

DACHSER magazine

The world of intelligent logistics ■

Logistics 2030

People make
the difference

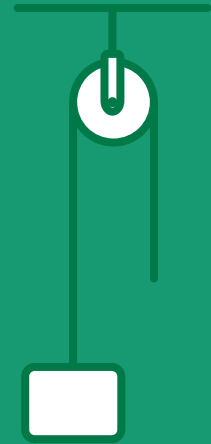


Less is more

Efficiency means making optimum use of energy and scarce resources. Time and again, humanity and nature manage to come up with ways of making this happen.

50% is how much force is saved when lifting a load with a pulley system, due to the resulting redirection of the load and the doubling of the path used to move it. The principle of load distribution is used today by exoskeletons.

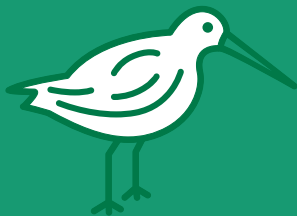
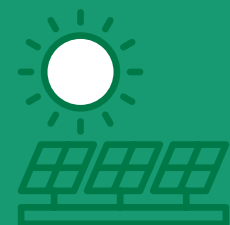
Passive exoskeletons reduce the lifting force needed by providing stability during smooth movements and distributing the load over the person's entire skeleton. Active exoskeletons are powered and provide optimal support for transporting heavy loads.



1,200 km

is the range for battery-electric vehicles that will be achieved in the future with solid-state batteries, which can be charged in just ten minutes. The electrolytes in conventional lithium-ion batteries are liquid, but in solid-state variants, they consist entirely of solid materials that don't ignite easily, such as oxide, sulfide, or polymer electrolytes. The first passenger car models using such batteries are expected to go into production in 2027 or 2028.

33.7% is the efficiency of perovskite-silicon tandem solar cells. In other words, they can convert around one-third of the incident solar radiation into electrical energy. Monocrystalline PV panels, the predominant type installed today, convert just one-fifth of the incident solar energy into electricity. Researchers around the world are currently racing to find more efficient solutions.

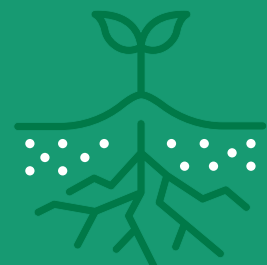


13,500 km

from Alaska to Tasmania is the distance a bar-tailed godwit has flown without a rest. With the help of a GPS chip, researchers were able to precisely track the bird's migration journey. Exactly how the godwit converts body fat into kinetic energy so efficiently, however, remains a mystery to experts. One thing's for sure: at its destination, the bird weighed only half as much as at the start.

400 times more yield per square meter of arable land with only 5 percent of the water consumption compared to conventional agriculture: this is the promise of the photonic technology developed by Berlin-based start-up Lite&Fog.

In this process, water consumption is reduced to a minimum by turning liquid water into a mist and supplying the plant roots directly via textile columns. Even in times of drought and extreme weather, this method aims to enable continuous food production year-round. And all without pesticides or chemical fertilizers.



Message from the CEO



Dear readers,

The year 2023 hasn't exactly been an easy one, what with ongoing wars, crises, and climate change. But fortunately, there's also been some good news, both on a grand scale and in the little things, and the good news always revolves around people. I recently attended an onboarding event for new Finance department employees in Kempten. The young people's beaming faces reflected a clear desire for something new.

This event also confirmed that Dachser is on the right path for the future. For us, it's people who make the difference. And that's precisely what our cover story is about. I recommend you take the time to read this portrait of people at Dachser who fill logistics with life and passion every day.

I'm also particularly proud of the teams from Dachser and our partner Fraunhofer IML. Working together, their great personal commitment is what made our @ILO digital twin possible—and they've now received the German Logistics Award for their efforts. You can read more about that starting on page 32.

In challenging times, I find there's immense value to be gained from stories of people, their confidence, and their will to create. Because with all their character, such people will prove to be the source of further good news in the new year and beyond. I think that, together, we have good reason to be optimistic.

Kind regards,

A handwritten signature in blue ink, reading "B. Eling". The signature is fluid and stylized, with a long horizontal stroke at the end.

Burkhard Eling, Dachser CEO



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Links to the digital world of Dachser

A prize for the network

Dachser CDO Stefan Hohm was honored with the prestigious "LEO Award for Innovation." He dedicated the award to his team in the IT & Development executive unit and also to the entire Dachser network.

https://bit.ly/DAmag_04_23_LEO_award



Taking off in life

Helping young people in Southern Africa build a professional future: A project visit by Bernhard Simon, Chairman of the Supervisory Board at Dachser, and Joshua Hofert, Executive Board Member Communications at terre des hommes.

https://bit.ly/DAmag_04_23_Project_visit_tdh



Milestone reached

Following an antitrust review, the European Commission approved Dachser's acquisition of 80 percent of FERCAM's groupage and contract logistics business. "Dachser & Fercam Italia S.r.l." can now be established.

https://bit.ly/DAmag_04_23_Approval_Fercam



10 years of Dachser Peru

Dachser Peru celebrated its tenth anniversary in August 2023. As one of six country organizations in the Americas, Dachser Peru is an integral part of the company's global Air & Sea Logistics network.

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Logistics 2030 – People make the difference





Teamwork is part and parcel
of logistics quality

Logistics is a complex interplay between flows of goods and information in intelligent networks. People are and remain the key to their success and reliability. The maxim “Logistics is People Business” has many faces—in Dachser’s overall strategy as well as in the everyday life at the family-owned company.

They’re already waiting in the warehouse. Today is “M.I.T.einander Day,” a kind of “Together with the Team Day.” Every two months, the project team at Dachser’s Kornwestheim branch near Stuttgart brings a few pub tables and a pinboard to the branch and talks to the employees. And it does so at every operational level: sometimes in the offices, sometimes in the warehouse, sometimes in cargo handling, sometimes in the external warehouse in Vaihingen an der Enz. In the program’s German name, the “M.I.T.” stands for “Mitten im Team,” roughly “in the midst of the team.” However, it’s also the first part of the word “miteinander,” meaning “with each other.” In this way, the program’s title contains clues to its objectives.

The Kornwestheim branch is one of the larger hubs in the Dachser network. Covering an area of 91,800 m², it comprises three building complexes plus the warehouse site. “It’s not easy for the 530 or so employees to keep track of everything that’s happening at the branch,” says project manager Lena Herion. The 27-year-old is part of the newly formed seven-person M.I.T.einander team, as is her colleague, HR manager Manuel Scimone. “With this campaign, we want to give →

employees from the different departments the opportunity to talk to us regularly about current projects, news, and actions at our branch and in the Dachser network,” Scimone explains, “and we want to engage in direct dialogue with them.” And it’s working: Herion reports that participants’ initial reticence has long since turned into a very lively exchange.

In 20 minutes, everything’s out in the open—from the constantly dripping coffee machine to occupational safety, from company health care to the big picture in logistics processes with new IT possibilities. “The depth of conversation is fascinating,” Herion says happily. “There’s a takeaway for everyone, every time.” Employees who have the day off or are working remotely aren’t left out: the M.I.T.einander team creates a video especially for them covering the topics of the event. This allows everyone to ask the team questions or make suggestions afterward.

“The strength of our organization lies above all in our network of people who share a passion for logistics. And that goes for all levels: from management to trainees, from commercial employees to logistics operatives, as well as the drivers who ultimately give our performance a friendly and professional face every day,” explains Dachser CEO Burkhard Eling. “Nothing in logistics works without people. Our employees are and will remain the key to our company’s success.” This idea is embodied by a strategic focus program at Dachser called “Logistics is People Business,” or LiPB for short. It finds expression both in large global projects such as the introduction of an HR system and in many local initiatives like the one in Kornwestheim.

Employee Experience

Collaboration



One strategy, 4 fields of action

A global HR strategy

To promote the strategy and drive its take-up throughout the company, LiPB Program Management was created under the leadership of Silke Schöpp. Together with her team, she focuses on four strategic fields of action: Employee Experience, Collaboration, Learning & Development, and Corporate Culture.

“We asked ourselves what makes Dachser an attractive employer today and what will keep it attractive tomorrow,” Schöpp says. “No one knows this better than those who experience the company in all its facets every day from the inside and who actively help shape it. We have fantastic employees all over the world who can make a valuable contribution to the entire network.” Communicating and exchanging ideas brings together perspectives from different countries and areas of the company. “It’s a win-win for everyone,” Schöpp says.

Field of action: Employee Experience

The M.I.T.einander project, which originally arose from the Kornwestheim branch’s own initiative, both inspired the LiPB team and itself received a fresh injection of energy from the strategic program. It serves as an example of how LiPB can take employee experience and leverage it to improve the quality of work and thus the quality of sustainable logistics services. This involves clarifying a wide range of issues: What specific issues are affecting employees in their area of work? What information would they like from other areas of the company? How can they play a bigger role in day-to-day work? What feedback do they expect? Herion reports that the project team gave a lot of thought to establishing communication that was specific but motivating as well. This also calls for careful timing. “We make sure our interviews don’t disrupt work processes, intrude on important appointments, or clash with peak times at the warehouse.” The hugely positive response from employees shows the M.I.T.einander team that such considerations are well received. “We connect managers and employees in the operational and commercial areas. This increases everyone’s motivation and strengthens their ties to Dachser,” Scimone says.

Field of action: Collaboration

To achieve cohesion in the Dachser world, LiPB takes a “collaboration across all levels” approach. One place the results can be seen is when newcomers join the company. A differentiated, respectful approach to applicants helps firm up and enhance the company’s attractiveness as an employer. “The way we live our values, especially openness and respect, is reflected particularly clearly in how we welcome new faces,” Eling says. The LiPB team has formed an international project team to drive forward the Collaboration field of action, aiming to bring the Dachser world closer together at all levels.

Danny Messing, Team Leader Recruiting & Onboarding for Logistics Operatives, has been involved in the project from the outset. He has devoted particular effort to employee recruitment and retention in times of a worsening shortage of skilled

workers. “Qualified workers are in demand, and the competition for them is fierce. Digitalization, which now features in all areas of life, has redefined the entire application and recruitment process,” Messing says of the challenge. Nowadays, everything has to happen much faster, and the exchange between applicants and the company has to be much more direct and immediate. “For this reason, we critically scrutinized the entire process and restructured what Dachser calls the ‘candidate journey.’”

As a result, the relationship between Dachser and new employees is now systematically built up in six steps. Messing describes the first part of the process: “It starts with the initial contact online or at job fairs, continues with the first exchange of information about the position and the requirements, and ends with the formal application and getting to know each other in person.” Ideally, the recruiting process doesn’t end once the contract is signed. “We stay in contact with the new employees to prepare them for their new phase of life and work and to clear up any doubts they may have. The newcomers can find a lot of information about their new employer on a special Dachser platform. It includes a welcome video with Burkhard Eling, in which the Dachser CEO introduces the company, its values, and the prospects for a bright future together.”

The hiring process culminates in the onboarding phase. “Everything should be ready on the first day—from the right work clothes to a tour of the work area with a personal ‘buddy’ and getting to know the new colleagues,” Messing says. “If people feel welcome, they’ll fit into the team that much more quickly.”

To continue advancing this process throughout Dachser, Corporate Human Resources is integrating the experiences of HR managers from all divisions in the various countries into the LiPB project under the Collaboration field of action. “We received enormous encouragement and, above all, active support from our branches in the further development of this topic. All members of the project team were able to contribute their recruitment experience,” Messing says.

Field of action: Learning & Development

Dachser views itself as a learning organization. This is an integral part of the target picture 2030 and shapes the LiPB Learning & Development field of action. “If we are to realize our potential, it’s crucial that we constantly encourage people to acquire and share knowledge, to learn, and to



Keep the conversation going:
The Kornwestheim employees

strive for individual growth,” Eling says. An example from Bad Salzufflen shows how this can also be achieved during day-to-day logistics operations: The Dachser Blue Box project, launched by the Dachser Academy under the leadership of Christina Müller, stations a small, compact, one-person learning studio right inside the warehouses and transit terminals. In December 2022, the mobile unit was piloted in the Bad Salzufflen branch. More such shop-floor boxes followed in Hörsching in Austria, at the Überherrn Eurohub in Saarland, and in Langenhagen near Hannover. Four more have already been built, one of which is slated for the Kornwestheim branch in the near future.

“With our Dachser Blue Box, our logistics operatives also have the opportunity to use the Dachser learning world and continue their training in a quiet, undisturbed place in their direct working environment,” Müller says about the concept, which has won an award from a trade journal. The one-person learning booth is equipped with a computer and a 27-inch screen. This setup provides anyone interested in learning with access to Ilias, Dachser’s in-house learning management system, as well as to Idea2net, the employee ideas platform. →

“Logistics is made by people, for people. That isn’t going to change, not even in times of digitalization and automation,” says Dachser CEO Burkhard Eling. This is the basis for the “Logistics is People Business” strategic focus program, which was developed in 2022 with four fields of action: Employee Experience, Collaboration, Learning & Development, and Corporate Culture. It serves as both the starting point and the destination for a global HR system with concrete plans and actions for the coming years.



The M.I.T. project team seeks out dialogue

“Since the box has a large window, the person inside doesn’t feel confined, but at the same time they are isolated enough from warehouse activities that they can concentrate for the whole 15 to 20 minutes of the learning units. Employee feedback about this has been good,” Müller reports following the first few trials in practice. In principle, the concept can reach every person in the warehouse—from part-time and mini-job employees to team leaders and shift supervisors.

“Each logistics operative can choose the right program for their own area of responsibility,” Müller says, summing up the user-friendly learning offer. For example, the operatives can review the instructions in peace and quiet or get answers to their questions on the topic. Current training courses, on topics like the safe handling of lithium-ion technology or accident and fire prevention, can be accessed via the website. The Ilias learning management system is available in 16 languages, so users can navigate the system in their native language. According to Müller, employees with a migration background also benefit from this: “We do translations for specific topics,” the head of the Academy explains. “One of our core strategies at the Academy is to continuously expand the language diversity of our learning content.” And it does so in a highly focused way. “For example, we considerably upped the number of French training sessions for French-speaking employees at the box in Überherrn due to the branch’s proximity to France.”

Field of action: Corporate Culture

LIPB’s fourth field of action is Corporate Culture. “At our family-owned company, value-oriented and sustainable action are the magnetic core that holds everything and everyone together worldwide. The experience of cohesion and team spirit, of trust, confidence, and responsibility in working together every day are ways we distinguish ourselves in the market, so we must maintain and further promote them together,” says Dachser CEO Eling to explain Dachser’s self-image.

This includes the proven knowledge that diverse teams in particular can work together more efficiently, develop better solutions, and thus break down prejudices. An example from Öhringen near Heilbronn shows that people with disabilities can enrich and advance work teams.

Marcus Seeburger loves the world of business and numbers. “I’m fascinated by the analysis of complex economic relationships and using that as a solid basis for decision-making. That’s why I sent Dachser an unsolicited application for a position in Sales Controlling.” In logistics, controlling specialists are highly sought-after, and Dachser is no exception. But there was something special about this application: Seeburger is deaf. When the recruiters and the Sales Controlling Manager at the Öhringen branch, Thomas Althaus, saw his application, they liked it so much that they were keen to meet the young man. Seeburger was impressed that Althaus had researched sign language on

YouTube in advance and used a few signs during the interview: “This showed me that Dachser is not only interested in hiring deaf people, but is also prepared to adapt. I knew then that I really wanted to work for the company.” The result was an internship in which Seeburger and Dachser both tried it out together—with resounding success.

The new employee was to be accompanied by a sign language interpreter, who would be available if required, and an email was sent to the team in advance informing them of this arrangement. “There were no other special preparations,” Althaus says. The colleagues created a warm and welcoming atmosphere right from the start; together, they all quickly overcame the initial uncertainty and fear of making mistakes.

“During my onboarding phase, there was usually a sign language interpreter at my side in the mornings to interpret important meetings and conversations,” Seeburger reports. Soon he’ll have technical assistance in the form of TeleSign, a telephone interpreting service. This enables him to communicate effectively with hearing colleagues and customers on the phone, ensuring a smooth workflow. However, much of the onboarding process was adapted according to the situation. For example, over lunch Althaus and Seeburger communicated easily via WhatsApp, even without an interpreter.

With his open, friendly manner, Seeburger is seen as a real asset by the Sales Controlling team, Althaus says: “It’s a mutual learning process. The new way of communicating has helped us all to rethink work structures and processes and to see our day-to-day work from a different perspective.” For his part, Seeburger is “very comfortable at Dachser and in my team.” When asked what would make him recommend his employer

to others, he doesn’t have to think twice: “It’s because of the special corporate culture characterized by respect, teamwork, and support. The company values employees’ individual skills and ideas, regardless of any disability.” The importance of diversity and inclusion at Dachser is also reflected in the newly created position of Inclusion Officer, which has been held by Daniel Metzdorf-Muigg at the Head Office in Kempten since June of this year. In brief, the goal of the position is to systematically drive diverse and inclusive collaboration at Dachser.

Logistics by people, for people

And so concludes the circle of the four fields of action in the “Logistics is People Business” strategic focus program. Eling believes Dachser is right on course toward its target picture 2030 with the projects the company has launched: “Logistics is made by people, for people. Both on a grand scale and in the little things. That isn’t going to change, not even in times of digitalization and automation. People are the focus of everything Dachser does. They keep the supply chains running and find tailored solutions for our corporate customers. That’s why appreciation of every individual is and will remain the basis for how we think and act,” the Dachser CEO says. “And not just as a well-intentioned commitment, but by linking global and local projects at all levels and supporting the exchange of successful case studies.” It’s the many large and small steps in everyday logistics that, implemented with a great deal of heart and soul, ultimately make it possible to move forward toward a major goal.

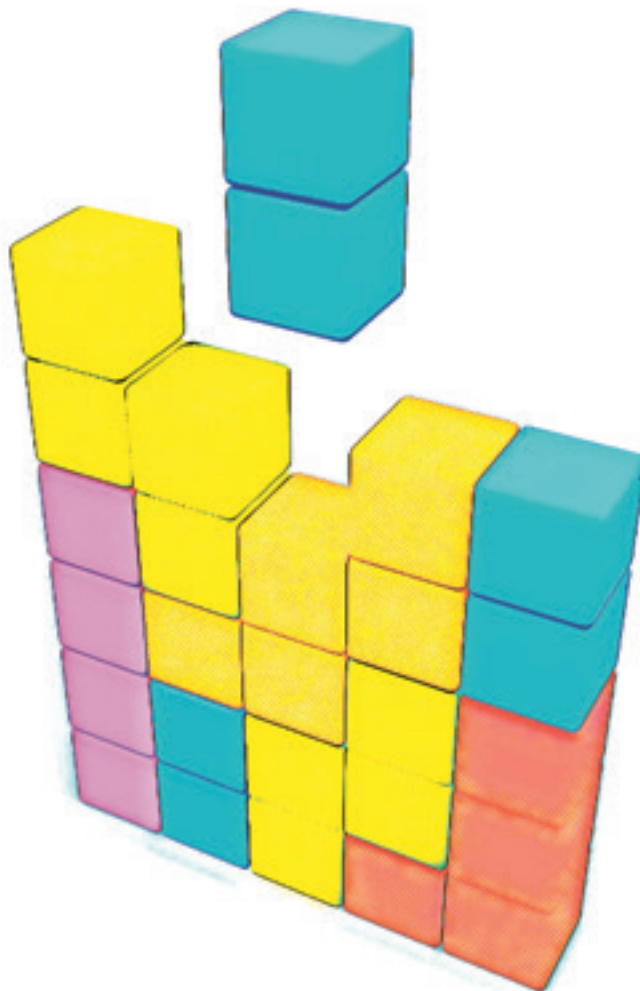
M. Schick



People & markets

The Tetris trick

New Year's resolutions are often like fireworks: we launch them with fanfare, bask in their glory, and then watch as they disappear in a puff of smoke. So much for our desire to eat healthier, get super fit, or give up drinking alcohol or smoking. Brain researchers have traced the cause of why humans have difficulty overcoming common addictions and laziness to the insular lobe, located in the cerebral cortex, which is in constant contact with the neighboring motor cortices. The researchers have now discovered a playful way to redirect this brain mechanism. Whenever a test subject was hankering for something they were addicted to, they managed to counteract this desire by playing a three-minute game of Tetris. Having to concentrate hard to solve the game caused their need for other temptations to vanish. Perhaps this method could also work for those New Year's resolutions aimed at overcoming a certain vice. Possibly, but remember: gaming can also be addictive.



New hopes for learning during sleep



There are no statistics on how many school and university students have tried in vain to do it, but the dream of learning during sleep is still very much alive. Now, researchers at the University Medical Center in Freiburg are adding new hope. They produced a study showing that people learning new vocabulary retained significantly more of what they had studied if they were exposed to granules of rose scent when studying, sleeping, and taking the vocabulary test. Does this mark a breakthrough in learning during sleep? Not quite. The study also showed that while being exposed to this scent during sleep did help people learn, it didn't prevent them from forgetting what they learned later on.

Healthy optimism

A study by a research team at Boston University School of Medicine showed that optimism can increase life expectancy by up to 5.4 percent. But does that mean there's no hope for pessimists? Not exactly. There are also studies indicating that when it comes to illness, pessimists live longer than optimists because they are more proactive about going to the doctor sooner and getting regular checkups. Overall, optimists can have a tendency to overestimate themselves, take more risks, be more susceptible to gambling addiction, and put themselves under pressure by setting themselves overly ambitious goals. The advice of science is "not to confuse optimism with toxic positivity and to learn that negative feelings, problems, and crises are also just a part of life."



Stay calm

Playing dead can also help you get ahead in life. Squid show us how, by remaining perfectly still whenever predators such as sharks and sea bass approach. These predators have highly-tuned sensors capable of picking up even the weak electrical fields that squid and fish in general emit as a result of metabolic processes and micromovements in the surrounding water. Biologists at Duke University in North Carolina recently made a surprising discovery. If a squid spots an enemy, it will flatten itself to the sea floor, reduce its respiratory rate to a minimum, and cover its bodily orifices with its arms. Its electrical field, which is normally 10 to 30 μV , drops by some 89 percent to as low as 6 μV . And if that doesn't do the trick, the squid can always flee—and squirt ink to obscure its attacker's vision.

If not now, then when?

Where there's a will, there's a way. But is that actually true? "Having a goal is not the same as having a plan," says Peter Gollwitzer, Professor of Psychology at the University of Konstanz and at New York University. What counts, he says, is that in addition to deciding what the desired outcome should be, people need to make a plan for how to get there. In other words, people should work out what specific steps they need to take to achieve a goal. Gollwitzer's wife, the psychologist Gabriele Oettingen, built on this to develop the concept of "constructive optimism." She came up with the WOOP visualization technique, which is made up of four steps: wish, outcome, obstacle, and plan. WOOP requires people to think not only about what they wish to happen but also about problems they might face and ways of solving them. That way, Oettingen says, a person can connect even an abstract goal with concrete actions in the here and now. An optimist would say "If not now, then when?"



Panorama

Rewriting the rulebook



Game changers: The inventions, ideas, and events that radically alter an area of life, an industry, or even the entire world. They are typically brought about by people who are willing to question established practices and traditions.

At first, Richard “Dick” Fosbury was met with nothing but contempt. Instead of using the standard downward-facing straddle technique, the high jumper from Portland, US, decided to try clearing the bar face-up by arching his back over it. “You’d be better off joining the circus,” his coach jeered. But Fosbury remained undeterred and went on to win gold at the 1968 Summer Olympics in Mexico City. This would change the entire sport forever as more and more high jumpers adopted the Fosbury Flop. The maverick technique developed by this exceptional athlete, who died in March 2023, quickly became the generally recognized standard.

Whether it’s in sports, business, politics, or society, from time to time innovations, ideas, or events come along that shatter established certainties, question traditions, and rewrite the rulebook. As in Fosbury’s case, such game changers radically alter at the very least a particular field. Sometimes, they can usher in a whole new age by giving all of humanity new inspiration. The steam engine, the electric lightbulb, and the world wide web fall into this category.

What all game changers have in common is they are brought about by people who refuse to be satisfied with claims of “we’ve always done it this way” or “that’s not how it’s done.” They are prepared to break with convention. This takes courage, because if things don’t go well, breaking the rules can start someone on the road to ruin. In extreme cases, it can even be a matter of life and death. Take Galileo Galilei, who in the 17th century only narrowly escaped a death sentence for his assertion that the Earth revolved around the sun.

Steel containers for a logistics revolution

Financial risks that threaten the livelihood of an organization or individual are also not uncommon in the business world. Nearly 70 years ago, US freight forwarder Malcolm McLean risked everything to turn his vision into reality: he sold his thriving trucking empire to buy a shipping company and invested in ships and cranes. He set out to prove that the use of stackable steel containers could drastically speed up the

loading and unloading processes. In 1956, ignoring the derision of his competitors, McLean dispatched his first ship laden with 58 of these containers—this can be seen as the birth of multi-modal container transports. Toward the end of the 1960s, Thomas Simon, the son-in-law of company founder Thomas Dachser, took the container idea further with the invention of the swap body. It’s virtually impossible to imagine today’s logistics without these two innovations.

These examples also demonstrate that game changers are often not the result of sudden flashes of inspiration. Doubts about the Earth being the center of the universe date back to ancient Greece, doubts that calculations by Galileo, Kepler, and others proved entirely valid much later on. The container idea was kicking around the industry before McLean took it up, but he was still the first to put it into practice. Another prime example of how it sometimes doesn’t take much for a thing to change the world is the iPhone. After all, Apple based it on some well-established technological building blocks. First released in 2007, this device featured extremely functional design and user-friendly software that made it a best-seller. The path to mobile internet was complete.

Long run-ups are quite common

Nevertheless, people are right to be skeptical whenever companies describe their next product as a “game changer” before it’s even been launched. Such claims tend to be based on little more than the desperate wishes of the marketing department. Indeed, whether or not an innovation will trigger a sea change only becomes clear further down the line, as in the case of the iPhone. Again and again, would-be revolutionary products turn out to be non-sellers, while others take the world by storm. But that takes time. The personal computer took almost 20 years to become a commercial success, and both the cell phone and Google’s search engine took years to establish themselves in people’s everyday lives.

After a long run-up, artificial intelligence is now poised to enter the mainstream market. Neural networks and machine learning might be old hat for researchers, but the rapid dissemination of ChatGPT and the staggeringly swift progress in image and video generators signal a new dynamic aimed squarely at daily life. Hardly anyone denies that these technologies possess game-changing potential, but the notion that AI will put scores of people out of a job, as many fear, is still far from certain. AI tools are excellent at creating something new out of their training data, but most jobs call for a lot more than that. There is still great demand for creativity and empathy, even more for an appreciation of the big picture—and time and again, for that quintessentially human ability to break out of old patterns.

S. Ermisch





A long road

Taking action to protect the climate and achieve climate targets is a major task that's challenging for everyone involved. Dachser is clearly committed to systematically pursuing a path toward more sustainable and climate-friendly logistics. Even if it proves to be a long and bumpy road. Dachser CEO Burkhard Eling presents the company's strategy and the specific measures it is taking to decarbonize logistics.

ESG. Net zero. Sustainability reporting. Terms that we barely knew a decade ago have now become the linchpin of corporate strategies. And that's good! For behind these terms are alarming facts, the effects of which are being felt more and more by societies all over the world. Southern Europe has had a summer marked by severe drought and devastating storms. European Union researchers reported that the summer of 2022 was the worst drought in Europe in at least 500 years. And we're seeing the same picture in Asia and the US. Climate protection is far more than an end in itself: it's an expression of the fact that we're being serious when we talk about our responsibility toward future generations.

This responsibility now even has constitutional status in Germany. It's no longer an empty phrase, but one with legal and political weight. In 2021, Germany's Federal Constitutional Court declared parts of the country's Climate Protection Act to be unconstitutional, as it left the path to climate neutrality by 2050 insufficiently defined, particularly with regard to the years 2031 to 2050. In other words, shifting the burden onto future generations is not compatible with the German constitution. It is our generation who must act. Now.

So let's do something about it! Let's turn the lofty language of ambitious sustainability projects into real action. →



Dachser CEO Burkhard Eling is pursuing realistic decarbonization

Dachser sees sustainability and climate action as elementary tasks within its inclusive responsibility as a company for society and the environment. This is why Dachser supports the global community's climate goals through a comprehensive climate protection strategy.

I'm proud to say that at Dachser we not only talk the talk, we walk the walk. We're committed to putting sustainability on the road and in the air—and not just figuratively.

That's one side of the story. The other side—and there's no tiptoeing around it—is that according to the MIT Climate Portal, freight transportation by truck, plane, ship, and train is responsible for around 8 percent of all CO₂ emissions worldwide, or as much as 11 percent if warehouses and ports are included. And those figures continue to rise.

Logistics causes emissions because our society thrives on the possibilities, convenience, and amenities offered by modern logistics. Yes, scaling back global logistics services could and would reduce carbon emissions. But is this a viable option? No: logistics is the backbone of our global, interconnected economy. This became even more apparent when COVID tore through our global supply chains and the world was suddenly faced with shortages. What's more, as new markets emerge, the number of road, rail, air, and sea shipments will only increase. Cutting back on

logistics services would mean cutting off the lifeblood of the economy. The only way to achieve the Sustainable Development Goals set by the United Nations in 2015 is with the help of logistics. It's obvious: logistics, climate action, and sustainable development are closely intertwined.

Carbon trading won't cut it

The challenge we face is a "bigger undertaking for humankind than flying to Mars," as Bernhard Simon, Chairman of the Dachser Supervisory Board, recently put it. How can we decarbonize logistics when it's estimated that road transport by truck will increase by 50 percent by 2050? Is decarbonization even possible?

Such an undertaking would involve the entire transport infrastructure, as well as new policies and legislation, technologies, the construction of real estate, the interaction of various industries, and diverse regulatory frameworks. There's no doubt that the goal of decarbonized logistics can be achieved only if all stakeholders pull together. Making logistics carbon-neutral by way of CO₂ offsets is certainly not a sustainable solution. In our view, the key is to take the long and bumpy road and actually actively avoid and reduce emissions. We'll tackle our own emissions first, reducing them as quickly as possible, while also collaborating with our customers, service partners, carriers, and the entire logistics industry ecosystem. But how exactly is this to be done?

There's certainly no magic formula, especially in industries like transport and logistics. Do I have the answer? No. Because there's not just one answer, but several.

Taking the first step

We have to take the first step. To reduce our carbon footprint, we need to increase process efficiency. We need to improve our energy efficiency. We have to strengthen research and innovation. And we must pursue our commitment to social causes beyond our sphere of business and assume responsibility as a "Corporate Citizen+," as we call it.

Here's how we're taking action at Dachser:

Process efficiency: Making the most of existing logistics capacity



It's obvious: logistics, climate action, and sustainable development are closely intertwined.

Burkhard Eling, Dachser CEO



We're continuously increasing the efficiency of our logistics processes. We strive to leverage all available technologies, from artificial intelligence to Internet of Things applications. We're working tirelessly to maximize truck capacity utilization, be it through the use of mega trailers and longer trucks, the intentional avoidance of empty-truck kilometers, or the deliberate use of multimodal transport in combined transport. Making the most of existing logistics holds huge potential for avoiding greenhouse gas emissions.

Energy efficiency: From air freight to solar power

Increasing energy efficiency is a twofold task: 95 percent of Dachser's carbon footprint is due to freight forwarders and transport companies over which we have no direct influence. But that's no reason to sit back and do nothing. Instead, we're making a conscious effort to influence the market, for example with sustainable offers in the Air & Sea Logistics business field and with attractive leasing offers for electric trucks in Road Logistics.

As for our own carbon emissions, we're taking action on several fronts. All Dachser logistics locations worldwide are powered entirely by green electricity, for example. We're installing solar panels on our logistics facilities and are well on the way to quadrupling our own energy generation capacity by 2025. We use LED lighting, battery-powered forklift trucks, and heat recovery. We're working with airlines to offer customers the option of reducing the carbon footprint of their air freight by about 30 percent through sustainable aviation fuels (SAFs). We're in the process of introducing a similar model for sea freight as well. We also asked our employees around the world to submit ideas for improving climate action in the workplace. We received a whopping 2,100 ideas from employees in 39 countries, and have already implemented more than half.

We not only incorporate energy efficiency into our existing business models—we're using it as a baseline for new ventures. DACHSER Emission-Free Delivery, our award-winning concept for city logistics, is a great example: it uses electric vans and trucks as well as heavy-duty, electrically assisted cargo bikes to cover the "last mile" in defined downtown areas. By sourcing and charging with green power only, we can cut our operational greenhouse gas emissions to zero. Plus, we help reduce truck congestion. We've rolled out this model in thirteen European cities so far and plan to add another eleven by 2025.

Moving ahead with research and innovation

Reducing carbon emissions on the road remains a major challenge: electric vehicles are becoming more and more common in private transportation, but commercial vehicles like electric trucks are still scarce. And we urgently need zero-emission technologies—whether powered by batteries or hydrogen—in long-distance transportation. This also includes the installation of charging infrastructure. At Dachser, we're making research and innovation a priority: our three e-mobility locations in Freiburg, Hamburg, and Karlsruhe are testing the use of emission-free technologies in local and long-distance transport as well as charging infrastructures and intelligent energy and load management. We're also piloting a heavy-duty battery-electric truck with a total weight of 37 metric tons, a 350 kWh battery that can be charged in around 75 minutes, and a range of around 200 kilometers. And in the Czech Republic, we're operating our first all-electric swap-body combination on a regular long-distance route. In short, we're moving forward, but there's still a long way to go together with our technology partners.

Taking on an exciting task with humility

Converting logistics to fossil-free fuels will require staying power. As things stand, it will take 15 to 20 years to replace our current fleet of diesel trucks with zero-emission vehicles. We're taking on an enormous task, one that requires action from many players: logistics providers, transport partners, and freight forwarders, as well as customers and legislators. As we move toward net zero logistics, we need to have a laser-like focus on efficiency, technical and financial feasibility, and the actual impact on sustainability.

Logistics and sustainability are mutually dependent, and as a logistics provider, we have an outside role to play. Unlike less carbon-intensive industries, each of our actions has a direct impact. For me, this is a task that is both humbling and exciting. We must not be discouraged by its magnitude. On the contrary, every successful step, no matter how small, must spur us on to intensify our efforts a hundredfold—to ignite the spark that manages to transform an entire ecosystem.

Burkhard Eling, Dachser CEO

Future lab

A digital double

The digital twin is one of the key innovations for the supply chains of tomorrow. What core technologies is it based on? And what does this mean for day-to-day transport and handling in logistics? The answers are promising.

Digital twins are the virtual counterpart to a physical reality. The data they are based on is collected and visualized automatically and, ideally, in real time. Real-life and virtual versions are kept in constant connection, or ideally interaction.

A digital twin may represent individual objects such as machines, vehicles, or buildings, as well as entire processes—for example, in production lines, warehouses, or even inter-continental transportation networks. In logistics, digital twins primarily record and display the current spatial position and status of objects in a defined area.

What has made these digital representations of reality possible is the availability of increasingly powerful and cost-effective electronic sensor technology. Small, energy-efficient electronic microsensors automatically record temperature, acceleration, incident light, and other conditions in real time. Various locating methods based on radio signals can also be used to determine the position of objects, be it through private local transmitters in buildings and depots, or in public spaces through mobile network masts and satellite signals. The number of available radio-based technologies has climbed steadily in recent years, with the best-known examples including RFID, Bluetooth Low Energy (BLE), WLAN, 4G/5G, and GPS, all of which are in widespread use.

In recent years, another important basic technology for digital twins has established itself: optical systems that combine image and video recording with software based on machine learning. Based on the image data, the systems can not only identify an individual object but can also apply further logic to calculate the object's position in space, its size, and even its very nature. In places where it is difficult or impossible for cameras to detect the surroundings, companies can opt for two-dimensional codes such as QR or Data Matrix (DMC). The large amounts of data generated during analysis of images and video as well as the necessary processing speed are usually handled by powerful graphics cards. More and more frequently, data is being processed directly at the optical scanning unit or on an on-site server (edge computing). This means that only a small amount of data needs to be transferred to the connection, or ideally interaction.

Making faults and errors visible

The first benefit of a digital twin is the real-time visualization of the status of objects and processes. With this transparency, it's possible to, say, make faults visible immediately so they can be rectified more quickly. This has a positive impact on time and quality in supply chains. Within seconds, companies can identify the point at which a defective machine needs maintenance or where a process is likely to fail and promptly take the appropriate action. A digital twin renders manual processes for data collection and data analysis obsolete.

Application of the digital twin goes one step further with prescriptive analytics. This tool uses the digital twin's real-time data to simulate and evaluate future states and events. As a result, it can automatically display suggestions for avoiding undesirable statuses or can even automatically make decisions to preclude such events altogether. Combined with past data and intelligent algorithms, prescriptive analytics can be used in transport logistics to support vehicle scheduling, for example.

A digital twin also allows people to operate objects remotely, such as controlling vehicles over long distances in complex environments. Using a virtually generated 3D environment based on data from the digital twin, people can obtain an optimal view of the remote location and steer a truck on a company site. In logistics, this can be used as a fallback solution when using autonomous vehicles. The same technology can also be used to train both humans and AI algorithms. Extreme situations in particular can be "learned" with little effort and without risk to humans.



Transferring logistics processes 1:1 to the digital realm

Digital twins at Dachser

In recent years, Dachser has developed and implemented two overlapping digital twins. One visualizes the processes in the European truck transport network: the company developed a special telematics platform that maps the position and arrival time of over 10,000 swap bodies and trailers in near real time, making scheduling easier. Specially developed solar radio modules with 5G/LPWAN and GPS positioning serve as the basic technology. Another digital twin has been created in conjunction with @ILO (Advanced Indoor Localization and Operations) for the

Dachser transit terminal. Here, the first pilot systems can automatically identify, localize, and measure shipments and ground conveyors in real time. Relevant data is made available to employees in the terminal via displays and monitors. The basic technology used here is optical scanning units in conjunction with DMCs.

Digital twins offer logistics an important new data basis for the future control, optimization, and quality assurance of logistics processes.

Andre Kranke, Head of Corporate Research & Development at Dachser

The "Future lab" feature presents findings from the Corporate Research & Development Division, which works in close collaboration with various departments and branches, as well as the DACHSER Enterprise Lab at Fraunhofer IML and other research and technology partners.

Value-driven growth

Logistics is and will remain a growth market, but this increases the demands on logistics providers and their networks. How is Dachser Road Logistics positioned and what principles will guide it into the future? We put these questions to Dachser COO Road Logistics, Alexander Tonn.

Mr. Tonn, what role does groupage logistics play in Dachser's target picture for 2030?

Alexander Tonn: Groupage logistics is the backbone and core competence of Dachser, so it will continue to play a key role in the company as we move toward 2030. Our goal is to attain and hold a position as number one in Germany and Europe. For us, the way to achieve this is not by increasing volume at any price, but by achieving value-driven growth.

Quality always comes first, in every area. It's the most important feature that sets us apart in the market. What creates this quality leadership is first and foremost our employees. Other essential components are our state-of-the-art logistics facilities and broad-based vehicle fleet, as well as our homogeneous IT structure, which makes it possible to standardize processes.

How is the Road Logistics network developing?

The network is the lifeblood of Dachser. We've been systematically expanding it for decades, and in the process we've arrived at a comprehensive level of network maturity. Here we have to distinguish between European Logistics, the division for industrial and consumer goods, and Food Logistics, the division for food and beverages. In European Logistics, Dachser has repeatedly expanded and strengthened its network through landmark acquisitions, most notably of Graveleau—the market leader in France at the time—in 1999, and of Azkar on the Iberian Peninsula in 2013. This year, we took the next necessary step by entering into an agreement to establish a joint venture with FERCAM for groupage and contract logistics in Italy. This means that we have now largely completed our network, although there are still some countries in which, for various reasons, we continue to work with partners rather than our own country organizations.

And what about Food Logistics?

The food logistics business is an entirely separate market. Cross-border flows of goods play a far less important role here than in groupage logistics. The business is much more concentrated at the country level. We are represented by our own

Dachser Food Logistics country organizations in Germany, Belgium, Hungary, and Italy. Aside from that, we work very well with local partners in the European Food Network. But we're always thinking ahead. Our acquisition of Müller Fresh Food Logistics, the market leader in the Netherlands, at the beginning of this year was a milestone and a key step for us in strengthening our Benelux business.

What potential do you still need to tap?

There's still room for growth in groupage logistics in many European countries. We're also working on integrating countries into the network that are outside the European continent, such as Morocco, Tunisia, or Turkey, as they are gateways to neighboring markets. These countries are already or will very soon be integrated into Dachser's European network via the core Dachser system, Domino. We can also leverage considerable growth potential in contract logistics. The close integration of transport and warehousing plays a major role in our efforts to fulfill our mission: to be the most integrated logistics provider worldwide. Another point is the optimum connection of our efficient groupage network to intercontinental transports—this will be a significant USP for our customers.

What thought guides Dachser in further developing the global network?

We have to detect changes in our volatile, complex environment quickly and not just react to them, but actively turn them to our customers' advantage. At the global level, those are tailored logistics solutions with end-to-end process management and comprehensive digitalization for the best possible transparency in the supply chain. The backbone for this is our strong, high-performance overland transport network in Europe. By tightly interweaving our Air & Sea Logistics and Road Logistics business fields, we want to create a service that is unparalleled on the market: Global Groupage. The advantages for customers are numerous: Dachser will offer a holistic solution for worldwide groupage transports, provided by an integrated network with comprehensive contract logistics expertise.





A seasoned logistics expert:
Alexander Tonn has been
with Dachser since 1999



Quality always comes first, in every area. It's the most important feature that sets us apart in the market.



Alexander Tonn, COO Road Logistics

How does that kind of holistic approach affect the remaining development goals for Dachser Road Logistics?

Last year, we launched the AHEAD strategic focus program. It aims to further sharpen our competitive edge and continuously advance our network by playing to our strengths. These include the high quality of our service and the systems we use, as well as efficient processes and the retention of well-trained specialists. We're also defining how we can work even more closely with our transport partners and improve our collaboration. The conditions for this are set by current market developments, like rising energy prices, the ever-increasing demands on branch infrastructure and the vehicle fleet, and of course the worsening shortage of qualified personnel. All these factors are part of a fundamental structural change that we have to face. It also means that prices and costs in logistics will inevitably rise and can't be offset by efficiency improvements and process optimization alone.

Retailers and manufacturers are using omnichannel concepts to focus heavily on the individual delivery requirements of their customers; B2C and B2B businesses are merging. How is the market changing?

As part of our AHEAD focus strategy, we're working hard on omnichannel market access and are looking for ways to balance

the requirements of logistics with those of customers. One result is our new product, targo on-site fix, where a specific delivery date can be scheduled when placing the order. This is popular with consumers, as they can have their purchases delivered after their vacation, for example. And for us as a logistics provider, this shortens the waiting time at the receiving branch. We're constantly working on developing even simpler and faster solutions and incorporating them into our service portfolio.

Digitalization is constantly offering new ways to optimize processes. What role does this play for overland transport at Dachser?

Digitalization has a fundamental role to play if we are to reliably fulfill our mission in the future, too. This includes the modernization of our own core systems for transport and warehousing as well as the introduction of technological innovations. The latest highlight is our @ILO project, which has just been awarded the German Logistics Award. First, packages here are identified, localized, measured, and recorded in the transport management system fully automatically when they enter and leave, as well as during their stay. This eliminates manual barcode scanning and the additional labeling of the packages. Next year, we'll start introducing the technology at our European branches. This is a milestone in the development of our network and will set an example for the industry.

Dachser always says, "Logistics is People Business." How does this fit in with the steady advance of digitalization and automation?

Digitalization and automation are not in conflict with our focus on people in logistics. Quite the opposite, in fact: if we are to generate value-driven growth, we need both skilled workers and digitalization that supports people in their work as comprehensively as possible. The lack of qualified personnel and specialists is already being felt at all levels and will become even more acute in the future. Europe currently has a shortage of over 400,000 professional drivers. The shortage of operational and administrative staff is not yet so extreme, but here, too, it's becoming increasingly difficult to find and retain people with suitable qualifications. Although Dachser has been counteracting this trend for years with a training rate of over 10 percent, it can't completely reverse it. This makes it all the more important to offer employees the best conditions for providing high-quality services. Digitalization and automation are the right way to do this.

DACHSER Emission-Free Delivery, the zero-emission delivery service for city centers, is a forward-looking concept. Could it soon be standard?

By 2025, we will double the number of DACHSER Emission-Free Delivery locations from its current level. At that point, we will

A closer look: Omnichannel

The term "omnichannel" describes a business model in which several sales channels are used in parallel, whether online or offline, with the aim of offering a uniform customer journey. This also has an impact on the flow of goods and the associated supply chains. Such a model demands greater flexibility, responsiveness, and transparency. With its omnichannel approach, Dachser is adapting to changing requirements in an agile manner, from goods procurement to warehousing to individual distribution. Dachser will be launching its targo on-site fix product on the European market in 2024. With this service, the customer can specify the exact delivery date at the time of purchase—delivery is often possible within 24 hours. Knowing as early as possible when and where deliveries will be made allows for better scheduling of outgoing goods, shorter waiting times, and avoidance of returns due to missed delivery attempts.



Alexander Tonn is close to customers and the markets

have implemented the sustainable city logistics concept in 24 major European cities. Whether and when this can become standard remains to be seen. Rolling it out involves considerable effort and the conditions have to be right. It depends, for example, on the local traffic situation, the potential for setting up microhubs, and the right charging infrastructure. All this requires major capital expenditure, which will ultimately be reflected in the pricing.

Emission-free supply chains require appropriate drive technologies. What will power the trucks of the future—electricity, hydrogen, or perhaps something completely different?

There are many indications that battery-electric trucks could become the preferred option for short- and medium-haul routes, and their ranges will increase. Trucks with hydrogen or fuel-cell drives are increasingly coming onto the long-haul market, although this still requires the development of a nationwide network of hydrogen filling stations. We're keeping a close eye on the direction in which drive technologies in freight transport are developing. We're not just waiting to see what

the future holds, but are actively involved in research and development together with partners from science and technology. For example, with our newly established e-mobility locations in Hamburg, Freiburg, and Malsch near Karlsruhe, we focus on testing climate-friendly technologies and processes as well as intelligent electricity and load management to see what will work in practice.

Let's take a look into the future: Ideally, how do customers view Dachser Road Logistics in 2030?

Our clear goal is for customers to continue to value Dachser as a quality leader in the European market. This is because Dachser is the most integrated logistics provider with the most comprehensive groupage network, the highest level of system and contract logistics expertise, and qualified employees who keep the supply chains running. Our people also help the company take significant steps toward climate protection and thus set standards in the logistics industry. We work on this every day—with great commitment and passion.

The path to greater **sustainability**





Sustainable together: how Ricola and Dachser are steadily reducing the Swiss herbal drop manufacturer's CO₂ emissions all along the global supply chain. A report on values-oriented rethinking and rerouting.

Fragrant meadows, buzzing bees, a clear mountain stream, and snow-capped peaks—people in harmony with nature. This idyllic alpine world is the starting point for a story that has exceptional appeal. The main character is the Swiss herbal drop manufacturer Ricola, based in Laufen near Basel. Founded in 1930, this family-owned company is regarded as a pioneer in herb growing. It is extremely selective about its locations, and it prizes controlled ecofriendly cultivation. In this unspoiled region, Ricola has entered into fixed purchasing agreements with more than 100 growers. They supply the company with the ingredients for some 50 different products, including specialty teas, which it exports to 45 countries. Ricola currently employs around 500 people and now operates subsidiaries in Europe, Asia, and the US. In this way, the traditional Swiss company with its herbal drops has established itself as a global brand. →



The carbon footprint depends on the entire process

Dachser and Ricola have a long history of successful collaboration, which was covered in the Dachser magazine back in 2019. The Issue 4 cover story, "Logistics with a Swiss twist," described the exemplary, sustainable route these Swiss herbal drops were already following as they traveled out into the world.



Sustainability has priority

"If your products contain natural ingredients, your sustainability has to be compelling—from one end of the production and supply chain to the other," says Jochen Layer, Vice President Corporate Fulfillment at Ricola. "Thinking and acting sustainably are part of how we see ourselves at Ricola. That's why our family-owned company gives such high priority to reducing our energy consumption and our CO₂ emissions. We're implementing a range of actions to achieve it." This is an approach that Dachser and Ricola shared from day one, he adds.

Since logistics accounts for a substantial share of Ricola's total emissions, it is a particular focus of the company's comprehensive climate protection strategy. To arrive at tangible, measurable results in this area as quickly as possible, Ricola put together a sustainability team in 2021. "We take a broad approach, one that considers not only the company's carbon footprint, but also ethical questions relating to every link in the supply chain," Layer says.

"At first, we thought we'd have a hard time getting logistics providers on board when it came to this rather complex topic. But when we took our climate action ideas to Dachser, we found that we were preaching to the choir. Dachser had long since anticipated many key aspects and even developed them further. It had compiled

studies and amassed a wealth of research and project experience in other contexts, so we were immediately able to apply this vast depth of knowledge as we went about assessing and redesigning our logistics chains."

A relationship built on trust

"Any collaboration to achieve climate goals hinges on thoroughly integrating the logistics provider into Ricola's processes and having a working relationship that is built on trust. This is what Ricola and Dachser have cultivated since our collaboration began back in 2008," says Samuel Haller, Country Manager Air & Sea Logistics at Dachser Switzerland. Together with sustainability experts from Dachser's Head Office in Kempten, efforts began several years ago to identify a series of different measures to reduce emissions along the entire supply chain. Jan Bender, Department Head Foreign Trade Compliance Air & Sea Logistics at Dachser, describes the approach that became a concrete climate action pilot project with Ricola in 2022: "We examined any and all sensible levers for cutting emissions and how to adjust them." Cecilia Homilius, Sustainability Consultant and a member of Bender's team, explains: "The project partners were looking to establish a self-critical and unbiased decision-making process, with a focus on preferred carriers,

on opportunities to use sustainable fuels—such as hydrogen and biofuels, sustainable aviation fuels (SAFs) and sustainable maritime fuels (SMFs)—and on the potential CO₂ savings these offer.” She believes that this kind of comprehensive approach is essential in implementing suitable economic and ecological measures all along the procurement and supply chains.

And that’s exactly what Ricola was aiming for when it drafted its rollout plan with the ambitious goal of halving its own CO₂ emissions from transports by 2030 compared to 2020. The goal for 2050 is net zero (well-to-wheel) greenhouse gas emissions. “At our joint kickoff workshop, we questioned and examined every aspect. We fleshed out Ricola’s expectations and targets and analyzed the supply chain to find ways of making it more sustainable. This was a hugely intensive process as well as an exciting exchange among equals,” Bender says.

Vinh Tran, Order Management Coordinator, who is responsible for implementing these logistics sustainability projects in operations, agrees: “We carried out a critical analysis and inventory of our emissions of CO₂ and other greenhouse gases resulting from transporting Ricola products from the factory to world markets. This yielded the first concrete measures for achieving a noticeable reduction in those emissions—across all carriers for collection, main carriage, and onward carriage.”

Scientific support

As a rule, Layer says, Ricola bases decisions to improve climate protection exclusively on proven scientific fact—as does Dachser. For its part, Ricola calculates its carbon emissions in collaboration with myclimate, an independent, international climate protection organization with roots in Switzerland. Data collected and processed in this way shows that by 2025, Ricola will fulfill the stringent standards set out for a company of its size in the EU Corporate Sustainability Reporting Directive (CSRD). By the end of 2023, Ricola also wants to complete a B Corp certification. This is part of a holistic approach, through which the certified companies enshrine their commitment to sustainability and fair working conditions in their articles of association—further reinforcing their intentions to help create a better, more sustainable tomorrow. The goal is to ensure more transparency and values orientation, both in this area and throughout the supply chain.

Testing all transports

The latest analysis of the supply and value chains in the Swiss family-owned company’s global herbal drop logistics has already yielded a number of specific actions.

For a start, efficiency was greatly increased by improving capacity utilization and making full use of a container’s maximum payload. This led to a 12 percent reduction in the overall transportation volume requirement. “This optimization was definitely a major lever for us,” Tran says.

Next, various zero-emission drive technologies for trucks are being considered for the short-distance transport of containers from the production plant in Switzerland to the train

terminal. “Unfortunately, it’s just not economically feasible for us to switch completely to purely electric alternatives,” Tran says. He adds that the company will have to wait and see how Swiss policymakers move forward as regards infrastructure and subsidies. Hydrogen-electric trucks, which many see as the future of zero-emission freight transport, are also not yet sufficiently widely available, Tran says. Until the new technologies have matured and are available for day-to-day transport operations, Ricola will be relying on biodiesel. This also saves several metric tons of greenhouse gas emissions every year.

Today, rail is the preferred means of transporting the drops from the factory to Hamburg and Rotterdam to be shipped to Asia and the US. “A 100 percent switch to rail collections instead of combined truck and barge transports saves the company approximately 51 metric tons of CO₂e per year,” Homilius says.

What’s more, the use of sustainable maritime fuels (SMFs) lowers the emissions resulting from transporting Ricola products by sea. Compared to conventional heavy oil, using SMFs can reduce CO₂e emissions by at least 75 percent in the lifecycle assessment.

For shipments to Asia (Hong Kong), Ricola and Dachser have recently completed testing of a transport route from Laufen to the Italian port of Genoa. “Making use of ports to the south further optimizes the transport route and transport time,” Tran says. This explains why the logistics planners are now considering the potential benefit of including additional destinations in Ricola’s supply chain.

More sustainable flight

Ricola’s zeal for climate action means it also wants to further reduce its already low use of air freight. But in emergency situations, it can’t be avoided altogether. “In the course of the project, we analyzed which airline offers the most sensible direct connection and uses a modern fleet of aircraft. After all, this can make a really big difference,” Homilius says. The calculations showed, that on the main transport route from Zurich to New York, there was a massive difference between the best and worst combination in terms of lifecycle footprint: 500 g and up to 1,200 g of CO₂e per ton kilometer. Dachser now also enables Ricola to use sustainable aviation fuels (SAFs), which saved over 150 metric tons of CO₂e in the first half of 2023 alone.

“We’re not trying to save the world by ourselves. But we can and want to do our part to help make the world a better place,” Layer says. At Ricola, this mindset has really struck a chord that goes beyond the innovation projects with Dachser, most recently with an ideas competition for trainees. “Our trainees really ran with it and showed terrific enthusiasm.” The 35 sustainability ideas submitted have so far spawned four projects focusing on wind power, sustainable packaging, food waste prevention, and more efficient purchasing.

For Layer, both the ideas competition and the collaboration with Dachser carry a message of future potential: “We see how making even a few adjustments lets us achieve great things. This makes us keen to do even more, and we will.” Here’s hoping that the image of the unspoiled alpine world continues to have such positive appeal.

M. Schick

Network expertise



The Kristiansand marina

Next level in Norway

Dachser continues to expand its services and capacity in Scandinavia, such as by building new branches and adding to its management structure.

Dachser Sweden is relocating; its new home is currently under construction in Jönköping and will be the company's largest branch in the Nordic countries. The site comprises 1,600 m² of office space, a 10,000 m² warehouse, and a 6,200 m² cross-dock terminal with 70 gates. "We're building for the future. There's great potential for Dachser in Sweden, which we're tapping into with the new facility," says Carl-Johan Westas, Branch Manager in Jönköping and Country Manager European Logistics at Dachser Sweden. The new branch will serve as a central hub for contract logistics in that region.

Dachser is also expanding its logistics services in neighboring Norway. To offer customers in southern and western

Norway further access to the EU markets, Dachser is opening a new branch in Kristiansand, in the south of Norway, in February 2024. It will help strengthen Dachser's network in Norway as well as throughout Scandinavia and Europe.

Overall, Dachser Norway has seen highly positive development. To continue on this trajectory, the logistics provider is also building up its local management structure and has appointed General Manager Armend Krasniqi as Country Manager. Krasniqi joined the company in 2019 and has played a decisive role in strengthening Dachser's market position in Norway.

More capacity in South Bohemia

Dachser Czech Republic has opened a new warehouse in an industrial park in České Budějovice. The 14,000 m² building, located in the South Bohemian Region's capital city in southern Czechia, is tailored to the needs of local customers and offers space for 25,000 pallets. Here, at Dachser's fastest growing Czech branch, the company will offer contract logistics services such as groupage and warehousing. The new warehouse will create 35 additional jobs.



Downtown
České Budějovice



Michał
Simkowski

Sad farewell

Dachser bids farewell to Michał Simkowski: the Managing Director European Logistics at Dachser Poland passed away on November 20, 2023, after a serious illness. He was 51. He is survived by his wife Magdalena and two adult children. "Michał's passing is a great loss not only for our employees in Poland, but also for the entire Dachser family worldwide," says Wolfgang Reinelt, Managing Director of European Logistics for North Central Europe at Dachser. "We've lost an exceptional leader and mentor for the quality of our network, someone whose vision, commitment, and passion were a source of inspiration for many of us. Michał's contributions to the success of Dachser and its customers were invaluable. We shall always honor his memory."

Electric is cool

Another "e-innovation" is being tried out in Food Logistics: Dachser is testing four battery-electric refrigerated semi-trailers in Erlensee, Hamburg, and Langenau. The trailers, manufactured by Krone, are equipped with a modern, highly efficient trailer unit, a 23 kWh battery, and an axle generator. Charging the battery takes about three to four hours at the branch's loading gates. Fully charged, the trailer can be cooled for around five to six hours, even without an additional external power supply or the axle generator.

100 percent Dachser in South Africa

Dachser has completely taken over its previous joint venture in South Africa and is now the sole owner of the Johannesburg-based country organization. In 2011, Dachser had entered into a joint venture with Jonen Freight Pty. Ltd., taking a majority stake with a view to strengthening its global air and sea freight network by operating its own locations in Africa's third-largest economy. Dachser has now acquired the 30 percent of the shares that had remained with the founding Duve family.



Growth trajectory in South Africa



First all-electric
swap-body combination

Dawn of a new, electric era

Dachser continues to advance e-mobility in the supply chain, including in regular operation on long-distance routes. At its Czech branch in Kladno near Prague, Dachser is using a Volvo FH Electric. This all-electric truck takes two swap bodies on the approximately 180-kilometer route between Kladno and Hradec Králové, east of the capital. It runs this regular nighttime service five times a week, there and back. The electric Volvo is also in use during the day, commuting between Dachser and a customer.



For more details
about @ILO, how the
digital twin works,
and what possibilities
it offers, visit the
Dachser website.





The moment Dachser and Fraunhofer IML received the award

A win for groupage logistics

The winner of the German Logistics Award 2023 is the @ILO digital twin. Getting the “Oscar” for logistics is a fitting reward for six years of collaborative research between Dachser and Fraunhofer IML. Now that the technology is being rolled out across Europe, a new chapter in groupage logistics begins.

For a moment, it seems like everyone in the large ballroom of the InterContinental hotel in Berlin is holding their breath—even though the beatboxer “Robeat” is doing all he can to make the air vibrate through his vocal percussion. Then comes the reveal, in beatbox style: “And the German Logistics Award 2023 goes to . . . Dachser and Fraunhofer IML . . .” and the rest of the announcement is drowned out by cheers and applause. The delegation led by Dachser CEO Burkhard Eling and Fraunhofer IML Managing Director Professor Michael ten Hompel had already worked out that they stood a good chance of winning. Now that the tension has broken, the euphoric winning team moves toward the stage, faces beaming, as a frenzy of tinsel streamers rains down on them.

It was six years ago that teams comprising Dachser experts and Fraunhofer scientists began conducting research into various aspects of digitalization in the DACHSER Enterprise Lab. →

In that time, Fraunhofer IML alone has put in more than 1,700 research days. “And now, the @ILO digital twin has finally arrived in the world of logistics and is here to stay,” Eling says.

Following evaluation visits to the four finalists, the 17-person German Logistics Award jury voted overwhelmingly that @ILO, which stands for “Advanced Indoor Localization and Operations,” deserved to win. They were impressed by how Dachser’s and Fraunhofer IML’s joint “DACHSER Future Terminal – High-Performance Groupage Logistics with the Innovative @ILO Digital Twin” project delivers real-time mapping of all packages, assets, and workflows in the transit terminal. Each package receives a two-dimensional Data Matrix code that serves as an identifier. These codes are captured by hundreds of optical scanning units in the facility’s ceiling area.

“This concept, which can be transferred to logistics providers and senders alike, combines and utilizes tried-and-true technologies in an innovative and practical way,” the jury said. Prof. Thomas Wimmer, Chairman of the BVL Executive Board, organized the competition and served on the auditing team. “@ILO solves one of the fundamental problems in groupage logistics,” he said.

The German Logistics Award 2023 places this pioneering research project on a large stage. In October, more than 2,000 people flocked to Berlin to attend the 40th International Supply Chain Conference—the largest and most important networking event in the logistics calendar. Each year, logistics decision-makers and other aficionados from trade, industry, the service sector, and academia come together to exchange news and ideas. It is also an ideal platform for honoring the innovative ideas that shape the logistics industry.

A quantum leap for logistics

Dachser CEO Burkhard Eling is convinced that “when it comes to improving efficiency, the @ILO project represents a quantum leap. It has the potential to be a milestone on the path toward more efficient and more sustainable logistics by providing a whole new level of transparency in transit terminal operations.” For Dachser CDO Stefan Hohm, whose executive unit oversees research and development activities, the @ILO digital twin delivers a new type of transparency on all goods movements in the transit terminal. “In the future, we also plan to give our customers and partners access to the optimization options this opens up.” The rollout is already underway, with Dachser’s Copenhagen, Erlensee, and Überherrn branches first in line. Over the next few years, the solution will be implemented step by step at the larger branches in Dachser’s European network.

Success in multiple research fields

In addition to @ILO, which Hohm notes is Dachser’s largest R&D project to date, the collaboration with Fraunhofer IML in the DACHSER Enterprise Lab has yielded other successes over the years. And these are already reshaping everyday logistics operations at Dachser. Examples include the latest innovations in areas such as AI and predictive analytics, 5G and telematics, automated guided vehicles (AGVs) and ground conveyors, automation and robotics, and IT architecture and data space.

“These successes all stem from the strategy we adopted on day one,” says Dr. Volker Lange, Head of the Packaging and Retail Logistics department at Fraunhofer IML in Dortmund. In this collaborative approach, Fraunhofer IML researchers and Dachser experts pursue a wide range of research objectives in small independent teams. “Right from the start, we made it a priority to have regular in-person meetings, both within and between the individual teams, and to maintain a dialogue with the members of the Dachser Executive Board and the Fraunhofer IML management team,” Lange says.

Large-scale research and development projects like the @ILO digital twin have always had a collaborative learning component, Lange says. This includes a shift in mindset from laboratory scale to everyday logistics practice. A prime example is the newly developed optical scanning units, which are used in the transit terminal to automatically identify, localize, measure, and visualize every package in real time. For the test assembly, the researchers equipped a storage area with a few dozen sensors. Dachser was so impressed by the results that it decided to have the transit terminals at its Unterschleißheim and Öhringen branches equipped immediately for field tests. “Procuring and installing up to 600 of these optical sensors in one go was a real challenge. We were all feeling the pressure for a moment there,” Lange says. “But we all pulled together and everything worked fine.”

“A long research journey is measured by its successes,” says Andre Kranke, Dachser’s Head of Corporate Research & Development and the company’s manager for the @ILO project. The path that led to Berlin is definitely one of those. “Receiving the German Logistics Award has given the entire team a massive boost in motivation. There’s still a lot we want to achieve.”

M. Gelink





Reaching the top together

There's an old mountaineering rule that says reaching the top takes more than just fitness: you also need a good plan and a team you can rely on completely when things get tough. The same is true in the world of work. To hone these skills, twelve trainees from seven Dachser branches throughout Germany met high up in the Alps, at the Blaueishütte mountain hut in Berchtesgaden National Park. Guided by experienced motivational and personality trainer Jürgen Gellich, the trainees tested their limits on summit hikes and by climbing rock faces before rappelling back down. In no time at all, their joint efforts had forged them into a strong team.

Driving innovation with passion.

As a driver of innovation in the logistics industry, DACHSER relies on seamless digital connectivity, both across its own network and with customer systems, and is continuously optimizing all its logistics processes.

Shaping the future.

To ensure we continue to generate fresh ideas, we routinely invest in key trends, technologies, ideas, and innovations. These help us further enhance our process quality and meet new market challenges – now and in the future.

dachser.com



GERMAN AWARD FOR
SUPPLY CHAIN MANAGEMENT
2023