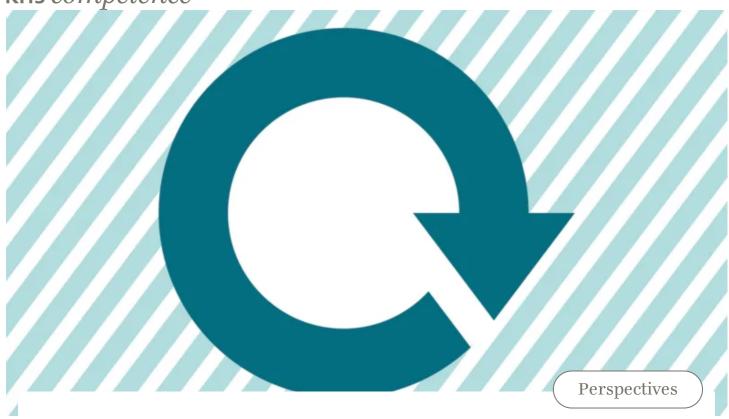
KHS competence



STRATEGY "SALZGITTER AG 2030" AND KHS

Closing the loop

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In the new group strategy adopted by Salzgitter AG this year, three of the key issues are the circular economy, partnerships and transformation. In the following interview group CEO Gunnar Groebler and KHS CEO Kai Acker outline their ambitious goals and describe the challenges that need to be mastered along the way.

PHOTOGRAPHY / ILLUSTRATION

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Society, industry and business are currently undergoing a period of radical change: in their striving for climate neutrality, more and more companies are making their contribution to decarbonization and a sustainable economy. Salzgitter AG, KHS'

parent company, is no exception: with its Salzgitter AG 2030 strategy defined at the beginning of 2022, the group has now joined the current social and political movement and devoted itself entirely to the principle of circularity. "We want to establish ourselves as a leading company for the circular economy," stresses CEO Gunnar Groebler, who before taking up his post in 2021 spent over twenty years helping to transform the energy sector to renewable energies. For him, steel is a universal and sustainable material that people encounter in all walks of life and which is infinitely recyclable to boot. Lots of approaches to the circular economy are being ventured throughout the group that are now to be expanded and supplemented by a number of new aspects.

Four clear principles

"Circularity encompasses the four principles of reduce, reuse, recycle and rethink that we will focus on in all of our future actions," explains Groebler. "By using finite resources with greater awareness we aim to minimize the use of these in the economic cycle – this is reflected in the use of the term 'reduce'. For us, 'reuse' means keeping the resources we take from our natural surroundings in economic use for as long as possible. By 'recycle' we mean making raw materials from products already consumed reusable to save on resources. And with the motto of 'rethink' we're continuously questioning our habits and processes."

The principles of the circular economy are of course also applied at KHS, observes Kai Acker, CEO of the Dortmund systems supplier of beverage filling and packaging machinery. "For us, circularity is especially relevant from a number of different perspectives. We can consider the containers made or filled on our machines to be circular, for instance: this applies to PET that can be recycled as often as required, as long as the necessary infrastructure is in place, and where we develop ways of saving more and more material. And it also refers to returnable glass bottles that can be kept in circulation for as long as possible through return, washing and refilling. Regarding secondary packaging, here we commit under the motto of 'less is more': just think of our Nature MultiPack where we can do away with outer packaging materials entirely thanks to a few dots of

adhesive. Other aspects – and ones I believe are even more important for us – concern our machines: they're made of steel that ensures that they have a long service life and that's fully recyclable even after being scrapped. First and foremost, however, we've spent years cutting down on the amount of energy and resources consumed by our equipment and reducing its carbon footprint: take our Innofill Glass DRS ECO, for example, that can save up to 60% in CO₂. We also think outside our ecological box by making sure that our machines are rPET-compatible. And we focus on economic targets such as long-term overall equipment effectiveness."

At a glance: Group with KHS

Salzgitter AG is divided up into the business units Steel Production, Steel Processing, Trading and Technology. Within the group around 25,000 people produce rolled steel and tube products, further process and trade in these goods around the world or work in specialist machinery and plant engineering. Together with DESMA Schuhmaschinen and DESMA Elastomertechnik the KHS Group forms the Technology Business Unit that makes up about 14% of the group turnover – around 90% of this (€1.245 billion) is yielded by KHS with its almost 5,000 employees.

KHS on track

Acker joined KHS as its CEO at the end of 2018. One of his first tasks was to thoroughly question the previous corporate strategy and to develop it further. The result of this process presented at the beginning of 2019 was KHS 2025 that includes ten core measures or 'pieces of homework', as the KHS boss calls them, the implementation of which calls for patience and perseverance. Lots of these topics are reflected in a similar form in the new group strategy – small wonder, as the business unit managers were actively involved in the process that was professionally initiated in the summer of 2021. "During the course of the project we found that our objectives largely match those of Salzgitter. And we had lots of good discussions that

confirmed we were on track in focusing on profitable new products that appeal to customers and generate the corresponding added value on the market." Acker will now constantly further develop the KHS strategy in an iterative process up to the end of 2024 and – in accordance with group targets – continue this until 2030.

Many aspects of the circular economy are not exactly new to the Technology Business Unit, to which KHS makes the largest contribution by far, even if there's still a lot to be done in this context. For the other subsidiaries with their focus on steel the challenges are greater – something Groebler is well aware of. "I'd like each individual employee to be open to the changes that result from the transformation of Salzgitter AG, to actively contribute to these and treat them as an opportunity." It must be the aim of every company to support each another across the various sectors and provide mutual encouragement through cooperation. Here, strategic partnerships must be assured, including those that help to afford access to high-quality sources of scrap and regenerative energies and make green hydrogen available.

»We need to answer the question of how our systems can positively influence our customers' carbon balance throughout the machinery's entire life cycle.«



Kai Acker Chairman of the KHS GmbH Executive Management Board

About the person: Kai Acker

After training as an energy electronics specialist, the 54-year-old studied general electrical engineering at RWTH Aachen University and went on to obtain a master of business administration (MBA) from the Technical University in Munich, Germany. After working in the chemical industry and various other sectors, during which time he spent several years in Indonesia, he held managerial positions at Krones and Leoni. In 2018 he was made CEO of KHS and in 2019 head of the Technology Business Unit, thus also becoming a -member of the group management of Salzgitter AG.

People as drivers of transformation

The crux of the new group strategy is to turn the focus to people – an aspect expressed in the extended corporate claim of "people, steel and technology". "In our new strategy people are the pioneers who ensure the success of our corporate vision," Groebler explains. "They contribute their ideas, realize them and drive the transformation of Salzgitter AG. Without our employees, all that we imagine is impossible."

In conjunction with this new emphasis, Acker points to the expected huge drop in personnel. "In the next ten years we'll lose between 25 and 30% of our employees throughout the entire group as a result of demographic change. This presents us with the challenge of securing our current expertise and building on it. And it poses the question as to how we as an employer can stay attractive and encourage young people to come and work for us. This is a global issue and an exciting task."

About the person: Gunnar Groebler

After finishing his degree in mechanical engineering at RWTH Aachen University, in 1999 Groebler joined Corporate Development at VEAG in Berlin, later Vattenfall Europe. He held various managerial positions here, including as CEO of the Vattenfall Group responsible for wind power and solar energy from 2015 onwards. In July 2021 the 50-year-old was made CEO of Salzgitter AG.

Proven lower emissions

Change is being chiefly precipitated by the global debate on the climate, however. To date, the main concern when deciding to invest was the price of procurement of KHS machines, with their manufacturers primarily yielding profits through maintenance and service. The focus has now shifted. "We're being asked which specific contributions we can make for our customers in the beverage industry and have to provide information on machine

data, energy consumption, the carbon footprint and much more," Acker emphasizes. One good example is Heineken who is currently constructing a brewery where carbon neutrality was top of the list of priorities even before the ground-breaking ceremony. "Companies naturally weigh up what we can contribute here. And even if our own footprint is relatively low for new machines, in the future a decision in favor of KHS will be made depending on how our systems can positively influence our customers' carbon balance throughout the machinery's entire life cycle. This calls for extensive and credible reporting not just of our German activities. With the help of auditors we need to provide proof of what we're doing to promote sustainability at our production sites in Brazil, Mexico, the USA, India and China, for example – and how successful we are here."

KHS is happy to rise to this challenge: one of the most effective measures being undertaken in this respect is to force the local-to-local approach, states Acker, where production and after sales in particular are organized decentrally in the countries of the world where the engineering company is active. The resulting cessation of elaborate shipping operations and use of digital solutions enable considerable savings in CO₂ to be made that the company will increasingly exploit in the future.



Gunnar Groebler CEO of Salzgitter AG

»Reduce, reuse, recycle, rethink – we will focus on these four principles of circularity in all of our future actions.«

Sparring partners

The Salzgitter Group provides support here, Groebler emphatically states. "We work closely together as sparring partners on concepts designed to log and cut carbon emissions – whether these be sustainability reports or EcoVadis* certification, to name but two examples." Unlike the other group companies with their focus on steel, in return the Technology Business Unit can contribute new angles and approaches to Salzgitter AG's striving for more sustainability. "The entire group benefits from the new standards KHS is setting here."

* EcoVadis = sustainability ratings platform for global procurement chains that assesses supplier performance with reference to 21 corporate social responsibility (CSR) and sustainability criteria.

Acker has a clear answer to the question of where KHS will be in ten years as part of the sustainable corporate group focused on the circular economy. "We'll have examined our products in detail as to their circularity and optimized them so that as many components as possible can be refurbished, reused or recycled at the end of the machine life cycle. In doing so, we'll continue to concentrate on our core field of business in the beverage sector. We'll grow organically together with the market that promises great potential in view of the rising world population."

Material with a future

In its core area of competence in beverage filling, in addition to kegs KHS has three hugely strong mainstays in glass, cans and PET. Acker sees vast opportunities with the latter in particular. "Besides PET we're now also talking about plant-based plastics such as polyethylene furanoate (PEF) that's fully recyclable and offers the sector a promising perspective. I personally believe that at the moment PET is the best material there is for beverage packaging. Plastic bottles are light, don't break and can be infinitely recycled. In Germany, for example, we have an impressive raw material recovery rate of 99%. In principle this is possible anywhere, provided that we manage to close the loop. Incentives must be provided to this end, for example by setting up deposit systems. We can see that this works by looking at Africa where there's currently a growing awareness for this necessity and structures are being created for collecting plastic waste. Unlike here in Germany, where we're used to being able to drink water straight from the faucet, this isn't possible everywhere in the USA - and not at all in Africa or Asia. Here, PET bottles are the cheapest and easiest way of supplying people with clean drinking water."

Alongside organic growth in KHS' main area of business, Acker believes digitalization to be a major future issue. KHS has already achieved a lot in this field yet will exploit its potential here even more strongly in the future. The prime activities he lists in this context include predictive maintenance, the manufacturing execution systems or MES provided by the Dortmund engineering company, various automation projects and KHS' remote diagnostic service ReDiS for remote maintenance of KHS lines and machines through an online link.

»The faster expansion of green energy and hydrogen capacities in Germany supports our SALCOS® Salzgitter Low CO₂ Steelmaking program.«



Gunnar Groebler Vorsitzender des Vorstandes der Salzgitter AG

Acker also sees change affecting innovation. Whereas in the past new technologies were only successful when they had yielded a beneficial result for the beverage bottler, in the future the carbon footprint will be considered the greater indicator of success. Nevertheless, he expects prices will still be the subject of much discussion in the next ten or 15 years. "Innovation costs money. Green steel for an automobile, for instance, is of course more expensive than gray steel. The question is whether consumers are prepared to spend 20% more on a car made from more climate-friendly materials, for example, or whether their sense of moral responsibility ends when they open their wallet." In his view, in such situations state frameworks can ensure that new and more sustainable products can become established on the market.

What risks does the group see itself confronted with on its way to becoming a pioneer in low-CO₂ steel production and processing? Group CEO Groebler considers the currently biggest risk to be the Russian war of aggression against Ukraine and everything associated with this. He finds it deeply distressing that KHS employees in the region are directly affected and that no one can predict when the war will end.

Green Steel: Ambitious Plan

With the help of the SALCOS® (Salzgitter Low CO₂ Steelmaking) technology program the approximately eight million metric tons of CO₂ generated during steel production each year are to be cut by around 95% by the year 2033. Climate-neutral hydrogen will have replaced the carbon required for the smelting of iron ore up to this date. To this end, Salzgitter Flachstahl's three blast furnaces and converters will be gradually substituted by a combination of direct reduction plants and electric arc furnaces.

Difficult circumstances

"Our economic activities in Ukraine and in Russia may be relatively modest," Groebler ascertains. "But as a global company we're feeling the indirect consequences: from rising energy prices through increasing challenges in transportation and logistics, the tense situation in global delivery chains and difficult market conditions for our end customers to the future of our energy supply." Particularly the problems with the delivery chain – and here Grobler and Acker are in agreement – place KHS in quite a predicament as in some cases beverage filling equipment can't be completed owing to missing components. People are working flat out to find alternatives and solutions for these bottlenecks, however, so that customers can continue to be reliably supplied.

Says Grobler, "Our German and European energy policies need to be completely reordered within a very short time indeed. Besides the positive effect of the energy revolution now gathering pace as a result of this situation, here at Salzgitter AG we also see this as a concrete opportunity. We're supporting the construction of LNG lines with our steel pipes, for instance, and in doing so helping to further develop the energy situation. And the expansion of green energy and hydrogen capacities now being planned in Germany supports our SALCOS® or Salzgitter Low CO₂ Steelmaking program."

At least Acker doesn't need to worry quite as much as his colleagues in the steel sector about rising energy costs or even a short-term stop in the supply of fossil fuels. Salzgitter AG's Technology Business Unit isn't as energy-intensive and switching over to renewables is a relatively simple affair – or has in part already been accomplished.

»The reduction in shipping brought about by our local-to-local approach and our use of digital solutions enable considerable savings in CO₂ to be made. «



Kai Acker CEO of KHS and member of the Salzgitter AG group management

Personal contribution

To close, we asked our interviewees to tell us what they're doing privately to promote the circular economy and protect the climate. Acker, for example, loves to spend his vacations on the North Frisian island of Amrum instead of booking long-haul flights to far-away destinations. His family also exerts a certain pressure here. "At 25 my daughter belongs to the Greta Generation and has been vegan for eight years now. I'm therefore often challenged when I fire up the barbecue on the weekend!" he laughs.

For keen hobby chef Grobler the first port of call is the weekly market where there's an incredibly delicious range of regional products to be had, he claims. "In buying things here I'm supporting short delivery chains and helping in my own small way to cut down on long transportation routes and carbon emissions." His orchard and vegetable garden at home attract bees and other insects; together with the compost that will become fertilizer for next year's crops, he's thus closing his own small but perfect loop for the good of the natural environment.