

we do

tesa sustainability goals

Sustainability Report
2022

A black recycling symbol is positioned in the bottom left area of the page. It is a square with rounded corners, containing three chasing arrows forming a triangle.

Beyond the
boundaries of
possibility

(Where is there)
room for
solar energy?

Back to the roots!
More sustainable
backing materials

editorial



Dr. Norman Goldberg,
CEO tesa SE,
on the relevance
of sustainability.

Dear readers,

For more than 125 years, tesa has been working on improving our customers' operations, products and lives in a sustainable way with the help of innovative adhesive solutions. In 2022, we further increased the importance of our sustainability strategy with five highly ambitious action areas. We have made sustainability a priority for tesa and are working on this important transformation of our business with greater speed and urgency than previously planned. We intend to use our expertise and passion to develop adhesive solutions and products that are more sustainable.

Our mission is to increase the pace at which we reduce emissions, vastly improve the sustainability of our products and packaging and ensure responsible sourcing. We have begun to extensively optimize our manufacturing processes at our plants and aim to achieve climate-neutral production by 2030. In the coming years, we will also be investing millions in research projects, knowledge, sustainable materials and our production facilities. We have been involved in the "Business Ambition for 1.5°C initiative" since 2006. We have also emphasized once again our commitment to the ten principles of the United Nations Global Compact and to the Sustainable Development Goals, which we have already been pursuing for many years. In other words, we now intend to make an even greater contribution. Last year, we succeeded in cutting our energy-related CO₂ emissions (Scope 1 & 2) by 27 percent in absolute terms (according to the market-based method) compared to 2018.

All employees support this endeavor – our specialists in the development centers in Germany, the USA and China are thinking differently, creatively and from new perspectives. Our customers are providing daily input on what matters to them for the future and how tesa can play its part in helping them to hit their sustainability targets.

For us, as a company in the chemicals industry, pursuing a holistic perspective and a science-based approach determines our actions and is a matter of course. tesa employs more than six hundred scientists, engineers and product developers around the globe with the expertise to come up with innovative, sustainable products and processes. By focusing on technical innovation, we have our sights set not only on reducing our environmental footprint, but also on achieving sustainable growth for tesa.

I'd like to draw your attention to a few highlights of this year's especially interesting report:

Back to the roots: We have introduced new bio-based packaging tape to the market which can be disposed of in the paper recycling together with the cardboard box. And, of course, we're looking at how we can use recycled materials and are working on opportunities for the circular economy arising from new raw materials.

Source responsibly: A good half of tesa's raw material suppliers have a sustainability rating as of this year. We also reviewed all natural rubber supply chains in 2022.

House of Smarts: In Suzhou, one of our three Customer Solution Centers, we are not only making our mark on the advance of electromobility but also working with customers to find more sustainable solutions.

Room for solar energy: 760 square meters of photovoltaics will be installed on the roof of our company headquarters in the far north of Germany in the coming weeks – further installations in China, Germany and the USA are planned.

Social responsibility has always been a part of our culture at tesa. With a donation of 200,000 euros, we were able to act swiftly to help children and their families from Ukraine with shelters and playrooms. tesa had donated a total of 3.8 million euros by late 2022 to tackle the coronavirus crisis and help with other causes.

These progressive actions stand out positively in a year marked by the coronavirus crisis, the outbreak of war, raw material and energy shortages, and rising inflation. And perhaps they also explain why we are fascinated by the topic of sustainability at tesa and are bringing even more creativity in our search for solutions.

I hope you enjoy reading this informative and inspiring report!



Norman Goldberg

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Creating a sustainable future is our most important task. In this magazine, you will learn more about what we are doing to achieve our main goals and discover which other themes and projects inspire us.

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we do



reduce emissions

Tackling the global climate crisis and accelerating positive change are central elements of our commitment. Our mission to reduce global emissions includes upstream and downstream processes as well as our own production. Renewable energy is a key pillar of our commitment. Since 2020, we have sourced 100% of our purchased electricity from renewable energy sources. In addition to reducing fossil-based energy consumption, increasing energy efficiency also plays an important role. To achieve this goal, we are implementing technologies that are particularly efficient in conserving resources and energy and emission.

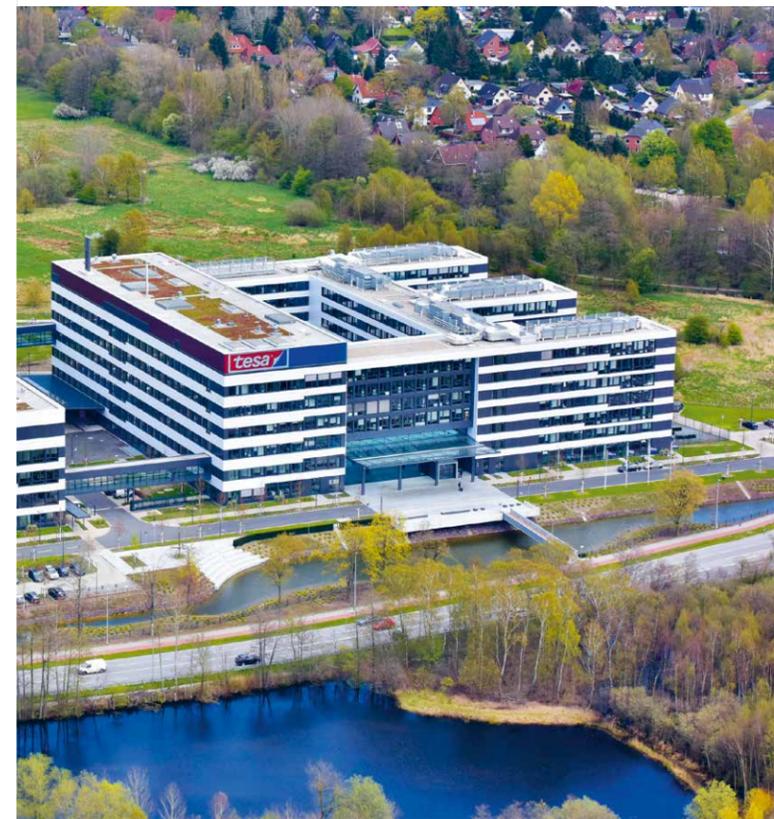
Our major sustainability targets 2030

- Climate-neutral production (Scope 1 and 2) versus base year 2018.
- Our indirect supply chain emissions will be reduced by at least 20% (Scope 3) versus base year 2018.



(Where is there) room for solar energy?

At the headquarters in Norderstedt, the photovoltaics project is moving into the next phase. A look behind the scenes – and on the roof.



Where there is light, there are also shadows. Using the sun's power to generate energy in northern Germany can present certain challenges. The Hamburg region, with an average of 2,252 hours of sunlight per year, is not exactly known as a sunny hotspot in Germany. The 700 photovoltaic modules 32 meters above ground on the roof of the tesa campus in Norderstedt have to offer a certain amount of resistance so they don't end up gone with the wind. Starting in the summer of 2023, these modules will contribute to energy supply.

It's a well-known fact that a bird in the hand is worth two in the bush – or on the roof. This applies to the new facility's potential yield as well. Only a surface area of 1,400 square meters on the campus roofs can be used for the installation of solar panels. Though the total area of the tesa roofs is naturally much larger, there are already a number of other structures on the buildings. Ventilation systems

A place in the sun: The roofs of the headquarters in Norderstedt provide room for 700 solar modules.



Photovoltaics have been used in Suzhou since 2021.

and other equipment make it difficult to install more solar panels since they would generate too much shade for the panels to function. But a place in the sun was found above the tesa Technology and Product Development Center.

For tesa, each kilowatt hour of power that the company can generate itself counts. At all plants in Asia, Europe and North America, photovoltaic systems are already in use (in Suzhou, China), are being installed, or are in the project phase. Planning for the tesa headquarters outside the Hamburg city gates began in 2021. To keep the wind from sending the environmentally friendly technology flying over the roofs of Norderstedt during the next storm, the experts required a bit of finesse: “The suction forces on the edges of the building are so strong that the modules need to be held down with additional weight. What’s more, the roofs are covered in greenery, so the usual method of fastening them from below isn’t possible. We consulted with structural engineers, and in the end we found a customized solution,” reports Tilo Tonn, Head of technical building management.



Retrospective

Looking back: For more than a year, the tesa plant in Suzhou, China, has been working on a variety of levels to reduce its environmental footprint throughout the entire value chain. A photovoltaic system was installed at the site in 2021. The 2,000 solar panels on a rooftop surface of 7,000 square meters enable savings of around 610 tons of CO₂ emissions per year compared with conventional electricity generation.

230,000 kWh per year

are generated by the photovoltaic system at our headquarters per year. This is enough to operate the ventilation system at the technology center.



In the context of sustainability, the bird in the hand represents every effort to save energy and avoid the use of fossil fuels. The photovoltaics (PV) on the top of tesa’s headquarters cover only 3 percent of the current energy consumption on the campus. Still, the expected 230,000 kilowatt hours per year are very welcome. This is enough to keep the ventilation system in the technology center running for an entire year, for example – and it is only one of many ways to save energy and reduce costs, according to energy manager Thomas Erfurth. He finds that, despite such seemingly low numbers, photovoltaics represent an exciting prospect in economic terms. Incidentally, if tesa Norderstedt wanted to switch completely to the sunny side, the company would need to install 50,000 square meters of solar modules, the equivalent of seven soccer fields.

The switch to clean energy sources is a goal of tesa’s sustainability strategy. Since the German sites in particular use great amounts of steam and heat, they must make an extra effort. Where it cannot generate electricity internally, tesa has for years purchased exclusively renewable energy. In collaboration with factory representatives, additional steps are being taken for energy

security – to contribute to the energy revolution as well as sustainability strategy goals. tesa wants its operations to be climate neutral by 2030. Its focus is on the use of energy from renewable resources and optimized efficiency in production as well as at all other facilities where tesa is stationed. The trick here, as almost everywhere, is to balance the three important parameters of sustainability, availability and cost. Our goal for 2030 is very ambitious. “We understand ‘climate-neutral production’ to mean an actual reduction in emissions and the use of fully renewable energy. We will only compensate for emissions that cannot be avoided in the short and medium term with high-quality certificates,” report the tesa energy experts.

The birds in the bush are far off and hard to get to – much like all the leaves and dust their fine-feathered friends leave up on the solar modules every day. In the future, a cleaning team will climb to the sunny top of tesa in Norderstedt once a year. The panels must be kept clean so they can soak up as much sun as possible. As far as this “dark side” of the technology is concerned, a dirty little bird on the roof would certainly be easier to care for than two in the bush.

 Find out more about climate protection and emissions at tesa on pages 48-50.

Beyond the boundaries of possibility

“We shall either find a way, or make one.” Hannibal, a great military commander in the ancient world, might have had a brutal approach to achieving his goals, but this saying attributed to him still rings true today in logistics and is indicative of the professionalism and creativity that go into reaching goals.

T rue trailblazers like the specialists at tesa move mountains to ensure that around 7,000 different adhesive solutions get precisely where they need to be all over the world. Balancing availability, service quality and cost efficiency while also incorporating sustainability is a mission in itself. tesa has come up with a master plan for this.

The aim and intention is to manufacture, provide and ship products as quickly and punctually as possible. Air freight in particular is generally considered a relevant originator of climate-damaging CO₂. How can we depart from well-trodden paths without losing sight of customer satisfaction? Ultimately, dates and deadlines are dictated by what goes on elsewhere: a large smartphone producer in China may order wafer-thin adhesive film today, ideally for delivery yesterday, while auto-makers require a wire harness bundling and protection solution in North America, and a home improvement store in Bavaria needs more painter’s tape. Off go the packages...



The fine art of logistics lies in improvization

Balancing environmental compatibility and cost effectiveness and coping with the current energy crisis often requires us to think smart and outside the box. tesa has set itself ambitious sustainability targets for its logistics operations. These fall under the “Reduction of emissions” strategic action area in the sustainability strategy. A roadmap has been laid out with initial plans, and the means, routes and modes of transport are being scrutinized.

As is the case for other companies, logistics emissions contribute to tesa’s overall Scope 3 footprint as defined by the Greenhouse Gas Emissions (GHG) Protocol. The declared objective is to reduce these by 20 percent in absolute terms by 2030, compared to the 2018 baseline. One of the first projects for this in the transport category at global level involves optimum capacity utilization of the containers used in overseas shipping. The pallets in these containers are now being stacked higher and higher, which has already resulted in a promising decrease in the number of container loads booked in 2022. “It’s about smart planning,” says Michele Hinze, Corporate Logistics. “How can we better predict when we will have to move which products in our global network? We might also leave a container where it is or order it for later. Having an overview of all the requirements is crucial.” Like in many other areas of planning, digitalization will make the difference here. And tesa has already started with this.



tesa’s Europe logistics region also wants to cover further ground on the road to sustainable success. The tools for this include order consolidation and optimized delivery cycles. This would then render unnecessary some of the approx. 94 million ton kilometers registered annually (tkm = kilometers covered multiplied by the quantity of goods transported in tons).

A reduction in air freight would be welcome, but, “many electronics customers in the Chinese market impose demanding shipping deadlines and are rather spontaneous with their orders – unfortunately, this means we sometimes have no choice but to ship the ordered products by air,” says logistics expert Michele Hinze. “However, we are confident that we can develop models that will take account of sustainability and customer satisfaction in this and other transport areas.” This includes tesa optimizing its production and storage facilities worldwide, as it did in China in 2022. Another plant is also currently being built in Vietnam. “In general, tesa’s ‘local for local’ concept will increasingly result in shorter supply chains – for example, in Asia. If tesa’s production remains close to all of its local markets, then we will be able to gradually cut our transport distances and thereby reduce emissions,” says Hinze.

To put it in similar terms to Hannibal: We will either find a way, or pave one ourselves.

 Find out more about our reduction of emissions from page 48.

“In general, tesa’s ‘local for local’ concept will increasingly result in shorter supply chains.”

Michele Hinze, Corporate Logistics

we do



source responsibly

We want to ensure that fair working conditions, human rights and environmental protection are upheld along the supply chain. To this end, we plan to use certifications, get involved in associations and assess suppliers. In the long term, we aim to achieve 100% responsible and sustainable sourcing for all of our raw materials.

Our major sustainability targets 2030

- We target full transparency of our supply chains.
- At least 80% of our spend will go to suppliers that are aligned with our sustainability standards.

“By 2030, we intend to establish full transparency regarding the sustainability of our supply chains.”

tesa sources raw materials from over 800 suppliers in many parts of the world. In order to ensure responsible sourcing and further expand our practices in this area, tesa established a team of experts to address this element of our sustainability strategy. In our interview, Jane Chen, Head of Responsible Sourcing, talks about the developments that took place in 2022 as well as transparent supply chains and bio-based materials.

What does responsible sourcing at tesa involve?

When purchasing raw materials, primarily in Asia and Europe, tesa aims to ensure the high quality of our products and their availability at all times. What’s more, we are equally committed to assuming social and environmental responsibility along the supply chain. tesa is on the right track in this regard, as demonstrated by our Code of Conduct for Suppliers (CoCfS), for example. For many years, this has set out in very concrete terms our funda-

mental rules and requirements in respect of human rights, labor standards, environmental protection and corruption prevention. The CoCfS is reviewed and updated on a continuous basis.

What are tesa’s targets for the coming years?

By 2030, we intend to establish full transparency regarding the sustainability of our supply chains. And we are not starting from zero – in 2020 we began to invite our material suppliers to share their sustainability performance via a sustainability plat-

form. We want to build on what has been achieved to date. By 2030, we intend to direct 80 percent of our expenditures solely to suppliers who not only fulfill our sustainability standards but also have the certification to prove their commitment to these.

Already at this stage, half of tesa’s raw material suppliers can produce the relevant, audited self-disclosure forms. This is also true for tesa itself, as we also act as a supplier for various industries and have obtained EcoVadis certification, for example – currently with a “Silver” rating. We aim to continuously improve in the future.

Isn’t it difficult for some of the smaller material suppliers to conduct these kinds of equivalence assessments?

That may be the case, as certifications and assessments take time, effort and also money, even if evaluations like this generally take the size of the company into account. There are also some companies that do not yet see any particular need to carry out these assessments because they can find other customers whose requirements are not as high as ours. But we have noticed a positive trend and interest worldwide.



Jane Chen, Head of Responsible Sourcing, on the responsible sourcing of raw materials. One focus is the use of certified natural rubber (see image) as a bio-based raw material.

70%

of the materials tesa uses should be bio-based or recycled by 2030.

What hurdles have to be overcome?

More sustainable alternatives are not yet available for some raw materials, and there are also limits in terms of the availability of the raw materials. In addition, close cooperation is required with all stakeholders along the supply chain – and sometimes tesa is just a small cog in a big industry in this regard. We have to convince suppliers of our path to greater sustainability, which sometimes also means putting pressure on them in order to bring about change. A great deal of persuasion is still needed. Sustainability is by no means afforded the same relevance in all countries and industries as it is here with us.

Do the raw materials themselves and their contribution to sustainability pose a particular challenge?

tesa aims to increase the share of bio-based or recycled materials to 70 percent by 2030. This includes natural rubber, paper, cotton and fabric, as well as natural resins and new bio-based raw

materials such as monomers and polylactic acid (PLA). Ideally, we are also able to prove the responsible origin of the raw materials with accredited certifications. To do so, we primarily count on the FSC standard for paper products. Natural rubber is often PEFC-certified. As certifications of this nature are often specific to materials and not standardized globally, we are not always able to procure all raw materials from certified sources. We are continuing to work on this as an important element of transparent and responsible sourcing.

Recyclates are the second big raw material area...

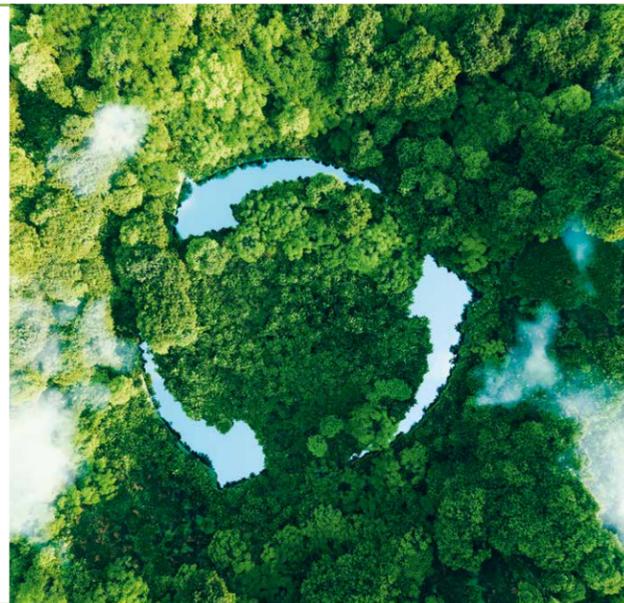
The more companies that use recycled material, the less new material will be produced. That's good. However, we also have to take care not to create an imbalance between the significantly increased demand for recycled materials and their



Responsible sourcing involves social and environmental responsibility. More on sustainability in our supply chains beginning on page 60.

Consciously sustainable

tesa's supply chains are complex, since the necessary raw materials come from across the globe. From the company's perspective, sustainability is not just a matter of responsible sourcing, product development or communication. tesa sees itself as part of a wide community of different players who are moving boldly ahead to take responsibility for our future. This includes not only our suppliers and customers, but especially our employees. They are all called upon to think and rethink things. Such a shift in awareness has a big impact on day-to-day work. It motivates people to promote sustainability out of conviction.



“We need to make sure that everyone, no matter what job they do, recognizes the importance of sustainability and takes the initiative to see how they can make something more sustainable.”



Jane Chen, Head of Responsible Sourcing

still limited supply. The recycling industry needs time to obtain more material, improve the efficiency of recycling processes and establish closed cycles.

How are goals and measures managed and monitored?

The responsible sourcing action area has a very broad interface to numerous functions, task forces and business units within tesa. There is very close collaboration with the Technology Development department, which is responsible for testing all materials to determine whether they meet our various requirements for greater sustainability.

During product development, we also frequently collaborate directly with our customers. Industries such as the electronics and automotive sectors have considerably different requirements of materials. We take an open-minded approach and

develop new concepts that will make our adhesive solutions and our customers' products more sustainable in the long term.

What is the outlook for the years ahead?

We have established specific goals and are passionate in pursuing these. Wherever possible, we want to go beyond the requirements of the regulations in the area of sustainability.

Our goal of ensuring that at least 80 percent of tesa's suppliers have demonstrated a responsible approach to sustainability to a high standard by 2030 is a realistic one. As they say, "How do you eat an elephant? One bite at a time."

we do



rethink materials

tesa has set itself the goal of significantly increasing product sustainability and is working on this every day. Over the next few years, for example, we will be developing many new products that make a sustainable contribution to our top product ranges in the automotive, electrical, and construction industries, as well as for our consumers in the office and home. In doing so, we are focusing on the reduction of non-recycled fossil plastics and will increasingly use recycled and bio-based materials.

Our major sustainability targets 2030

- 70% of the materials for our products and packaging will be recycled or bio-based.
- We will cut the use of virgin fossil plastics by half until 2030. In our packaging we want to achieve this already by 2025.

Not all PCRs are alike

When it comes to recycling material for blister packaging, transparency is required. tesa's new more sustainable sleeves are made of 100 percent post-consumer recycled material (PCR).

Straw today, gold tomorrow? Though not impossible in fairy tales, everyday industrial reality prefers not to rely on hocus-pocus. Tangible inventions and developments are required if a material is to be replaced with another, better one. This was the case when we set about to create "green" packaging for our famous tesa tape. The trick was to use worn-out and recycled consumer plastic waste (PET-PCR).

What might have until recently been a PET plastic bottle is now more sustainable packaging that protects the well-known adhesive film as well as about 350 additional tesa consumer products. Millions of hobbyists and do-it-yourself enthusiasts won't notice the difference. While plastic for the transparent wrappers was still produced using crude oil as a fossil-based energy source (PET standard)



👁️ "Reduce, reuse, recycle" is the principle at the heart of our waste and raw materials management. Find out more beginning on page 50-51.



On course

With its sustainability targets, tesa is in step with the times. Within the context of the Green Deal, the EU Commission is currently proposing additional new packaging regulations. These are intended to reduce the demand for primary raw materials, increase Europe's recycling capacity and minimize its dependence on primary raw materials and suppliers from non-European countries. Ultimately, everyone wants to avoid the nearly 50 percent increase in plastic packaging waste that is projected to accumulate in the EU by 2030 unless countermeasures are adopted.

until the summer of 2022, fully recycled plastic has gradually been introduced, and the transition is now complete. The crystal-clear appearance has been preserved through the green innovation, and the protective wrappers are now even thinner. This reduces the material used by up to 20 percent. The sustainable blister covers – retaining their high quality – continue to make all adhesive solutions look smart on store shelves while protecting them from dirt and damage.

Numerous experiments were needed to achieve a customized mixture of post-consumer recycling materials (PCR). After all, not all PCRs are alike. Different kinds of recycled plastic were tested using varying amounts of recycled material from consumer plastic waste and bottle flakes to make the resulting material as colorless as possible. The final result was a crystal-clear "green" product.

tesa is "Rethinking materials" to reduce the virgin plastics it uses in packaging – meaning non-recycled fossil-based plastics – by at least



All shrink-wrap packs for packaging industrial products are also more sustainable. They now consist of up to 50 percent recycled plastic (PE-PCR).

50 percent by 2025. To manage this, quite a bit more straw will still have to be spun into environmental gold.

Film for shrink-wrap packaging is also becoming more environmentally friendly

Not only has the blister packaging produced at the Offenburg tesa plant become more sustainable, but so has all the shrink film needed to package industrial products. Starting in the spring of 2023, this will no longer be made of the conventional 100 percent PE standard. Instead, 50 percent of it will come from PE-PCR industrial waste, i.e. recycled plastic. However, more than 50 percent of the films cannot be made of recycled material or they would not be durable enough to hold together objects such as roll containers; they would stretch or tear. But we will keep trying and strive for continuous improvement.

19 million

blister covers are manufactured every year from recycled plastic at the tesa plant in Offenburg; they come in various sizes and shapes for around 350 different types of articles.

Back to the roots, back to future

Natural and rich in recyclable material: tesa developers put alternative backing materials to the test.

tesa is continuously researching and developing new technologies and products to get it just right. From the initial steps to quantum leaps towards a sustainable future, everything lies in the hands – and heads – of our 600 in-house specialists around the world. They bear great responsibility, for example, when it comes to finding and creating backing materials that are more environmentally friendly.

Back to the roots, back to future – both bio-based and recycled raw materials that already have their roots in plastic products used in private homes and industry have excellent prospects at tesa. tesa has already committed to increasing the share of recycled and bio-based materials used to 70 percent and significantly reducing CO₂ emissions by 2030. What are the “natural” limits to chemistry in this regard and how can they be overcome? Why is it so complicated to make the move back to nature? A project team has been tackling these issues for quite some time now – and has already found an exciting answer in cooperation with a large number of stakeholders.

Pioneering work for product solutions that perfectly meet the requirements

As tesa does not produce all important backing materials combined with adhesive to create adhesive tape in-house, there is a great deal of interest in ensuring that sustainable innovations in the industry for film, foams, paper backing, fabric, non-woven material and even laminates are also a precise fit for tesa’s adhesive solutions. “For this reason, we collaborate closely with a wide range of partners. Either they already have solutions in their portfolio that meet our specific requirements or we want to work with them to develop formulas tailored to our needs,” says Dr. Ingrid Sebald, who is responsible for product

and technology development at tesa. “In this regard, we really are a pioneer for these adhesive systems.”

In trial and pilot facilities, tesa tests the suitability of these and other materials for many of tesa’s 7,000+ products. Bio-based and recycled materials are promising backing materials. Alternative mediums such as PLA film (based on natural cornstarch) or from recycled paper and recycled PET film (made from post-consumer plastic waste such as water bottles) are now commercially available and have already been incorporated into various tesa products following extensive test phases.

“**Our goal is to achieve the perfect result. We find ways to do this.**”

Dr. Ingrid Sebald, Chief Technology Officer

More complex film made from recycled materials is yet to be developed. “The building blocks we use are often already quite specific and therefore require particular backing materials,” explains Dr. Sebald. Quality is crucial for these, but it is not always possible to find recycled materials that meet the requirements. “We test everything available until we achieve the perfect result.” For example, tesa is also active in the area of chemical recycling. Here, the entire polymer chain is broken down again into its monomer building blocks. “Although these monomers come from a petrochemical source, they can then be recycled and reused. And the end product is also recyclable.” Here, too, the future is clearly rooted in the past.

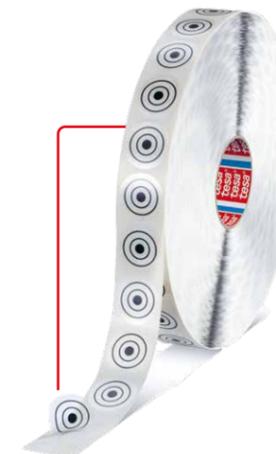
 More on our circular economy beginning on page 50 and 58.



Test passed: At the end of a long trial phase are qualified materials.

Around 600

of tesa’s in-house specialists worldwide work on finding the right chemistry.



Hole-covering tape for the automotive industry, with a 90 percent PCR PET backing, is one example of a product that has made the grade and established itself on the market in recent months.

we do

push circularity

tesa will contribute to the circular economy and use resources as carefully as possible. First and foremost, this involves avoiding waste. Where that is not possible, we reduce it. Where waste is unavoidable, we seek to reuse or recycle it by various means. By 2025, we want to eliminate all landfill disposal of production-related waste.

tesa will further invest significantly in the further development of solvent-free and energy-efficient production technology and capacity. The facilities on which we currently coat with solvents are to be technically upgraded so that the solvents are fully recovered at the end of the process and thus remain in the cycle.

Our major sustainability targets 2030

- We strive for reduction of waste from our production and products.
- By 2030, we will provide more products with sustainable end-of-life solutions.
- We will invest into solvent-free processes and full recovery of solvents.

Original ideas
are worth
their weight in
gold.



At tesa Manufacturing Hamburg, the specialist in precision punched parts, employees are boosting the circular economy. An impressive 15 tons of release liners no longer need to be burned every year and are now recycled instead.

Used to be a valve on a coffee bag,” reads the label. The joint effort for increased sustainability includes similar success stories. “I am a model for success” is the claim of the pilot project specifically launched for this at the Hamburg-based stamping specialist in May 2022. Tons of paper waste are produced there every year, also due to the yearly production of an impressive amount of around 300 million coffee bag valves. Now, in cooperation with a specialized company, these are being reintroduced in a new raw material cycle and are no longer being incinerated. At the processing center, they are first collected and then picked up from our partner, who separates the silicone layers as part of the “RafCycle” process before reusing the remaining pulp and paper for new labels or other paper products.



More on the subject of waste at tesa from page 50.

“The best product solutions often emerge in everyday life.”

Tino Heitmann, tesa Process Engineer

Many types of waste can be reintroduced in new cycles

“The best solutions are often found in everyday life,” says tesa process engineer Tino Heitmann from tesa Manufacturing Hamburg. There, over a billion stamped adhesive strips or dots for the most diverse applications – such as coffee bags – are produced every year. Production waste includes a number of materials that cannot be recycled as scrap paper or plastic waste. In particular, this concerns release liners that were used to cover processed adhesive tapes or gaps.

Nowadays, the staff at industrial companies maintain constant communication with other specialists – for example, the waste disposal company next door – as part of their day-to-day activities. A similar opportunity brought the creative tesa employees closer to the solution for more sustainable waste recycling. Now, a number of paper companies offer special recycling programs for exactly these kind of materials. Why shouldn't tesa get on board?

“Team spirit and collaboration for the environment pay off,” say the resourceful stamp pros. Recycling release liners can even translate into a small plus in tesa's finances, as well as “the certainty of having made a significant step towards a circular economy.” And the pragmatists have their sights set on the recycling of other waste materials too. The next recycling success story could also begin with “I used to be a”.



The Collective

At tesa, the passion for collecting has taken hold. tesa Manufacturing Hamburg is finding really great deals. In addition to great quantities of release liners, a further pilot project deals with the recycling of other types of film that are no longer disposed of as commercial waste. This prevents the generation of at least seven tons of waste every year – and we can even sell the waste, which is rich in recyclable material, instead of having to pay to dispose of it as in the past.

Packaging and other films have been collected separately since fall of 2022 and handed over as recyclable material to a waste disposal company based near tesa's processing center. In addition to waste prevention and increased recycling, the mindful handling of materials also brings in cash since the packaging and stretch film made of PE (polyethylene), PP (polypropylene) or PA (polyacrylate), or also “roll maskers” – the industrial variety of Easy Cover® film for painting for home use – contain valuable materials that can be reused. That makes for an attractive collection. Waste becomes a valuable source of raw materials. A true collector's item.



Around
300 million
coffee bag valves

are produced at tesa Manufacturing Hamburg every year. Since May 2022, even the release liners used in this process are recycled.

we do



support customers

Achieving a higher level of sustainability is an important goal for many of our customers – just as it is for us. We are taking this path together with them and supporting them with innovative adhesive solutions. In addition to our own product sustainability, we are working to ensure that our customers enjoy ecological benefits through the use of our products; for example, tesa® Bond & Detach makes smartphone components recyclable and can be removed easily without leaving any residue. The aim is to make these contributions more visible in the future.

Our major sustainability targets 2030

- Innovative adhesive solutions are available for our customers that contribute to sustainability of their processes and applications.
- We will make these positive contributions measurable.

House of Smarts



A smartphone clatters to the ground for the fiftieth time. A tablet display bakes under a sunlamp, an adhesive hook holds its own in icy water and an electric car battery is put on a restricted feeding schedule. These are all everyday occurrences at the largest of tesa's three Customer Solution Centers (CSCs).

Expanded in 2022, the "House of Smarts" is a future lab for all kinds of adhesive solutions and therefore sometimes also a place where new developments are put through stress and endurance tests. Sustainability is built in. "The annex itself is probably the best-insulated building in this Chinese metropolis," Uwe Michel, Head of the tesa Customer Solution Center, notes with a smile. All kinds of equipment for developing new products can be found throughout the five floors of this state-of-the-art, environmentally friendly building. Behind the insulated facade and its

triple-glazed windows, an activated charcoal filter system also ensures that no vapor is released into the atmosphere.

Specific stress tests for every scenario

The predecessor facility set up here near China's east coast in 2008 was quickly bursting at the seams. It has now gained an additional 5,400 square



Smart solutions from the tesa Customer Solution Center in Suzhou allow customers to operate more sustainably.

meters of space in the large annex. The goal remains the same: the laboratory units aim to help companies find the best possible adhesive tape and application solution from tesa for their requirements. This also allows them to operate more sustainably themselves. To enable this, the products get put through their paces. Extreme heat, icy cold, floods of water, heavy loads and movements ranging from uncomfortable to turbulent are just some of the criteria that products are tested on here. Ultimately, the tesa adhesive technology has to meet the relevant product specifications, namely strength and durability requirements. These are usually some years in the case of a smartphone, a full 15 years for a car and even 30 years when bonding facade parts.

After numerous trials, tesa is able to deliver clever adhesive tape elements for any scenario – tailored to the smart products of its major industrial customers. The know-how at Suzhou is available to the entire Asian market, from India to China to Australia – a

region known as a source and stronghold of popular consumer electronics such as smartphones, tablets and wearables. "But also a longstanding key market for electromobility," says Uwe Michel, "as you cannot have electric cars without display screens."

Smart cooperation for products in development

All of the up to 2,000 customers per year that can meet with the tesa specialists or, for example, take part in training in the CSC share similar goals. Given the breathtaking pace of development in smartphone design and similar products, tesa has to continuously come up with new solutions for bonding screens, batteries and casing parts. These developments are generally cooperative projects between the tesa Customer Solution Centers and the product development laboratories in China and Norderstedt.

The reparability of popular devices is a high-priority topic in China at the moment. Smartphones break quickly because they easily slip out of our hands and pockets. The screens and back panels are made of glass that shatters and has to be replaced. All of these elements, as well as the batteries, are often held in place today by wafer-thin tesa adhesive tape, which can also be detached to some extent to repair individual components. This is not only cheaper than purchasing a new device, but also more sustainable because it extends the service life. Some governments are also recognizing this. In Europe, for example, the law will require smart communication technology to be repairable to a certain extent from 2025

onward. “This means we have to find ways to ensure that individual parts can be replaced,” says Michel.

The Customer Solution Center is the right place for challenges like this, with the specialists there working tirelessly to find solutions – for example, if a mobile phone manufacturer decides that a repair time of 45 minutes is 39 minutes too long. According to Uwe Michel, an impressive 80 discarded smartphones successfully served as guinea pigs in Suzhou. They were dropped, taken apart and then put back together perfectly. The bondings were repeatedly reformulated and repositioned until a new, doable six-minute repair standard was achieved. “Our cus-

tomers is happy. Saving this time means real money for the manufacturer and ultimately also the repair shops.”

**State-of-the-art equipment—
from a climatic chamber to
an innovation workshop**

The almost 50 specialists in Suzhou love to tackle these kinds of tricky tasks. In 2022, they ran around 1,900 projects to work on optimizing products. For example, automakers can see in person how adhesive tape is automatically applied to vehicle bodies for the painting process. A sizable walk-in climatic chamber

“In the past, we would send sample adhesive rolls by parcel, but today we can do this by email in some cases.”

Uwe Michel, Head of tesa Customer Solution Center



With a trained eye, the team of experts at the Customer Solution Center keeps a watchful eye on customized solutions for our application solutions. Through our product solutions, we aim to help our customers increase the sustainability of their production and achieve their goals.

**Around 50
specialists**

work at the Customer Solution Center in Suzhou. In 2022, they optimized products for approximately 1,900 projects.



enables testing with large objects that are brought in, while an innovation workshop can be used by project teams for brainstorming and testing. These are just a few of the opportunities that the center offers. One entire floor is home to offices and labs equipped to the highest technical standard.

This is a good place to work – also in the field of electromobility. Every kilo counts when it comes to battery range, so tesa is helping to cut crucial weight from the electrical system, for example. “We are able to give a fixed form to cable bundles there, which had not been possible until now for space reasons. For this, we have developed a new cable wrapping tape that is cured by UV irradiation. This gives cable bundles in the electrical system a structure, while also reducing weight and creating space. Compared to conven-

tional cable ducts and depending on the specific application, this can save up to hundreds of grams in weight. At the same time, it frees up room that can be used as precious installation space, which is often in short supply. Smart solutions can also be developed for new trends that are bringing increasing levels of functionality and intelligence to vehicles,” explains Uwe Michel.

For example, incremental progress is being made day after day with the aid of drop towers, tumblers, autoclaves/pressure tanks and lots of enthusiasm. The Customer Solution Center doesn’t just put in-house adhesive solutions on the test track or run computer-simulated stress models to meet requirements profiles, though. As a very innovative form of customer service, the team is especially proud of the invention of

its virtual adhesive tape. “Where previously we would have sent adhesive rolls as samples in a parcel, we can now use email for this in some situations,” says Uwe Michel, explaining the innovation.

The tape is now described digitally. While this does take a good two weeks, “customers know in advance all the special features that we can offer them and can swiftly adapt their product to take advantage of these. When they have drawings available at such an early stage, they can change something with just a few clicks on the computer, making the smartphone shell a little wider, for example, to suit. This eliminates complex reworking later on. Providing a digital twin means that our customers get a sample at an early stage, which really helps to accelerate development.”



people
and
society

Sustainability within your grasp

Explore, participate, inquire. Over the course of three action days, employees were given an impression of the ways in which our sustainability strategy is being implemented in practice.



Clearly a "sought-after" event: The sustainability experts were available to answer questions at various stations at our headquarters that led through the diverse aspects of sustainability at tesa.



With great dedication, tesa is currently translating its ambitious sustainability strategy into specific programs, projects and initiatives. Sustainability is integrated into the existing organizational structure, and hundreds of employees are already actively involved. In order for the sustainability agenda to become an integral part of daily work, it is important for everyone to develop the same understanding of its importance, the topics involved and the challenges it presents. Explanation and clarification are at the heart of the sustainability strategy's success.

What makes the difference with natural rubber? How is blister packaging becoming sustainable? What levers do we have to make production processes more environmentally friendly? What do we want to change going forward, so that tesa can quickly achieve its ambitious goals for more sustainability?

Over the course of three action days in the fall of 2022, employees at the tesa headquarters were able to familiarize themselves with these and other topics relating to the company's sustainability goals. Joining in, asking questions and discussions were expressly encouraged. Various initiatives such as information booths, lectures, discussions, film presentations and tours were on the program. The focal point was a large informational marketplace where projects that have already been initiated could be discovered, touched and observed. Experts in the areas of technology development,

production, energy procurement, product sustainability, packaging and climate protection were on hand for discussions and to provide answers to the participants. CEO Dr. Norman Goldberg and Chief Sustainability Officer Dr. Stefan Röber opened the sustainability week together. "Sustainability is mandatory," is the CEO's message. "We all have to pitch in and help contribute." Specialist presentations and keynote speeches by organizations such as the WWF and the European School of Management and Technology (ESMT Berlin) sparked numerous new ideas and interesting discussions.

An interactive tour provided informative insights behind the scenes

The event would not have been complete without a look behind the scenes. During a tour to the technical supply facilities, employees learned about subjects such as the energy concept at tesa's Norderstedt location. The demonstrations were very descriptive – showing how the company's own combined heat and power plant works, how much power the building needs, and where there is still potential for optimization. Participants gained these and other interesting insights during an interactive tour.

There was great interest in the topics on the agenda, as well as intense discussion. There was one key takeaway from the day: "Don't wait for instructions or an invitation in either your work or your private life. The time to act is now. Be part of the transformation! All employees can contribute and submit ideas," urged Stefan Röber in his closing address at the first sustainability week. Additional action days are currently being organized around the world.

"Sustainability is mandatory. We all have to pitch in and help contribute."

Dr. Norman Goldberg, CEO



The sustainability marketplace provided employees with a wealth of information.





A light in times of need – social responsibility at tesa

For Solomiia from Ukraine and Natalia from Guatemala, for Dipan from India and Majo from Colombia: There are still so many children without adequate or permanent access to education, even though this is a basic human requirement. Some children do not even get to go to school at all. tesa is there to help them in many parts of the world – after all, compassion knows no borders.

For many years, tesa has been providing neighborly assistance in the form of funding for children’s rights organizations and local projects near to where our sites are located. We are committed to promoting the education of young people, especially in the area of science and technology. By the end of 2022, tesa had donated 3.8 million euros to alleviate the consequences of the education crisis brought about by the coronavirus pandemic and its ripple effects, especially

school closures lasting months. 1.7 million euros of this went to Save the Children, with whom we work closely. Under the motto “Education connects. Together worldwide.”, the world’s largest independent children’s rights organization and tesa joined forces during the coronavirus pandemic to combat ever-growing educational inequality through aid projects in six countries on three continents.

This commitment did not mean that children in numerous other countries were forgotten. Poverty is growing, and with it hardship. “The sky’s the limit” is the challenge facing all who want to help. “tesa once again wholeheartedly demonstrated its commitment to the children of this world in 2022,” says CEO Dr. Norman Goldberg. For example, Save the Children used tesa donations to continue its Safe Back to School global education initiative and sought to instill a love of reading in children in Colombia with the Dream, Live and Read club project. Catch-up clubs were also established there and in many other countries in order to help children catch up quickly with the educational material they had missed during the pandemic.

This crisis was no way near over when Russia attacked Ukraine in early 2022. “We are all shaken by the terrible news reports and images coming out of Ukraine,” said Dr. Goldberg in his initial reaction. tesa immediately donated 200,000 euros so that Save the Children could help young people and families from Ukraine. The organization set up mobile shelters and playrooms, for example, where children and parents could take a break and receive psychosocial support directly on the ground. In addition, the organization provided care for refugee children and their mothers arriving at the borders and reception centers in Romania, Poland and elsewhere.

The focus areas of tesa’s support with other partner organizations differ from country to country. In Suzhou, China, children

from migrant families are assisted under the Sunshine Education Program, while 445 children at the Guangong Village School received much-needed “hardware,” from a water dispenser to a new projector. tesa sites in China also invited a few hundred pupils of different ages to visit our plants and learn about the possible careers there.

In Vietnam, we assisted orphans and children with HIV, while tesa’s plant in Haiphong donated a water heater and filter system to the Tanh Xuan Social School. Other examples of good deeds in 2022 included support provided to primary school children in Indonesia in the form of fans, lockers and snacks. Food, clothing and medication were given to the Philippines Orphanage Foundation. The list of donations is long. Many projects and institutions in Africa, Asia, Australia and the Americas as well as all over Europe received contributions from tesa. Sometimes these donations were a few hundred euros, but often they ran to many thousands. And occasionally they came in the form of a donation in-kind. The tesa plant in Offenburg gave 800 rolls of tesa tape to the Freiburg City Mission, which organizes German classes for Ukrainian children fleeing the war – including Jurij.

tesa’s activities are based on the guiding principle “Holding the world together – for a sustainable future.” This reflects not only tesa’s core competence, but also our determined aspiration to take responsibility for the world around us.

200,000 euros

directly donated by tesa to Save the Children to help children and families from Ukraine.



Lucky cents from employees for a good cause

tesa employees are also very willing to make donations themselves. Many of our staff at a number of German tesa companies donate the odd cents from their monthly wage packages. At the end of the year, tesa doubles this amount. In the reporting year, a total of 9,087.36 euros were raised. The beneficiary organization will be decided together.



substantials

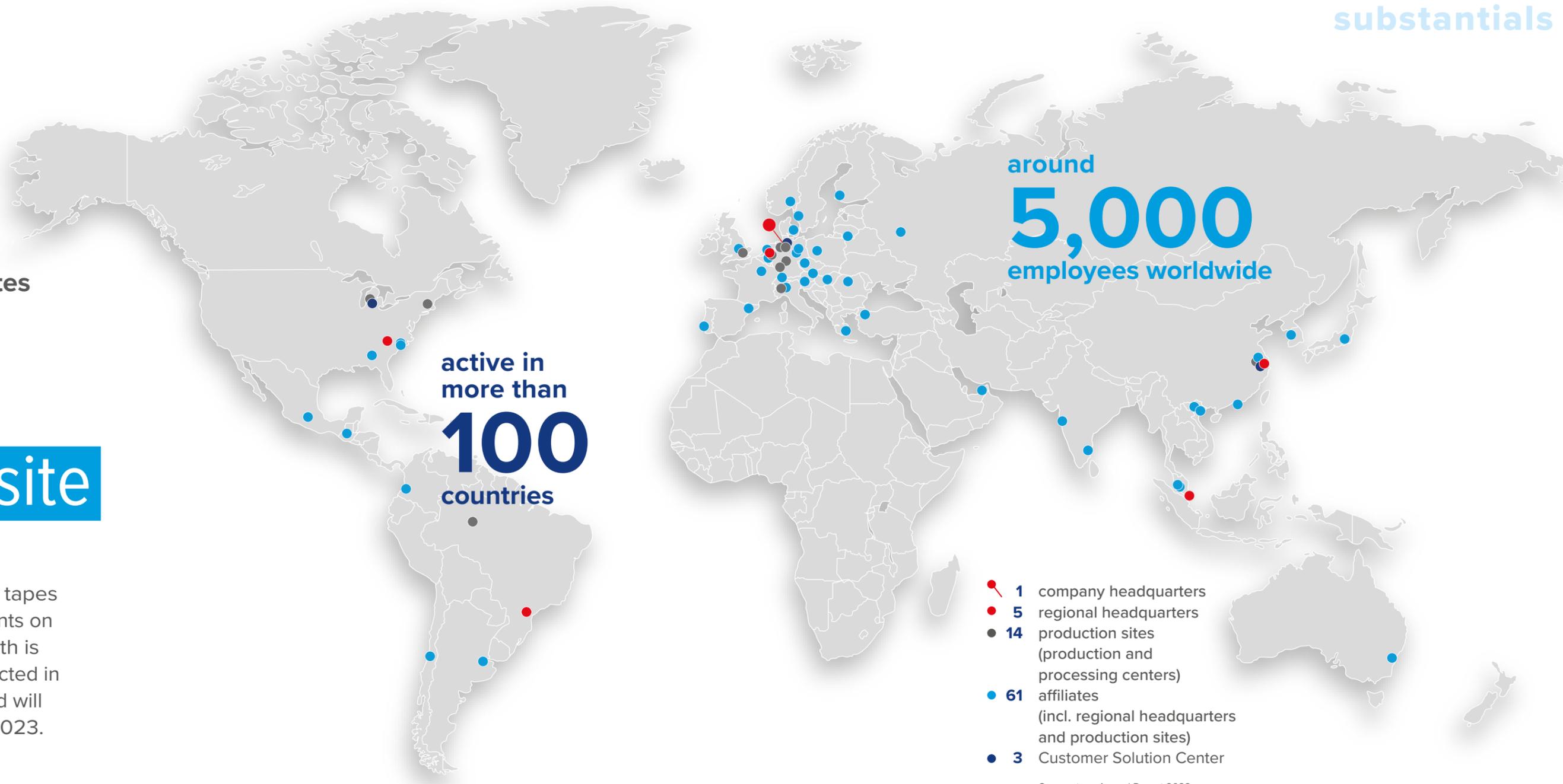
14

production sites

(production and processing centers)

Site by site

We produce adhesive tapes for the world at five plants on three continents. A sixth is currently being constructed in Haiphong, Vietnam, and will be commissioned in 2023.



Sparta – USA



Concagno – ITALY



Offenburg – GERMANY



Hamburg – GERMANY



Suzhou – CHINA



completion in 2023
Haiphong – VIETNAM



Fascinating details

More than **7,000** adhesive solutions

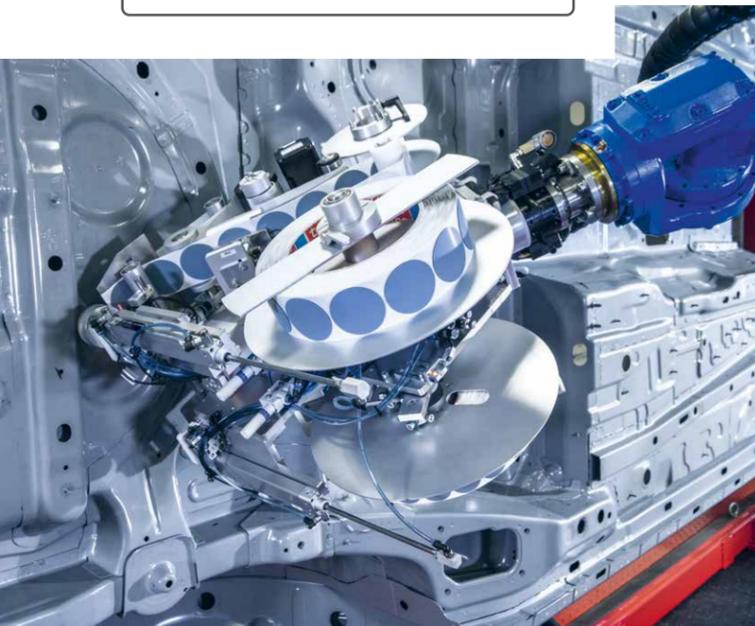
are already improving the work, products and lives of our customers.

More than **125** years of experience

with innovative product solutions are contained in every tesa product.

130+ different adhesive tapes

are used in the production of electric cars – for example, in the bonding of battery packs.



More than **100** products

are introduced to the market by tesa every year.

Ratings and rankings confirm our clear commitment to sustainability.



Find out more at <https://www.tesa.com/en/about-tesa/sustainability/sustainability-ratings-assessments>



Since 2014, **1.8 billion** smartphones

have been equipped with innovative adhesive technology developed by tesa that makes it possible to replace the battery.



600 engineers and developers

develop our tapes so they are in tune with the times, and adapt them to the needs of our customers in all areas.



facts and figures



Environment

Reducing emissions and using resources responsibly: These are the areas we focus on with our environmental protection efforts. We aim to achieve completely climate-neutral production by 2030 at the latest. We support the circular economy and are taking measures to reduce the amount of waste generated in our plants and to use the precious resource water more sparingly.

Climate protection and emissions

As a company, we're dedicated to limiting the increase in the average global temperature to no more than 1.5 degrees Celsius, since we view climate change as one of the biggest social challenges of our time. At tesa, we are directly helping to protect the climate by lowering our energy consumption, using energy more efficiently and utilizing more renewable energy. Every year as part of our environmental program, our plants define measures for expanding our contribution to climate protection.

Strategies – Goals – Progress

Climate protection is a strategic action area in our sustainability strategy at tesa. Management is responsible for monitoring climate-related decisions, taking stock of the progress made towards achieving climate goals and ensuring that climate protection measures are implemented.

We review the effectiveness of our activities through monthly tracking of site-specific energy consumption. Since 2020, we have sourced 100 percent of our electricity from renewable energy sources at all of our offices and production facilities worldwide.

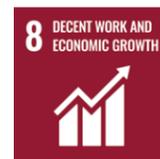
We revised the tesa sustainability strategy and set ourselves even more ambitious climate goals during the reporting year: By 2025, we intend to cut our absolute Scope 1 and Scope 2 emissions by 30 percent by comparison with 2018. By 2030, we want our operations to be climate neutral. We aim to reduce our Scope 3 emissions by 20 percent in absolute terms by 2030, compared to the 2018 baseline. The Science Based Targets initiative (SBTi) has confirmed our climate goals up to 2025 as part of the Beiersdorf Group. We have also pledged our long-term commitment to the Business Ambition for 1.5°C initiative aimed at limiting the increase in the average global temperature to no more than 1.5 degrees Celsius and achieving a climate-neutral business model by 2050 at the latest.

Finding new ways to save

We optimize energy-intensive processes by identifying energy-saving opportunities, and we reduce our CO₂ emissions and the related costs. Corporate management is involved in these tasks every year through a management review. The environmental and energy experts at the respective locations bear operational responsibility.

We use ISO 14001-certified environmental management systems at seven sites for the continuous organization and planning of our operational measures to protect the environment. External environmental audits are conducted annually as part of matrix certification of the ISO 14001 sites. The environmental management system at selected ISO 14001-certified sites is additionally reviewed

We support these Sustainable Development Goals in the area of "Environment".



- **Scope 1** comprises emissions resulting from our own activities – for example, production.
- **Scope 2** comprises emissions resulting from procured energy – for example, electricity.
- **Scope 3** comprises emissions generated by upstream and downstream activities along the value chain – for example, by suppliers.

through internal audits. A work instruction sets out the approach to be taken in the event of environmental incidents and instances of environmental damage with the intention of minimizing their ecological impact.

Hamburg and Offenburg, our largest production facilities, emit 65 percent of the combined GHG emissions of all of our ISO 14001-certified sites. We are monitoring and assessing the progress made by these sites in reducing their CO₂ emissions. They, like our Norderstedt headquarters, are also certified to ISO 50001:2018, the German version of the global standard for energy management systems. It serves as a guide for establishing systematic energy management and is intended to help reduce energy costs, greenhouse gases and other environmental impacts.

Increasing efficiency

Another strategic approach for increasing energy efficiency is the use of energy and resource-saving technologies. That includes the efficient generation of our own energy: At several of our production facilities, we operate combined cooling, heat and power (CCHP) or combined heat and power (CHP) plants. These enable efficient self-generation of energy, as we not only use the electricity generated, but also the heat that is produced – such as for production processes or heating. In addition, we have been covering the energy consumption of the CHP plant at our headquarters in its entirety since 2021 and in part at our production facilities in Hamburg, Offenburg and Italy since 2022 through biogas certificates. All in all, we were able to generate more than 50 percent of the electricity we require using energy-efficient CHP plants in 2022.

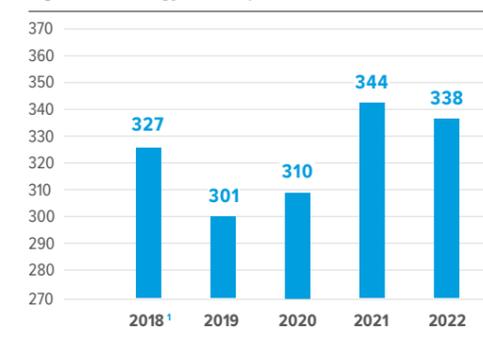
Expanding solar energy

We continued to work on expanding electricity generation with solar energy during the reporting period. All tesa plants have initiated feasibility studies and instigated specific investments. We will install an almost 760 square meters photovoltaic system on the roof of our headquarters. It will have an output of 260 kWp and is expected to go into operation in the first half of 2023, with further installations in China and Offenburg to follow in the near future.

Reducing emissions

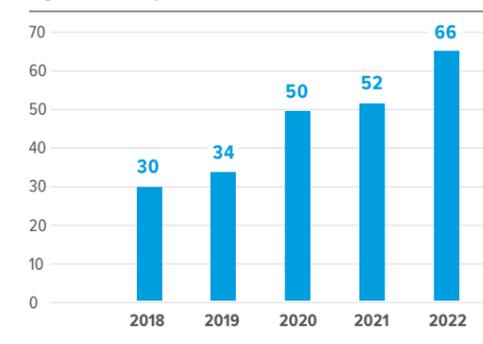
We calculate our GHG emissions based on the guidelines of the Greenhouse Gas Protocol (GHG Protocol) and use the market-oriented method. These determinations showed that we succeeded in reducing our Scope 1 and Scope 2 emissions by 27 percent in absolute terms between 2018 and 2022. Accordingly, emissions were down 11.6 percentage points in comparison with the previous year. We also lowered our specific emissions per metric ton of end product by 25 percent in the same period.

Fig. 1: Total energy consumption in GWh



¹ Base year

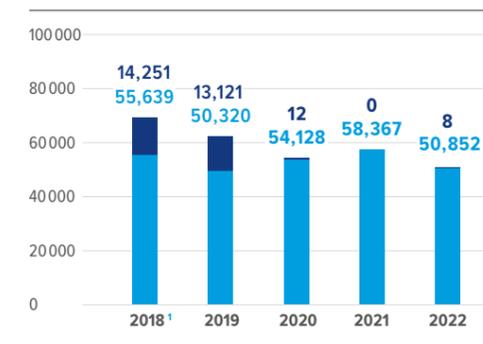
Fig. 2: Electricity from renewable sources² in %



² This includes purchasing guarantees of origin for renewable electricity, self-generating electricity, e.g. through photovoltaic and the operation of CHP plants with biogas.

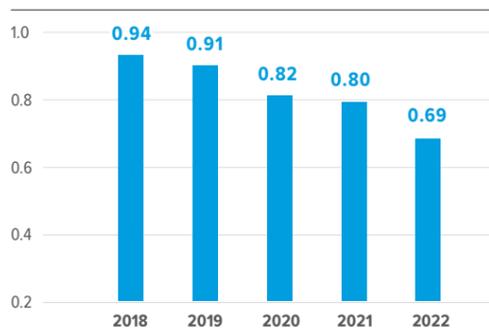
³ Definitions as per GHG Protocol Scope 2 Standard; Market-Based Method; emission factor for electricity from renewable sources is set at zero.

Fig. 3: Scope 1 and Scope 2³ CO₂ emissions in t CO₂e



● Scope 2
● Scope 1

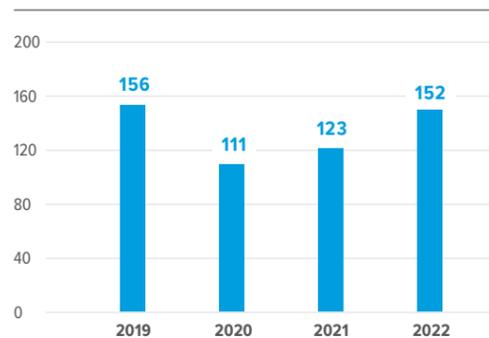
Fig. 4: Specific CO₂ emissions per metric ton of end product in t CO₂e



We have been collecting data on material emissions along the value chain (Scope 3) since 2018. In the process, we have identified the areas of raw materials, finished goods manufacturers and product transport as material categories. We report our Scope 3 emissions to our stakeholders through CDP. We further expanded our CO₂ monitoring for Scope 3 emissions during the reporting year.

Our production processes result in what are known as volatile organic compounds (VOC). We want to minimize emissions of these exhaust gases. To this end, we use regenerative thermal oxidation systems for thermal exhaust gas purification as well as adsorption and waste air purification plants with solvent recovery. We commissioned a new thermoreactor at our Hamburg plant and another two at our new site in Vietnam during the reporting year. Our total global VOC emissions amounted to 152 metric tons in 2022.

Fig. 5: VOC emissions in t



Waste

We promote a circular economy and want to use materials that can continue to be used within the circular economy or can otherwise be recycled upon reaching the end of their useful lives. It is not yet possible to eliminate all waste during production. However, we are committed to reducing it efficiently. That is why we attach great importance to the efficient use of resources.

Reduce, reuse, recycle

“Reduce, reuse, recycle” is the tenet at the heart of our waste and raw materials management. Avoiding and reducing waste has the highest priority. In addition, we continuously identify various options for recycling. Waste is disposed of only when this is unavoidable. We have set our plants the strategic goal of eliminating all landfill disposal of production waste (“zero waste to landfill”) by 2025. We have already achieved this status for six out of seven of our plants.

Resource efficiency

We develop more sustainable, solvent-free production methods and use bio-based and recycled raw materials where possible. In order to recycle materials wherever possible, we take care to ensure resource efficiency from the early stages of developing our products and the methods used to produce them. We also work constantly on minimizing production-related losses of raw materials in our plants. This applies just as much to adhesive manufacturing as it does to coating and cutting. One of our planned measures is to upgrade the technology in systems that require the use of solvents by 2030, with the aim of recovering the solvents entirely at the end of the process. Waste that is generated during a production process and cannot be avoided is collected separately at our sites. tesa recycles almost all non-hazardous and hazardous waste containing solvents, which is thus kept in circulation. Likewise, tesa supports sustainable forestry through the use of FSC®-certified raw materials. Accordingly, many of our products already carry FSC® certification (FSC® C148769).

CDP is an organization that analyzes the sustainability performance of companies once a year through the use of detailed questionnaires.

More on CDP on pages 52 and 59.



Packaging recycling

Using less packaging is another way to minimize waste and thereby the negative impact on the environment. In the industrial area, we want to reduce the amount of packaging materials as much as possible and to avoid all packaging that is not absolutely necessary – without harming the quality, performance or protection of our products in the process. Where packaging is necessary, we attach importance to the highest possible degree of recyclability of the packaging materials. As a general rule, the constituent elements are indicated on the product package in order to ensure proper disposal.

Active involvement of employees

We harness our employees’ expertise in order to develop further waste-reducing measures. As part of this, in 2022 we continued the successful “Big Ideas Instead of Waste” campaign at the tesa plant in Offenburg. Behind this campaign is a long-term project through which we intend to continuously reduce our energy and resource use. Employees from production, process development and technology are participating in the campaign.

The project involves regular intra-departmental and inter-departmental discussions, which assist in coordinating the implementation of potential improvements and in fostering the exchange of information regarding best practice solutions. The project includes communication measures that are designed to create awareness of the issue among employees. All in all, 15 resource efficiency projects were implemented in 2022. These projects led to savings of 286,000 euros.

Waste volumes

We sort waste by disposal method. In total, the waste volume per metric ton of end product generated in our plants rose by 5 percent compared to 2018. During the reporting year, 88 percent of the waste was also recycled (89 percent in the previous year).

Fig. 6: Waste volumes by type and disposal method in 1,000 t

	2020	2021	2022
Disposal of hazardous waste	0.6	1.0	1.3
Disposal of non-hazardous waste	1.2	1.1	1.2
Recycling of hazardous waste	5.9	6.4	6.0
Recycling of non-hazardous waste	9.7	11.5	12.4
Total	17.4	20.0	20.8

Water

Water is a precious resource that is threatened by various influences and in short supply in some regions. Responsible, resource-conserving and economical use of water is therefore extremely important to us. Moreover, we consider it to be our responsibility to protect water sources from contamination caused by our production activities. This is also set out expressly in our Group-wide environmental guidelines.

Risk minimization

We disclose information on our water management through CDP. Based on the Water Security questionnaire, we received a C rating during the reporting period. We want to work even harder to improve this rating.

We would like to reduce risks for water sources that result from our production as much as possible. The World Resources Institute (WRI) has created the Aqueduct Water Risk Atlas, a data tool that we use to perform an annual risk assessment on all of our production facilities and our headquarters. We take preventive measures against any conceivable accidents. For example, liquids that pose a threat to water are only ever emptied, refilled or stored in areas that are equipped with appropriate retention tanks. If water-endangering substances leak, emergency plans come into effect that regulate the precise course of action to take. All measures are regularly reviewed in external ISO 14001 audits.

Water volumes and sources

Among other things, we use water for the production of adhesives – for example, for the dilution and granulation of rubber or to manufacture intermediate products. In recent years, the share of water-based products has increased since we are using water more frequently as an auxiliary resource. We keep track at our production facilities every year of water data such as water consumption and effluent quantities.

Fig. 7: Water data in cubic meters **2022**

Water withdrawal	514,000
cubic meters from groundwater	215,000
cubic meters from municipal sources	299,000
Water consumption	142,000

The water we use is primarily obtained from the local drinking water supply and from the groundwater. The water is reused several times in our cooling systems. We are implementing appropriate measures at our sites in order to return industrial water to the water cycle. Our wastewater is differentiated into sewage and rainwater, and concentration levels are continuously monitored. In addition, the wastewater is examined for prescribed parameters by an external laboratory each month. Our new plant in Vietnam (to be commissioned in 2023) will have a rainwater treatment system. The water will be used to irrigate plants on the factory grounds.

Social

It is part of our corporate culture to assume not only ecological but also social responsibility, pursuing an approach characterized by appreciation and respect. We are guided by the principles of honesty, trust, tolerance and integrity and we support diversity and equal opportunity.

Occupational health and safety

As a company with international operations and more than 4,982 employees, we invest in initial and advanced training and take great responsibility for worker safety and health. That is why we have set ourselves the goal of reducing the number of work accidents to zero and avoiding work-related ill health as well as physical and mental strain at work. We regularly check to see if and how we can make our company workplaces even safer and healthier.

Health and safety in the workplace are a key priority at tesa. We aim for our employees and suppliers to benefit from the highest health and safety standards. For us, effective occupational health and safety measures require a systematic and consistent approach. We focus on prevention and raise our employees' awareness of possible risks – for their own protection and for that of their colleagues.

Avoidance and prevention

We formulated and approved the Group-wide tesa Policy on Occupational Safety and Health during the reporting period. This replaces the previous Occupational Safety Guidelines. In conjunction with legal requirements, the new policy forms the basis for our internal management system in the area of occupational safety. This revolves around six key topics: crisis and emergency management, health care, risk assessment and ratings, accident prevention, fire and explosion prevention, and plant safety. The Policy on Occupational Safety and Health is further specified through internal rules and specific operating instructions and also

applies to sub-contractors who handle tasks at our production sites. Operating instructions for occupational health and safety are made available to employees in the local language of the respective tesa sites.

Our employees and especially our supervisors are aware of their responsibility for occupational safety. In occupational safety committees and in the annual management review, corporate management works with the occupational safety unit to evaluate the accidents that occurred that year. Based on this information, management then takes new steps to further improve employee safety and reduce work-related health risks.

Germany's professional association for the raw materials and chemical industry (Berufsgenossenschaft Rohstoffe & chemische Industrie, BG RC) evaluated tesa's Hamburg and Offenburg plants in 2022 and awarded them the "Sicher mit System" seal of approval for occupational safety. This means that all of our German sites have received the seal – an important occupational safety milestone at tesa. The seal confirms that occupational safety has been systematically integrated into leadership responsibility at our plants.

Protection through evaluation of hazards and risks

Event-driven risk assessments in the area of occupational health and safety are conducted in our plants on a regular basis. These assess changes to machines, systems or workrooms or for new acquisitions and process adaptations. Safety-related testing and acceptance as well as systematic hazard identification and risk assessment with the involvement of expert employees ensure that technical and organizational

We support these Sustainable Development Goals in the "social" category.



shortcomings are avoided and that work can be conducted in a manner conducive to safety and health. Safety specialists, employee representatives and management meet in occupational safety committees to discuss the material results of the risk assessments and define satisfactory avoidance and corrective measures.

Personal protective equipment for employees

tesa provides suitable personal protective equipment to all employees who require this. The requirements for wearing the equipment are set out in the respective operating instructions. Employees are involved in the selection of certain items of equipment in order to ensure individual requirements are met and increase user acceptance.

Regular training

Risks can only be reduced if our employees act in a responsible and proactive manner. Accordingly, all employees are required to take part in basic occupational health and safety training. This covers a number of areas, including general safety rules, preventive measures, what to do in an emergency and health tips. There is also regular safety training for external service providers at all sites.

Handling hazardous substances and accident risks

The handling of hazardous substances is also regulated in detail. The occupational safety unit, the corporate regulatory affairs unit and those responsible in research, development and production draw up the processes on the handling, labeling, storage and transport of hazardous substances. Storage of hazardous waste is also regulated via an operating manual. Employees who work with certain hazardous substances receive regular mandatory training and undergo regular health checks. Facility and workplace safety is periodically inspected and reviewed. The procedure in case of accidents involving hazardous substances is set out in the emergency management guidelines.

Our occupational safety management activities focus in particular on our ISO 14001-certified production facilities – as the risks of accidents and adverse health effects and environmental damage are greater there than at our office locations. We employ our own safety specialists at all of our ISO 14001-certified sites and promote international dialogue among them. Key occupational health and safety risks are discussed and joint projects are initiated in annual meetings. By 2025, we intend for all tesa sites that already have an ISO 14001-certified environmental management system to also obtain ISO 45001 occupational safety certification.

Fig. 8: Occupational safety in figures

	2018	2019	2020	2021	2022
Work accidents ≥ 1 day (number)	21	22	18	21	20
Accident frequency rate ≥ 1 day (number / 1 million working hours)	4.1	4.3	3.6	4.1	3.6
Work accidents > 3 days (number)	10	8	9	6	12
Accident frequency rate > 3 days (number / 1 million working hours)	1.9	1.6	1.8	1.2	2.1

We use the "Accident Frequency Rate" (AFR) to document all work accidents that result in at least one lost day. In 2022, the AFR of documented accidents with at least three lost day was 2.1 per million hours worked across all sites (2021: 1.2). This was below the German industry average (BG RCI) of 12.3 (2021).

Prevention through information

We continued to focus on fire safety during the reporting period. For example, fire protection assistants at the plants received evacuation and fire extinguishing training. A fire extinguishing drill was also held under expert guidance at tesa's headquarters to familiarize employees with fire prevention measures and instruct them on what to do in the event of a fire. An occupational safety

and health day covering a wide range of topics was organized for tesa Manufacturing Hamburg GmbH and a Safety Week at our Suzhou site like every year. This gave all employees the opportunity to learn more about personal protective equipment and noise exposure, how to identify and safeguard against pinch points, and more. Preventive measures against noise and other interferences are taken at our production facilities. Sound levels are regularly measured in the various operational areas of the plants. Any new machines and systems purchased must satisfy our requirements on noise emissions. The use of some monomers in the polymerization process may result in unpleasant odors. We take measures to counter these, including utilizing special attachments for air filter systems.

At the tesa Manufacturing site in Hamburg, one of our processing centers, an intensive occupational safety and health day was held featuring numerous practical exercises, for example on the correct way to safeguard against falling when working at heights.



See Fig. 8: Occupational safety in figures.

Employees

Our employees make an important contribution to the company's sustainable development. Their expertise, skills and commitment secure our competitiveness and innovative capacity. We aim to create an attractive working environment that recognizes individual performance and actively embraces the potential of a diverse workforce.

Success through development

Our company's success depends to a significant extent on the skills of our workforce. We want to recruit and retain dedicated employees. Our human resources strategy is designed to ensure that we are perceived as an attractive employer and to continuously increase our appeal through targeted measures. We also count on the willingness of our employees to continue to develop themselves and support this by offering a wide range of initial and advanced training options and by providing opportunities for them to assume responsibility. The intention behind all of this is to ensure the long-term satisfaction of employees who show a great deal of potential. That is why we work transparently and in close communication with our employees to continuously improve our working conditions.

Besides giving our employees development prospects, we are committed to diversity and equal opportunity. The People Values describe our corporate culture in our day-to-day activities and are integrated into annual employee performance appraisals and feedback discussions. We encourage all employees to participate in shaping the values and embody them in practice.

Healthy working environment

Much of our approach to health management is based on prevention. In addition to the counseling provided by the company medical service and the social advisory service, we offer free psychological consultation hours aimed at supporting employee mental health in collaboration with an external partner. Our work stations are ergonomic and contemporary. In addition, we offer flexible options for self-determined work, such as flextime and working from home.

A parent-child office at tesa's headquarters is one way in which we support employees' flexible organization of their working time. There is also an



People Values

Our teamwork values

Focus on our customers

Be close to our customers so that we can anticipate and meet their needs.

Set the pace

Be self-driven and proactive.

Team up

Be open-minded and strive for success as one team.

Achieve goals

Be willing at all times to improve your performance and achieve the best possible results.

Challenge yourself

Be committed and open to change and challenge yourself.

Act responsibly

Be fair and honest and act responsibly at all times.

extensive health management scheme in place there, including everything from ergonomics advice to an in-house gym.

In order to additionally support healthy living, we offer our employees counseling and assistance through the company medical service as well as preventive health checks, and run various mobility schemes. For example, electric cars and bikes can be charged at a charging station on the company premises.

Customized training opportunities

We treat all employees as individuals with their own potential and offer a wide range of development opportunities. Our annual performance appraisals help us to integrate personal and professional aspirations into our employees' development plans and to effectively tailor their further development to them. For their professional development, we have created a portal for externally and internally advertised positions. This ensures that our employees have the transparency they need and a means of applying for internal roles in various units and countries.

Our training programs include basic qualifications for new employees. In addition, all employees can participate in in-person training covering topics such as compliance, occupational health and safety, environment, sales, management and leadership. The digital Learning Hub contains courses on providing active feedback, self-learning, sustainability and more. Since 2021, all of our employees have also had access to sustainability training on our global learning platform, covering topics such as greenhouse gas emissions and climate protection. Our own programs are supplemented by offerings on the LinkedIn Learning digital learning platform.

Actively combating the shortage of skilled workers: Training and dual study programs at tesa

The tesa Group offers standalone professional training at the Hamburg-Hausbruch and Offenburg production sites and we are planning a similar program for the tesa SE headquarters from 2023 onward. The focus is on technical careers, for example in chemical technician apprenticeships, electronics technician for operating technology, industrial mechanic, machine and system operator and mechatronics technician. In addition, we offer cooperative university education and vocational training programs as well as commercial vocational training, for example in the areas of plastic and elastomer technology, electrical engineering, data science, business administration and industrial engineering.

Promising interns and student employees with outstanding performance may join our tesa Talents program. This allows us to maintain contact with talented young people, who benefit in turn from additional job prospects. Our talent network consisted of 53 former interns and students in the reporting year.

Diversity and equal opportunity

We aim for all of our employees to have the same opportunities – irrespective of their gender, age, origin, sexual orientation or religion. Our human resources departments and our managers worldwide are made aware of the need to prevent any form of discrimination. When filling new positions, we attach great importance to hiring people from different cultural backgrounds. In the tesa headquarters, the proportion of employees with a nationality other than German rose 3.2 percentage points to 8.7 percent between December 2020 and December 2022. In order to promote this trend, we advertise posts for certain functions exclusively in English. We also support programs aimed at integrating disadvantaged groups. In Norderstedt, we work with the company Elbe Nord, which trains and employs people with disabilities.

Over the next few years, we want to work even harder on achieving gender equality in our workforce and in management positions. The targets we have set ourselves for tesa SE are 30 percent women at the first management level below Executive Board level and 35 percent women at the second management level by mid-2027.

Governance

Environmental and social concerns are an essential consideration in every kind of corporate action. At tesa, we are responding to this challenge and aligning our business processes with a sustainable economy. We also demand that our suppliers act accordingly. International initiatives such as the UN Global Compact and the Sustainable Development Goals serve as guiding principles for shaping our sustainability activities and requirements.

Importance of sustainability in our corporate strategy

We view sustainability as our responsibility, as an attitude – and as an opportunity. Sustainable behavior requires us to think one step further and to continuously improve. That is why sustainability is a firmly established key component of our corporate strategy at tesa. We revised our sustainability strategy during the reporting year and raised the bar of our ambition even higher: We want to use all our expertise and passion to develop products and adhesive solutions that are more sustainable.

Sustainability management at tesa

Responsibility for managing major sustainability topics such as climate protection lies with the extended Executive Board, the Global Executive Committee. This is composed of the Executive Board members and other senior executives, such as the Chief Sustainability Officer. The Committee meets every two weeks to discuss sustainability and other aspects. In addition, the Chief Sustainability Officer reports directly to the tesa CEO.

We also engage in regular dialogue with our external stakeholders. Through this exchange, we continuously review our sustainability activities and incorporate the latest social and environmental developments into our planning.

Our sustainability strategy

We revised our sustainability strategy during the reporting year and identified five strategic action areas for which we formulated long-term targets up to 2030. The action areas cover our entire value chain:

Strategic action areas

- Reduction of emissions
- Responsible sourcing
- Use of recycled and bio-based materials
- Circular economy and reducing waste
- Enable sustainability at our customers

Our sustainability agenda, which is geared toward the ten principles of the "Global Compact" (UNGC) and the United Nations' "Sustainable Development Goals" (SDGs), remains a cornerstone of the strategy. We also made slight changes to the agenda in 2022. It reflects our commitment to a holistic understanding of sustainability and therefore also encompasses topics beyond the strategic action areas – such as occupational health and safety (for more on this, please refer to the Occupational health and safety section, pages 53-55).

In order to define as precisely as possible the international sustainability goals to which we can contribute with our processes and products, we have carried out a comparison with the 169 SDG targets. The result can be found in the index on pages 62-63.

Ratings and awards

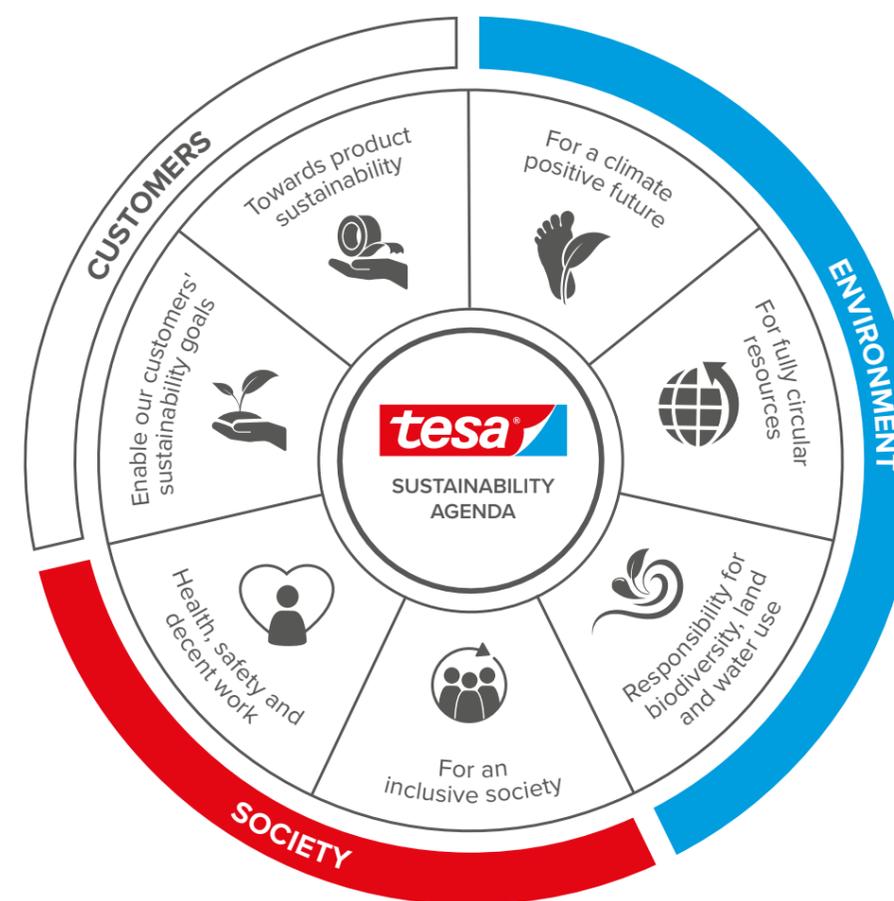
Ratings and rankings regularly confirm our clear commitment to sustainability. We see the results of these assessments as a form of motivation for us to continue improving. CDP has awarded tesa a B score for its efforts in the area of Climate (B- in the previous year) and a C in Water Security (please refer to the Water section, p. 52).

In 2022, tesa also once again participated in the EcoVadis sustainability ratings and was awarded a silver medal for its sustainability efforts. EcoVadis is a well-known rating platform for companies with global procurement chains.

In order to determine as specifically as possible which of the international sustainability goals our processes and products contribute to, we have conducted a comparison with the 169 SDG sub-goals. The results can be found in the index on pages 62-63.

The sustainability agenda reflects our aim of taking a holistic approach to sustainability and therefore also includes topics that go beyond the strategic fields of action.

Fig. 9: tesa Sustainability Agenda



Sustainability in the supply chain

As an international company, we purchase raw materials all over the world. Our global supply chains are correspondingly complex. Europe and Asia are two of our most important markets. Close cooperation with our suppliers enables us to guarantee high product quality and security of supply. At the same time, we assume social and ecological responsibility. We expect all of our suppliers to meet our high expectations. That includes respecting and safeguarding human rights.

High standards for responsible sourcing

We want our suppliers to meet our standards and to remedy grievances in the event of violations, and have put our own inspection process in place to track this. Our buyers are trained on the Purchasing Compliance Guideline, the Code of Conduct for Suppliers, antitrust compliance and sustainability. As part of this course, we also promote awareness among participants of the need to respect human rights. The provisions underpinning our global purchasing processes are set out in our Purchasing Compliance Guideline (PCG), which forms part of the Group-wide Compliance Manual and contains binding rules of conduct for tesa as a purchasing company. This is evaluated by us on an ongoing basis.

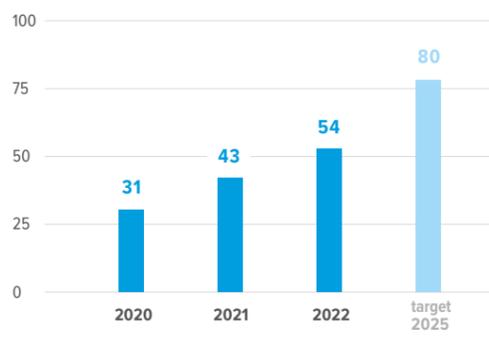
Suppliers who deliver directly to us are required to sign the Code of Conduct for Suppliers (CoCFS), which sets out fundamental rules and obligations in the area of human rights, labor standards, environmental protection and corruption prevention. In view of the new German Supply Chain Act (LkSG), we expanded the CoCFS during the reporting year and attributed even greater relevance to the topic of human rights. This new version takes effect from 2023. As a responsible company, tesa rejects any form of human rights violations; any reported violations are dealt with immediately. We reserve the right to terminate business relationships in the event of serious violations. No reports of human rights violations were received in 2022.

Transparency with suppliers

We have set ourselves the goal of incrementally improving transparency and sustainability in the supply chain. Since 2020, we have been inviting direct suppliers to undergo an assessment on the EcoVadis platform. This gives them a means of establishing the extent to which they consider human rights, fair working conditions and environmental aspects as well as responsibly produce and procure their products, raw materials and services. This assessment is the first step in increasing transparency and therefore an important contribution to strengthening sustainable development in the supply chain. In addition, we regularly invite our buyers and suppliers to undergo training on various aspects of sustainability offered by EcoVadis on its platform.

At the end of 2022, EcoVadis self-disclosure information was available for 54 percent (2021: 43 percent) of our direct purchasing volume. We intend to gradually increase this share over the next few years so that we have sustainability assessments covering 80 percent of our direct purchasing volume by 2025. Our goal is to ensure that 80 percent of our purchasing volume is directed solely to suppliers that meet our high requirements and can provide evidence of this in respect of responsible supply chains by 2030.

Fig. 10: Direct purchasing volume covered by EcoVadis in %



Risk assessment

All of our suppliers undergo scheduled annual screening. We also conduct event-driven audits, for example when onboarding new suppliers. Through this, we identify risks specific to the respective country and industry. Purchasing volume is one of the considerations in the classification into six categories, ranging from "very low" to "very high." In addition, factors such as "strategic relevance" play a role, for example when dealing with an important raw material or single-source supplier.

Compliance

tesa observes internal standards and guidelines, applicable laws and overriding regulations, making it a trustworthy partner for all stakeholders and interest groups. This applies to environmental and social issues as well as other matters of corporate management. But this is only achievable if we internalize and understand the existing legal framework, applicable laws and internal guidelines and apply them properly.

Code of Conduct – basic values for responsible action

We established a Code of Conduct (CoC) to ensure that our strict compliance standards are observed to the maximum extent possible and thereby take account of our social responsibility. As an overarching value framework, the CoC guides our approach to all business activities and is intended to help our employees, managers and corporate bodies to observe and embody the key principles and values of our divisions. We anchor the compliance principles within our company through regular training specific to the respective target groups. We routinely train an average of several thousand employees worldwide on the Code of Conduct and corruption prevention as well as compliance with antitrust law and data protection. In addition, our Corporate Compliance Management department supports our corporate management with identifying compliance risks and preventing violations. Compliance risk assessments are conducted on a regular basis in order to pinpoint key compliance risk fields. Corporate Compliance Management advises the local compliance officers and helps them implement the measures derived from these assessments.

When it comes to our corporate activities, the following international standards and guidelines are definitive:

- The United Nations' (UN) Universal Declaration of Human Rights
- The guidelines of the Organisation for Economic Co-operation and Development (OECD) for multinational enterprises
- The fundamental conventions of the International Labour Organization (ILO)

■ We also drew up a Human Rights Policy Statement during the reporting year, which was published both internally and externally. At the same time, we have expanded our training on topics that fall under our Code of Conduct. As a result, all employees now undergo awareness training on matters of labor law, such as child and forced labor, as well as human rights issues, including discrimination and harassment. We continue to ensure that employees are made well aware of these topics as well as the whistleblower process.

Compliance Management System

Our Group-wide compliance management system (CMS) is based on established standards such as audit standard 980 of the Institute of Public Auditors in Germany (IDW), which sets out principles for proper auditing of compliance management systems (IDW PS 980). We pursue the central ideas of "avoidance and prevention," "recognition" and "reaction and improvement."

- **Avoidance and prevention:** We have preventive measures in place to avoid improper conduct.
- **Recognition:** We use risk assessments in order to identify and manage key compliance risks Group-wide early on. Additional control mechanisms ensure that irregular activities are brought to light.
- **Reaction and improvement:** We punish any violations of legislative or internal requirements as appropriate given the specific situation. We also continuously identify improvement measures for the entire CMS.

During the reporting period, we introduced a digital ■ whistleblowing system that all employees, managers, customers, suppliers and other external whistleblowers can use to report possible violations confidentially and also anonymously if so desired.

For further information about the areas of focus of our CMS, please consult the compliance section in the non-financial disclosure, which we submit with our parent company, Beiersdorf. Is alicidu ciatur aut archillorio. Ratur, sit, is adistia invel inulpa consequi bea cus elliatquam aliquib usapit ut quunt exerum evel molum aliqne dolenis dolor molecup taecerf ercilibus sitatectotat voloria nia dest, voloremam, sa que res conserepe pro blatureius, sit voluptatis ma verum ut esci duci berum rate consequi id



Find out more about our guidelines and standards at <https://www.tesa.com/en-us/about-tesa/sustainability/our-guidelines-and-standards>



Find out more about our digital whistleblowing system at <https://www.bkms-system.net/tesa>

Sustainable Development Goals Index

We contribute to the following SDGs and their corresponding targets:

SDG	SDG targets	Our contribution	In this report
	4.4: By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship.	Wherever its sites are located, tesa is committed to promoting the education of young people, especially in the area of science and technology. By the end of 2022, tesa had donated 3.8 million euros to alleviate the education crisis brought about by the coronavirus pandemic. Among other things, the company worked closely with children's rights organization Save the Children in a joint effort to combat the negative effects of the pandemic and provide emergency assistance to children and parents from Ukraine.	Pages 38–39
	5.5: Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life.	At tesa, all of our employees have the same opportunities – irrespective of their gender, age, origin, sexual orientation or religion. tesa is also working to achieve gender equality in our workforce and in management positions. We have set ourselves the target of 30 percent women at the first management level and 35 percent at the second level by mid-2027.	Pages 53–57
	7.2: By 2030, increase substantially the share of renewable energy in the global energy mix.	Since the end of 2020, renewable sources have provided 100 percent of the electricity purchased for all tesa sites worldwide. In addition, we are increasingly relying more on the use of renewable fuel sources, such as biomethane for our CHP systems.	Pages 48–52
	7.3: By 2030, double the global rate of improvement in energy efficiency.	Both production facilities in Hamburg and Offenburg and our headquarters have an ISO 50001-certified energy management system. The introduction of the energy management systems paved the way for further increasing the energy efficiency of our facilities. Another strategic approach for tesa is the use of energy and resource-saving technologies. This includes the efficient generation of our own energy through cogeneration and photovoltaic systems.	Pages 6–9 48–52
	8.4: Improve progressively, through 2030, global resource efficiency in consumption and production and endeavor to decouple economic growth from environmental degradation, in accordance with the ten-year framework of programs on sustainable consumption and production, with developed countries taking the lead.	Our products should be as harmless as possible to the environment over their entire lifecycle. During development and manufacturing we take care to ensure resource efficiency and to avoid production waste as much as possible. Measures to this end are an integral part of our environmental protection activities as a company. By 2030, we expect 70 percent of the materials we use for our products and packaging to be made from recycled or bio-based materials. The reduction and avoidance of packaging materials also help to minimize waste and thereby the negative impact on the environment. For example, we will halve the use of plastic from non-recycled fossil sources in our packaging by 2025.	Pages 20-27 48-52
	8.8: To protect labor rights and to promote safe working environments for all employees, including migrant workers, particularly female migrant workers, and people in precarious employment situations.	As a responsible employer, we see it as our duty to protect our employees from risks and hazards in the exercise of their activities. With a wide range of measures, we contribute to preventing accidents and occupational illnesses. In 2022, Germany's professional association for the raw materials and chemical industry (Berufsgenossenschaft Rohstoffe und chemische Industrie) awarded tesa's Hamburg and Offenburg plants the "Sicher mit System" seal of approval for occupational safety. This means that all German sites have received the seal, and an important occupational safety milestone has been achieved at tesa. We have created a supplier program to increase transparency in our supply chain. We ask direct suppliers to share their sustainability performance with us.	Pages 53-57

SDG	SDG targets	Our contribution	In this report
	12.2: By 2030, achieve the sustainable management and efficient use of natural resources.	tesa develops eco-friendly, solvent-free production methods, and uses bio-based and recycled raw materials wherever possible and sensible. We take care to ensure resource efficiency and avoid production waste from the early stages of developing our products and the methods used to produce them. Likewise, tesa supports sustainable, responsible forestry through the use of FSC®-certified raw materials. Accordingly, many of our products already carry FSC® certification (FSC® C148769).	Pages 14–17 27–33 48–52
	12.4: By 2030, achieve the environmentally sound management of chemicals and all wastes throughout their lifecycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment.	There is no way to eliminate all waste when producing goods. Our waste and raw materials management activities are geared toward using materials efficiently and recycling wherever possible. Therefore, we constantly work on minimizing production-related losses in the raw materials we use. tesa recycles almost all non-hazardous waste and hazardous waste containing solvents. We intend to eliminate all landfill disposal of production waste (zero waste to landfill) by 2025.	Pages 48–52
	13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.	We have set ourselves the target of reducing our Scope 1 and Scope 2 emissions by 30 percent in absolute terms by 2025 compared to 2018. By 2030, we want our operations to be climate neutral. This goal is consistent with the scientific consensus (Science Based Targets Initiative) that global warming should not exceed 1.5° Celsius. We intend to reduce Scope 3 emissions by 20 percent in absolute terms by 2030, compared to the 2018 baseline. We are aiming to achieve a completely climate-neutral business model by 2050 at the latest.	Pages 5–11 48–52
	15.1: By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements.	We aim to use water responsibly. Our primary concerns are using water efficiently and protecting it against contamination. Every year, we keep track at our production facilities of water data such as water consumption and effluent quantities and perform a regular water risk assessment. We also report the results through CDP.	Pages 48–52
	16.5: Substantially reduce corruption and bribery in all their forms.	We reject any form of corruption, bribery or other forms of unlawful conduct. Corruption prevention is one of tesa's Core Compliance Fields and plays a central role in the Compliance Management System.	Pages 58-61

imprint



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