is played by our company's own Training Centre in Pöchlarn, Austria, where valuable know-how is passed on to the next generation of glassmakers. The focus here is on hard skills in glass production. Our Training Centre is a place where our employees have the opportunity to practice and learn with tools and machines. The manufacturing process can be replicated here, but in a controlled and safe environment.

Our Vetroademy training platform, on the other hand, is designed to develop strategically important soft skills. The first Vetroademy programme is aimed at all leaders in Vetropack's HR management organisation. It includes a wide-ranging curriculum embracing strategy, market trends, change management, leadership management and corporate governance. The platform offers modern interactive learning methods to unlock the potential of teams and help them deliver meaningful outcomes not only for their own development but also for Vetropack's sustainable growth. The first pillar of the Vetroademy was developed in 2020 and launched in 2021.

Performance appraisals as a component of professional leadership

A performance appraisal is a systematic and regular process that measures an employee's work performance against the established requirements of their job. It offers an excellent opportunity for managers and employees to align their priorities and expectations, and to define how an employee can contribute to the organisation's overall strategy.

Implementation of the «Performance and Goals» module of SAP SuccessFactors at Vetropack gives us a tool that will make it much easier for employees and managers to keep track of what was discussed and agreed, and when – even in cases that involve remote working or work in a matrix organisation. It does not replace interpersonal communication but instead, helps to guide the process and ensures overall transparency. Although the only official requirement at Vetropack is for an annual review, we strongly encourage managers to talk with their teams as often as possible in order to maintain alignment and focus.

Progress and events in the reporting year

Optimised onboarding programme

More than 400 new employees joined Vetropack last year. To make it easier for them to begin working with us, we developed the basic framework for a global standard onboarding process together with an optimised induction training programme during the reporting year. For this purpose, we have adopted a mixed approach that combines eLearning, in-class instruction and on-the-job training. We created a new eLearning course in 2022: titled «Exploring Vetropack», it explains our history and values, who we are, and what we do in greater detail. The goal is to invest more in eLearning on all informative topics so as to offer more flexible opportunities for new employees to learn about Vetropack when they join us.

Developing the right mindset for exemplary leadership

Back in 2021, Vetropack's management made a start on integrating the "Leadership" pillar into the Vetroademy. This features a wide-ranging curriculum that includes all areas, aimed at empowering our leaders to achieve success in their roles. Alongside the actual training we provide for leaders, we equip them with perspectives and instruments that will enable them to achieve greater impact as they fulfill their personnel responsibilities. All Vetropack managers took part in this programme during the reporting year. Also in the year under review, all our managers made a start on the in-depth "Mindset" module, which is designed to strengthen readiness for change and boost participants' confidence in their own abilities.

Active participation in training

The «Vetrocademy Leadership Development Program» continued in 2022 with a focus on the topics of «Building high-performing teams» and «The right mindset in times of change». 41 senior leaders from seven countries joined the sessions, and over 95 percent of the participants were satisfied with the training.

Vetropack invested in an extensive range of technical training courses for our production workers, as well as language training and training on subjects such as communication, resilience and presentation. In total, more than 70,000 hours of training were provided throughout the Vetropack Group (excluding the Republic of Moldova) in 2022.

Diversity, equality and inclusion

Vetropack upholds an inclusive corporate culture that offers equal opportunities to all employees and actively curbs discrimination. By taking active steps to maintain a diverse working environment that is free of discrimination, we can positively influence our employees' satisfaction, safety, security and wellbeing. This approach also allows us to help build a fair society where solidarity prevails.

A democratic society thrives on solidarity among its members. This goes far beyond an emotional bond, and is not limited to behaviour at the individual level. It also requires institutions such as companies to foster and implement diversity, equality, inclusion and solidarity in their microcosms. As a company that is part of society, Vetropack is mindful of this responsibility. From an entrepreneurial perspective, too, it is both important and valuable to promote diversity, equality and inclusion. By doing so, we strengthen our culture and help to reduce human conflicts. It is also a proven fact that a diverse workforce is more creative and innovative. This can have a direct impact on our company's success. And – not least – it also enables us to enhance our attractiveness as an employer. In all these ways, a diverse workforce in an environment where equality, inclusion and solidarity prevail plays its part in our company's long-term success.

At Vetropack, we pay particular attention to gender equality as defined in UN Sustainable Development Goal 5: «Gender equality». Equality of opportunities for women also impacts the issues of integration and promotion of diversity – especially as more men than women traditionally work in the glass industry.

Guidelines, policies, supervisory and control instruments

Cornerstones that support social sustainability, focusing on equality and fairness:

- Code of Conduct for the Vetropack Group
- Business Ethics Policy (BEP) for the Vetropack Group
- [Supplier Code of Conduct](#)

Progress and events in the reporting year

Initiatives to promote diversity, equality and inclusion

In the reporting year, the HR Department together with the Health and Safety areas initiated a commitment to diversity, equality and inclusion.

Board of Directors becomes more diverse

During the reporting year, Diane Nicklas became the first woman ever to be elected to Vetropack's Board of Directors. Now, with the 2023 Annual General Meeting in view, the Board of Directors has nominated a second woman for election in the person of Raffaella Marzi. She is to succeed Rudolf Fischer, who is retiring.

Media release: «Vetropack Group: Board of Directors nominates Michela Argirò as new Chief Supply Chain Officer at Group level and proposes Diane Nicklas for election to the Board of Directors at the next Annual General Assembly» (19 August 2021) →

Media release: «Board of Directors proposes Raffaella Marzi to the Annual General Assembly as a candidate for election» (18 November 2022) →

Integration of Ukrainian refugees

Nearly eight million refugees from Ukraine have been recorded across Europe since the outbreak of war in their country. In response to this influx, supporting the integration of the refugees as quickly as possible became Vetropack's highest priority. Our company immediately assembled a team to coordinate all required support measures for our displaced Ukrainian employees and their families, and we were able to provide them with transportation, food, clothing, and much more. We also welcomed and integrated several employees from our Ukraine plant, together with their families, in the Czech Republic, Italy, Slovakia, Austria, Croatia and Switzerland, where we provided them with accommodation and offered them new employment contracts.

Training on diversity and inclusion

Vetropack is committed to systematically training its leaders on diversity, equality and inclusion, and we have planned to include these topics in a dedicated module in our Vetroademy Leadership Program.

Training of this sort on diversity and related topics has already been implemented in Croatia and Italy.

Integrating people with disabilities

We employ a large part of our workforce in production, or in areas closely related to the production process. Some of these jobs involve risks, and they often set high requirements for employees' physical or mental health. This limits the scope for employing people with disabilities in our plants. At our Nemšová plant in Slovakia, however, the high level of attention focused on this issue has now made it possible to employ seven people with various disabilities in the normal work process.

Professional requalification opportunities for disadvantaged people

Based on internally designed programmes, Vetropack Italy offered opportunities for professional retraining and employment to over 40 unemployed individuals, with a particular focus on people in severely disadvantaged categories.

Addiction awareness

Vetropack is committed to raising its employees' awareness about addiction. In Italy, a dedicated training course was organised to make department heads and teams from Human Resources and Health, Safety and Environment aware of the problems of addiction.

Disclosures

GRI 405: Diversity and Equal Opportunity 2016

405-1 Diversity of governance bodies and employees

Corporate governance report



405-2 Ratio of basic salary and remuneration of women to men

The equal pay analysis carried out in 2021 by external experts in accordance with Swiss legislation proves that Vetropack complies with the principle of equal pay for work of equal value, within the limits of the Federal Act on Public Procurement (PPA) and the Federal Act on Gender Equality (GEA).

GRI 406: Non-discrimination 2016

406-1 Incidents of discrimination and corrective actions taken

There were no cases of discrimination in 2022.

Occupational health and safety

"Safety first" is embedded in the Vetropack Group's DNA – in other words, our employees' safety takes precedence. This is an axiomatic principle for Vetropack. In addition, there are comprehensive efforts to maintain and promote the physical and mental health of our employees.

Glass production involves high temperatures, high levels of noise and moving machine parts that pose substantial risks for the people who work in the industry. This is why we accord the highest priority to compliance with health and safety protection legislation, and also to promoting our employees' physical and mental health.

Multi-tiered health and safety management

Our objective is a comprehensively sustainable business model – fully in line with our «Clearly Sustainable» strategic thrust. This also includes fulfilling our duty of care towards our employees. Our goals are to cultivate a safety culture and reduce workplace accidents – two critical factors in sustainable success. We translate these goals into action in our Occupational Safety Policy, which is managed at different levels: the Head of Corporate Development and the Integrated Management System (IMS) is directly responsible for quality, health and safety, sustainability and environmental protection at Group level; the Group Manager for Occupational Safety coordinates activities with the local Safety Managers, who in turn are responsible for these issues at our business units and plants. Team leaders and individual employees are then responsible for putting the defined safety standards into practice. We also have a Health and Safety Working Group in place: at this forum, our Safety Managers and the Group Health and Safety Manager discuss various issues relevant to all our plants, with the aims of developing safety concepts and planning their implementation.

Internal health and safety audits

Various measures are in place to complement the Occupational Safety Policy and our multi-tiered health and safety management structure: for example, all our production employees receive regular safety training and in most locations, near-accidents are recorded for the purpose of prevention. The Health and Safety Working Group also conducts internal audits to monitor the implementation of improvement measures.

Certified health and safety systems

Our goal is to have ISO 45001-certified occupational safety and health management systems in place at all our production facilities. Five sites are already certified (Pöchlarn, Kremsmünster, Kyjov, Nemšová and Hum na Sutli), with certification of Boffalora and St-Prex scheduled in 2023.

Progress and events in the reporting year

Nemšová site recertified

Our Nemšová site in Slovakia successfully completed the ISO 45001 recertification process in the current reporting period.

2022 – Year of Safety

We declared 2022 as our «Year of Safety», and we marked this by launching an ambitious project to improve safety and health protection featuring a new approach that encourages both employees and management to contribute to this key issue. This initiative focuses on improvements in three dimensions of safety: technology (i.e. safer equipment and protective devices), processes, and behaviours. One of the key goals is to raise employee awareness and bring about a far-reaching change in our culture and behaviour – as expressed by the motto: "I am more important than production".

Introduction of «Safety minutes»

In 2022, we introduced «Safety minutes» for production employees: these are briefings that usually take less than ten minutes to present concise and relevant safety information.

The Golden Rules

Another development in the reporting year was the launch of the «Golden Rules of Workplace Safety» at Group level. These are nine non-negotiable safety rules that every employee must follow, together with four safety principles that complement them. Implementation of the Golden Rules is to be ensured by briefings in the form of Safety Days, and regular training. To date, we have held Safety Days at Vetropack's plants in Austria, Italy, the Czech Republic and Slovakia, with similar events scheduled across all locations in the near future.



Nine «Golden Rules of Workplace Safety»

Targeting zero accidents

We have gradually been able to reduce the number of occupational accidents at our sites in recent years. In 2022, we took another step forward by setting a zero-tolerance target for accidents and incidents.

Paying attention to mental health

In order to continuously improve our employees' mental health – and to prevent burnout in particular – we have introduced controls of overtime working in management functions.

Provision of personnel resources at Group level

To ensure strategic control and coordination of measures related to occupational safety and health issues, we created the function of Group Health and Safety Manager at Group level during the reporting year.

Disclosures

GRI 403: Occupational Health and Safety 2018

403-9 Work-related injuries

Key indicators occupational health and safety



403-10 Work-related ill health

Key indicators occupational health and safety



Key indicators occupational health and safety

	+ / -	2022	2021
Share of workers covered by an occupational health and safety management system (ISO 45001 externally certified)		65%	N/A
Incidents leading to at least one lost work day	- 10%	74	82
Total lost work days due to injuries and occupational diseases	- 7%	2 681	2 887
Total Recordable Incident Rate (TRIR) ¹⁾	5%	2.4	2.3
Total Recordable Incident Severity Rate (TRISR) ¹⁾	6%	87	82

¹⁾ Per 100 full time equivalents (FTE).

Environment

Glass is a sustainable packaging material because it is manufactured from natural raw materials, and can often be 100% recycled without limitations. Nevertheless, there is great potential for improvement within the industry for making production more sustainable in the long term. We therefore aspire to evolve as a glass producer known as a pioneer of environment-friendly practices and products.

«Clearly Sustainable» is the primary pillar of our Strategy 2030. We want to play a decisive role in shaping the green transformation in the glass industry as a pioneer. To achieve this goal, we pursue a holistic approach to sustainability based on two main initiatives:

- Continuously reducing the environmental footprint of all business activities and
- Closing material cycles in the value chain.

Because: in the glass industry, it is the energy-intensive melting processes that generate the main impact on the environment and natural resources. As regards the supply chain, the primary factors influencing energy efficiency are processing of raw materials and packaging materials on the one hand, and transportation of raw materials and finished products on the other. Since these aspects account for the majority of our environmental impact, these are also the areas where we need to focus our efforts.

We have established key indicators as well as relevant short-, medium- and long-term targets so we can measure progress towards these objectives.

[Chapter our focus: Clearly Sustainable](#)



Energy efficiency and lower greenhouse gas emissions

Central elements of our environmental protection efforts are the improvement of energy efficiency and the reduction of greenhouse gas emissions. We have the greatest leverage in these areas when repairing furnaces or building new ones. We aim to improve energy efficiency by 10% to 15% with every furnace renovation. In addition, we are gradually evaluating fundamental technical changes such as the conversion to oxy-fuel, hybrid or fully electric furnaces. To this end, we participate in various research projects that focus on new technologies to reduce greenhouse gas emissions in glass production: our membership of International Partners in Glass Research (IPGR) is just one example.

We also aim to achieve climate-neutral internal logistics by 2030. To achieve this, we will (for example) switch our vehicle and forklift fleet to alternative drive systems. We are also making additional investments to optimise our supply chain and shift transport from road to rail.

By pledging to minimise the impact of our glass production on the environment, we are contributing actively to attaining the UN's Sustainable Development Goal (SDG) 13: Climate Action.

Progress and events in the reporting year

Science-based targets to reduce emissions

In the «Clearly Sustainable» pillar of our Strategy 2030, we have established relevant key indicators as well as short-, medium- and long-term emission reduction targets: we aim to reduce CO₂ emissions per metric ton of glass produced by 30 percent (against the 2019 benchmark). In November 2022, we also committed to the Science Based Targets initiative (SBTi) and defined near-term Group-wide emission reduction targets in line with climate science.

Media release: «Vetropack participates in Science Based Targets initiative (SBTi)» (11 November 2022) →

Supplier Leadership on Climate Transition (Supplier LoCT)

In 2022, we completed the analysis modules on our own operations (Scopes 1 & 2) as part of the Supplier Leadership on Climate Transition (LoCT) initiative – and we will continue by focusing on Scope 3 emissions as the next step.

Media release: «Vetropack participates in Science Based Targets initiative (SBTi)» (11 November 2022) →

Energy management system and energy efficiency

We are currently rolling out a new energy management system – Siemens Simatic Energy Management PRO – to boost the energy efficiency of our furnaces. This system was developed specifically for Vetropack and is designed to optimise energy consumption management while evaluating improvement potential. Simatic Energy Management PRO monitors strategic, economic and technical factors related to energy management and includes add-on functions for structured energy procurement.

A parallel system was introduced at our plants in Croatia and Austria during the period under review, and we also collaborated with Montanuniversität Leoben (Austria) to investigate further potential for energy-saving.

A new glassworks for a new era

We are investing in a new flagship facility to serve the long-established Italian market. This cutting-edge production plant is due to start operating in 2023 at Boffalora sopra Ticino near Milan, not far from our existing site. The new facility is designed to ensure maximum future viability, flexibility and sustainability.

This project aims to reflect our comprehensive understanding of sustainability. The new factory is intended to be a flagship facility, especially in terms of environmental protection. We have therefore invested intensively to ensure that production in the new plant can be as environment-friendly and resource-efficient as possible.

Our measures to enhance sustainability in the new site:

- Remediation of the contaminated industrial site
- Re-use of material from the demolition of the original buildings and installations
- Low noise emissions
- Energy-efficient processes and production equipment (e.g. utilisation of waste heat)
- Production of green electricity from photovoltaic systems
- Reduced emissions thanks to latest filtration systems (dust and NOx)
- Low water consumption ensured by use of closed-loop systems

[Media release «Vetropack builds new plant in Italy: state-of-the-art equipment and more sustainability» \(21 November 2022\)](#)



[Vetrotime article: «Vetropack builds new production site in northern Italy» \(Vetrotime 01.2022, p. 4\)](#)



Photovoltaic energy

In 2022, we collaborated with VERBUND (Austria's leading energy company) to install a photovoltaic system on the roofs of our Kremsmünster plant in Austria. The electricity is used directly in the plant for more sustainable glass production.

The plant is to be expanded in several stages. In the first stage of expansion, completed in August 2022, the system already began producing enough solar power to theoretically supply electricity for approximately 400 households in one year.

[Vetrotime article: «Clearly Sustainable: using the sun's power for ourselves» \(Vetrotime 01.2022, p. 17\)](#)



Disclosures

GRI 302: Energy 2016

302-3 Energy intensity

Key environmental indicators



GRI 305: Emissions 2016

305-1 Direct (Scope 1) GHG emissions

Key environmental indicators



305-2 Energy indirect (Scope 2) GHG emissions

Key environmental indicators



305-4 GHG emissions intensity

Key environmental indicators

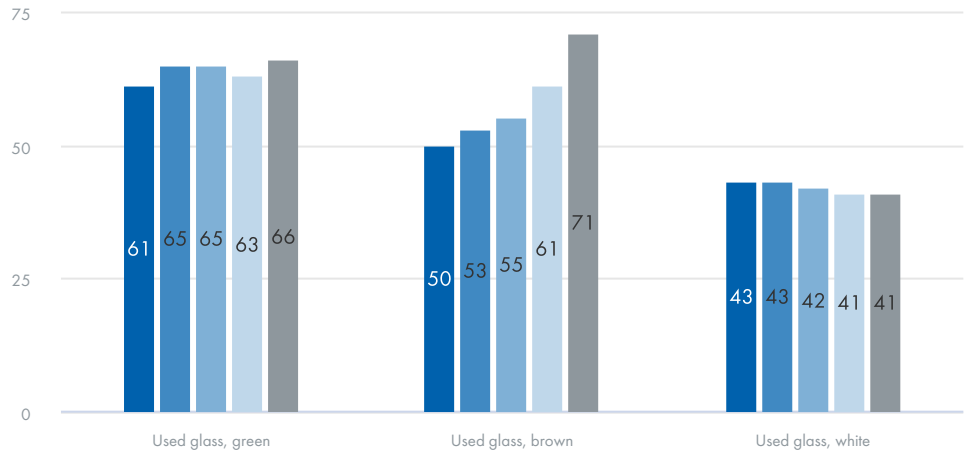


Circular economy and resource efficiency

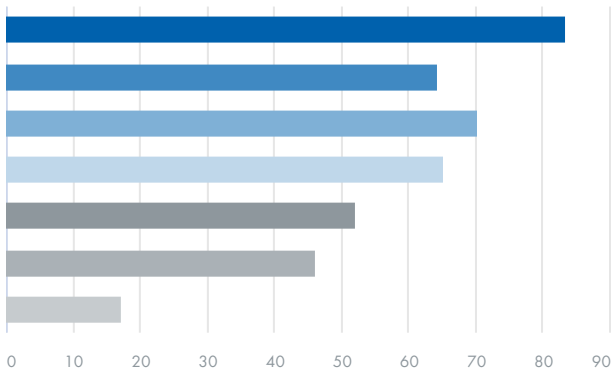
Alongside energy consumption and the associated emissions, consumption of resources is the most significant environmental impact generated by the glass industry. To ensure that glass is manufactured ecologically, it is essential to use a high proportion of cullet (recycled glass) in production – so we have set ourselves the goal of achieving a cullet share of 70 percent by 2030.

Share of used glass in the glass production

in %

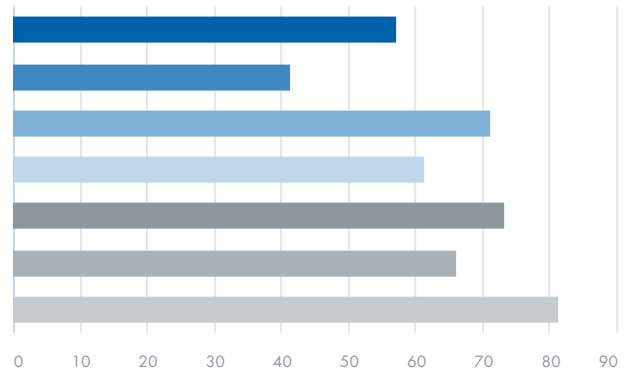


Used glass ratio for glass production 2022 (by Group Company)



- 83% Vetropack (CH)
- 64% Vetropack Austria (AT)
- 70% Vetropack Moravia Glass (CZ)
- 65% Vetropack Nemšová (SK)
- 52% Vetropack Straža (HR)
- 46% Vetropack Italia (IT)
- 17% Vetropack Moldova (MD)

Used glass ratio for glass production 2022 (by colour)



- 57% average all colours
- 41% White
- 71% Brown
- 61% Primeur
- 73% Olive/Cuvée
- 66% Green
- 81% Feuille Morte

The availability of high-quality cullet is a major challenge in this regard. In many countries where Vetropack operates, cullet collection rates are significantly lower than in Switzerland or Austria (for instance). Contamination with foreign materials (such as ceramics) can present an additional problem. To overcome these challenges, Vetropack is promoting measures that increase collection rates and cullet quality.

[Vetrotime article: «Glass – the infinitely recyclable packaging» \(Vetrotime 01.2022, p. 22\)](#) →

Encouraging sustainable consumption

Because it can be recycled, glass is perceived as a sustainable packaging material. Vetropack is thus in a position to encourage sustainable consumption patterns in keeping with SDG 12: «Responsible Consumption and Production» and SDG 13: «Climate Action».

Reducing our water footprint and waste volume

Alongside this focus on the circularity of our main raw material (as just mentioned), we also aim to reduce our water footprint and volume of waste generated. In glass production, water is only used as a coolant and is circulated in a closed-loop system; this means that the process as such is already very economical on resources. Waste is mainly generated during the processing of used glass, due to the large amounts of foreign materials that are deposited in collection containers.

Progress and events in the reporting year

New «Vetrocycling» plant in Pöchlarn

To separate residual substances such as metals and paper more efficiently, we have invested in a new «Vetrocycling» plant at Pöchlarn (Austria). Since this does not impair the quality of the glass and as processing is also improved, a larger share of cullet can be used in the melt.

Reconstruction of the recycling line in Nemšová

As sand becomes more scarce, the global glass industry is under growing pressure to step up its utilisation of used glass. But in Slovakia, the situation is difficult because glass containers sorted by colour have been abolished there and a mix of brown, green and white cullet is not suitable for producing white glass.

The line that has been operating since 2008 was unable to separate out enough white glass from the mix. This prompted our decision to convert the plant so as to maximise the yield of used white glass. Thanks to a 50 percent increase in the plant's capacity, we can now process around 140,000 metric tons of cullet each year. We expect the glassworks to save about 4,100 tonnes of original raw material – and as an additional benefit, greenhouse gas emissions will be slashed by 550 metric tons. For a 10% increase in the share of cullet in the volume of glass, energy savings are about 3% and greenhouse gas emissions are cut by 7%.

Thanks to the investment in this plant, we are now the only processor in the country to meet current and future requirements for the recycling of used glass.

Vetrotime article: «Reconstruction of the recycling line in Nemšová» (Vetrotime 01.2022, p. 16) →

Disclosures

GRI 303: Water and Effluents 2018

303-1 Interactions with water as a shared resource

In our glass production facilities, water is mainly used as a coolant in a closed-cycle system and is only replaced very occasionally. Water consumption is therefore of minor importance.

Key environmental indicators →

303-2 Management of water discharge-related impacts

Vetropack undertakes to comply with the wastewater discharge regulations that apply to its production sites. If Vetropack identifies a deviation, action is taken immediately in cooperation with the responsible authorities.

Key environmental indicators →

303-3 Water withdrawal

Key environmental indicators →

GRI 306: Waste 2020

306-3 Waste generated

Key environmental indicators →

Key environmental indicator

	2022	in %	2021	in %
Total energy consumption in GWh	2 563		3 188	
Electricity	439	17%	546	17%
Natural gas ¹⁾	2 124	83%	2 641	83%
Specific energy consumption in MWh/t²⁾	1.72		1.96	
Greenhouse gas emissions in tCO₂e³⁾	650 995		718 373	
Scope 1 (heat)	430 024	66%	482 823	67%
Scope 1 (process emissions) ⁴⁾	126 488	19%	123 018	17%
Scope 2 (electricity) ⁵⁾	94 482	15%	112 532	16%
Specific greenhouse gas emissions in tCO₂e/t	0.433		0.441	
Material consumption: recycled glass				
Used glass green	66%		63%	
Used glass brown	71%		61%	
Used glass white	41%		41%	
Water in m³				
Total water withdrawal	1 418 023		1 319 963	
Municipal water supply	336 320	24%	318 839	24%
Groundwater	1 081 703	76%	1 001 124	76%
Total water discharge	1 386 172		1 227 932	
Waste disposal in tons	66 614		80 883	
Non-hazardous waste	64 682	97%	74 210	92%
of which continuously (routinely generated)	64 073	99%	73 433	99%
of which produced sporadically (extraordinary event) ⁶⁾	609	1%	776	1%
Hazardous waste	1 932	3%	6 673	8%
of which continuously (routinely generated)	1 673	87%	3 189	48%
of which produced sporadically (extraordinary event) ⁶⁾	260	13%	3 484	52%

¹⁾ Incl. 5.0 GWh heating oil in 2022 and 10.6 GWh heating oil in 2021.

²⁾ Per tonnage of glass produced that satisfies all quality and safety requirements thus qualifying for sale.

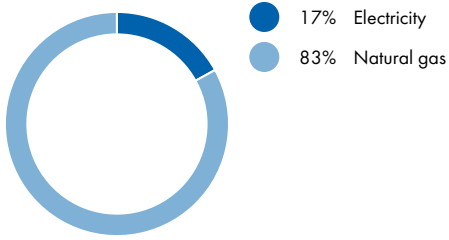
³⁾ Greenhouse gas inventory calculated in accordance with the Greenhouse Gas Protocol.

⁴⁾ The method on calculating process emissions has been optimized for 2022 and is – for the first time- based on the actual consumption of materials used. Until 2021, an average sector methodology was applied for the calculation of emissions.

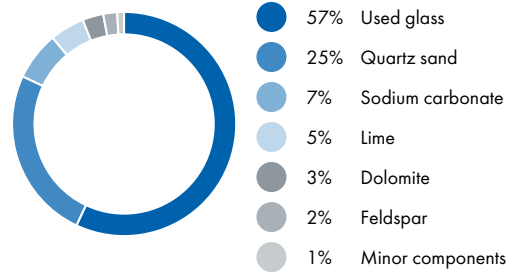
⁵⁾ Emissions for 2021 and 2022 are calculated acc. to the "market-based approach" (using energy certificates - where available - which represent approx. 43% of overall electricity consumption). The optimized method leads to a correction of calculated emission numbers for the reporting year 2021 compared to the last report. According to the "location-based approach", 113'371 tCO₂e and 131'151 tCO₂e result for 2022 and 2021, respectively

⁶⁾ Waste not generated every year from ongoing operations (e.g. furnace repairs).

Total energy consumption (GWh)



Mixing ratio raw materials and used glass



Greenhouse gas emissions by source (t CO2e)

