

**SCHWALBE** 

# ***DEDICATED***

## ***RECYCLISTS***



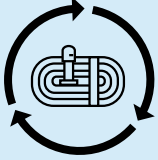
**CSR REPORT 2022**




## SCHWALBE AT A GLANCE 2022



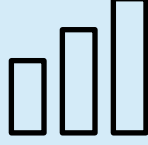
**5**  
children's aid projects started



**1.8 million**  
recycled bicycle inner tubes




**39%**  
reduction since 2018



**€335 million** in sales



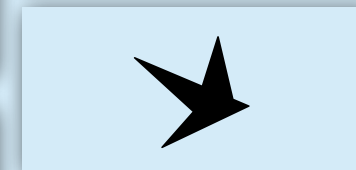
**184 thousand**  
recycled bicycle tires worldwide



**100%**  
Fair Rubber in the newly developed Green Marathon



**70**  
countries with brand presence




**8,600 t CO<sub>2</sub>e**  
saved through improved logistics



**275**  
employees



## ***AS A BICYCLE TIRE MANUFACTURER WE WANT TO BE LEADERS IN THE FIELD OF CSR.***

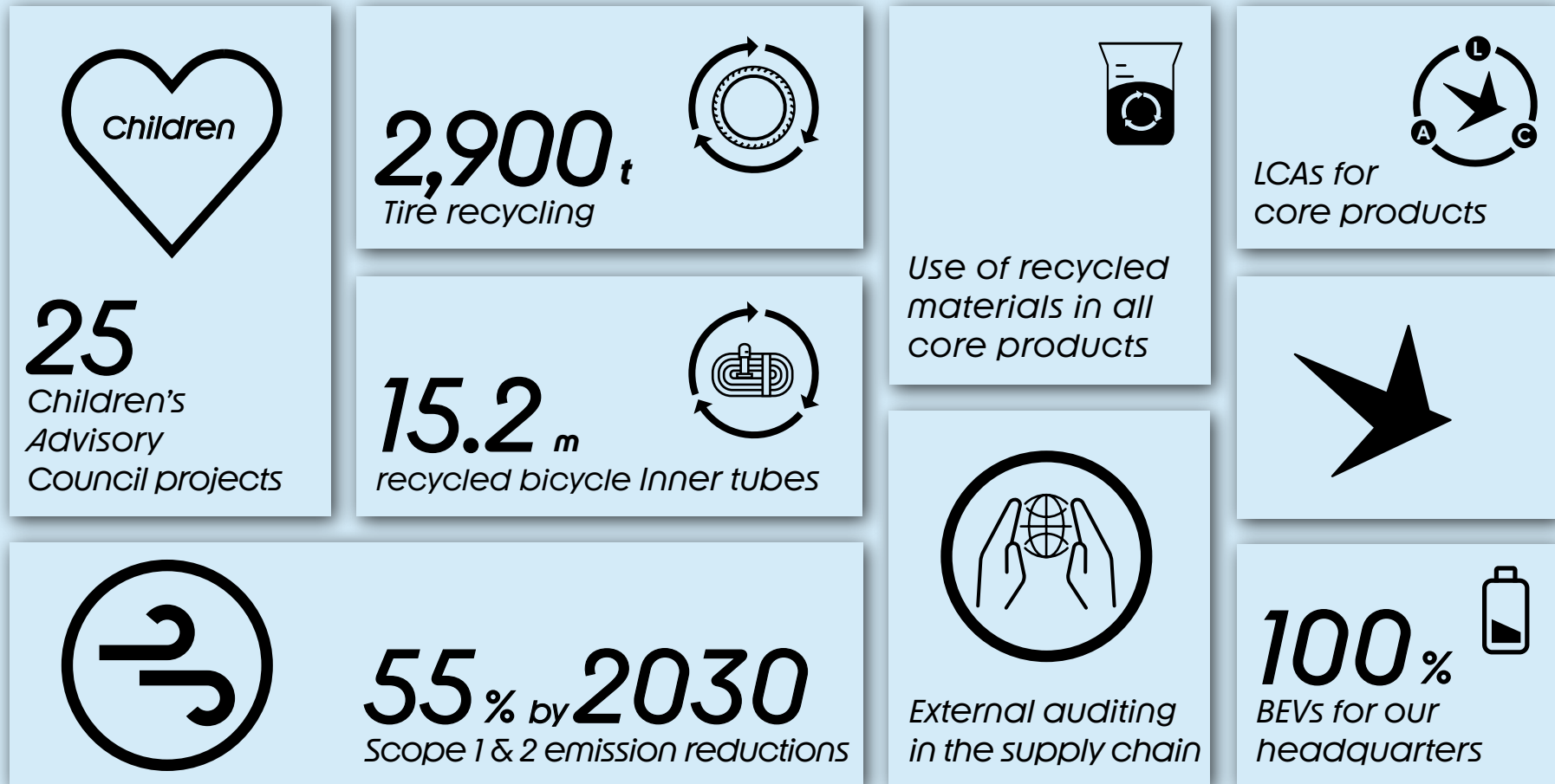
### **Striving for a full circular economy**

As a family business in the bicycle industry, it is both our job and our duty to make the bicycle socially responsible and environmentally friendly. It is the aim of our Corporate Social Responsibility (CSR) policy to promote ecofriendly, healthy and emission-free mobility on the bicycle. Here, our commitment to CSR is based on the cradle-to-cradle principle and the striving for a full circular economy. We attach great importance to all materials in our products being fully recyclable at the end of their service life.

### **Significant progress in our CSR projects**

We have already made significant progress but our efforts to assume more social and ecological responsibility are far from exhausted. Our ambitious targets encompass the further expansion of our recycling system, the launch of recyclable products, increasing the transparency of our supply chain and cutting emissions throughout the process. We aim for continuous improvement in all that we do while continuing to indulge our pioneering spirit.

## SCHWALBE'S KEY CSR TARGETS UNTIL 2025/2030\*



\*All targets apply to 2025 except for emission reductions by 2030.

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## DEAR READERS,

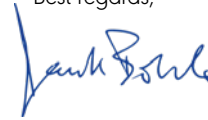
We present you with our second Schwalbe CSR report. With this issue, we want to again provide transparency by reporting on our commitment to CSR, outlining the progress we have already made in implementing our goals and detailing our plans for the future.

In 2022 we were able to present our Schwalbe Recycling System to the world. This system is a milestone in our company history and embodies our pioneering and innovative spirit as an enterprise in the bicycle industry. The huge interest both within and outside our sector strengthens us in our endeavour to act according to the cradle-to-cradle principle while handling our precious resources with care. We are proud pioneers within the circular economy and wish to steadily increase the amount of recycled materials contained in our products. One next step is to use recycled materials from our own recycling process in the new Green Marathon. This will further boost the bicycle's significance as a future-proof, environmentally-friendly means of transport.

As an employer, business partner and supplier of products and services in the bicycle industry, we understand ourselves to be a part of global society. With our CSR report we would like to lend transparency to our commitment in this field and at the same time act as a source of inspiration to others. We are fundamentally convinced that we need to assume responsibility with the clear goal of helping to create a better world for generations to come.

This is something we are constantly working on. Thanks for the interest you have shown in our commitment!

Best regards,



Frank Bohle  
President and CEO



***We have successfully put  
the cradle-to-cradle  
concept into practice.***



## ***THE SCHWALBE RECYCLING SYSTEM IS A MILESTONE IN OUR COMPANY HISTORY.***

Frank Bohle, son of company founder Ralf Bohle and now CEO, has been closely linked to the Schwalbe company since his childhood. As a pioneer of CSR, it was he who, together with Prof. Dr. Michael Braungart, drove this important topic at Schwalbe.

**FRANK BOHLE**  
Part of the company since 1990  
CEO since 2000



***Green Marathon is the result of years of research together with our production partner Hung-A.***

**Schwalbe published its first CSR report in 2022. You opted for a detailed reporting style very early on and in doing so are something of a pioneer in your sector. What was the feedback for your first CSR report like?**

We received very positive feedback on our first CSR report from our customers, our workforce and various associations and organisations. Our international employees especially praised it very highly and found it extremely helpful and informative. The report allowed us to officially define our CSR strategy and communicate it in a manner that's transparent. We've had plenty of good resonance from customers, too, as they now have a better insight into our extensive range of activities. Particularly our CSR targets and climate goals and our commitment to recycling have met with a very positive response.

**CSR is also a topic young people are finding increasingly important. Has the report had an impact on the recruitment of new talent yet?**

Our CSR report serves as a work of reference for applicants and is an important talking point in the recruitment process. We've had positive feedback both in house and outside the company, irrespective of age or the departments our employees work in. Through the report external stakeholders also obtain a comprehensive summary of our actions - that incidentally go far beyond the development and sale of bicycle tires and inner tubes.

**The Schwalbe Recycling System was introduced in 2022. What significance does this system hold for Schwalbe and the bicycle industry?**

The Schwalbe Recycling System is a milestone in our company history. It embodies our pioneering spirit and our will to innovate. The overwhelming enthusiasm both within and outside our sector deeply strengthens us in our passionate endeavour to do all we can to act according to the cradle-to-cradle principle while handling our precious resources with as much care as possible.







***Our clear goal is to help to create a better world for generations to come.***

We are pioneers in the circular economy. Our next steps include using recovered carbon black (rCB) in the new Green Marathon. We want to continuously increase the amount of recycled material used in our products and develop further markets. For we're still at the very beginning and repeatedly need to redefine the status quo for ourselves. We're aware that real progress is only possible through constant further development and by questioning our previous actions.

**Which challenges and opportunities does this create?**

The Schwalbe Recycling System offers us a number of opportunities. Through increased research and development, we can improve recycling processes and raise the amount of rCB used in our products. This has a positive impact on our greenhouse gas balance. What's more, this system strengthens customer loyalty as we provide a responsible solution. It also motivates other companies to establish similar circular systems and thus helps the entire sector to develop further.

There are also a number of challenges, however: developing further markets depends on lots of external factors, such as national waste laws, for instance. At the same time, the system is built on a complex logistics setup that needs to be adapted and optimised for new markets.

**Are you proud of having initiated a development like this after 100 years of company history?**

Yes! What started out in the 1990s as the downcycling of tires in to workshop mats has now evolved into a holistic recycling system. We've managed to turn the theory of the cradle-to-cradle concept into live practice. This is an absolute milestone that fills us with pride and joy. However, this success wouldn't have been possible without the extraordinary teamwork demonstrated by our personnel. Each and every department has poured its passion and talent into making this system a success.



**Which part has your partnership with Hung-A played here?**

Our many years of partnership with Hung-A have had a key role in this development. Hung-A sets the benchmark when it comes to expertise in bicycle tire technology and compound development. Without their decades of experience, we wouldn't be where we are today. This also applies to the Schwalbe Recycling System: it was Hung-A who in 2015 developed the devulcanisation process for inner tube recycling. This opened our eyes to the fact that cradle-to-cradle can indeed be implemented in practice. They've also worked relentlessly on the development and testing of rCB so that it can be used in the new Green Marathon.

**Schwalbe is very heavily involved in various social projects. What was your personal favourite in 2022?**

My personal favourite CSR project in 2022 was the official kick-off of our commitment to the Children for a better World e. V. association. This is where we held the first meeting of our advisory council made up of the children of Schwalbe employees. The kids and teenagers chose five projects which they considered important and sponsored them with a total of €15,000. Besides providing financial support, we also want to enable the children to take on responsibility from an early age. What's more, we've considerably expanded our Fair Rubber project.

This cooperative on Java now has 2,350 members - in 2020 there were only about 250. Through this initiative we're actively improving the living and working conditions of the people at the beginning of our supply chain in the long term.

**With all this energy and ambition, what can we expect from Schwalbe next?**

Looking ahead, we can safely say that the future will also see us bursting with energy and ambition here at Schwalbe! Although we achieved a lot last year, we're far from done yet. In the next few months, we'll be launching lots of new, environmentally-friendly products. We'll be pushing ahead with the expansion of renewable energies in our supply chain, especially in production. We'll also be offering our recycling systems for tires and inner tubes in more markets, including the first outside Europe: the USA. We'll be shouldering even more responsibility in the supply chain and creating transparency through audits and screening to satisfy our high standards of human rights and environmental protection.

**SHORT DISTANCES**

Short transport routes from the rubber tree to the tire factory





**For us, cycling plays an important role in mastering the global climate and energy crisis.**

Holger Jahn, COO, Schwalbe

## WE ONLY HAVE ONE PLANET

As a company we are well aware of the vast importance and urgency of the tasks that need to be performed regarding Corporate Social Responsibility (CSR). The challenges our world faces, such as climate change, the loss of biodiversity, social injustice and a limited supply of resources, call for quick, decisive action.

We consider it our responsibility and duty to not only pursue economic goals but also make a positive contribution to society and the environment. Here, we want to act as pioneers and use our powers of innovation to develop and implement ecofriendly systems and solutions.

We aim to continue to push the bicycle as a climate-friendly means of transport and to fully exploit the potential held by the circular economy. With our commitment to CSR, we want to drive positive change and create a world worth living in for future generations. For us, cycling is an important way of mastering the global climate and energy crisis.

### INNOVATIONS

 **2013** Cooperation with EPEA

**2015** Inner tube recycling 

 **2021** Germany Sustainability Award

**2021** Tire recycling 

 **2022** First recycled tire with rCB

1922

**Beginnings in Bergeleustadt**

The history of Schwalbe begins in a small town in the Oberberg region of Germany where Eugen and Willy Bohle founded C&W Bohle. They sold bicycle parts and mainly separated them from Germany to Asia.



**Start in Bergeleustadt**

Die Geschichte von Schwalbe beginnt in einer Kleinstadt im Oberbergischen: Eugen und Willy Bohle gründen die Firma «C&W Bohle». Sie vertreiben Fahrradteile und exportieren vor allem von Deutschland nach Asien.

1999

**New responsibility**

The next generation took over in Germany, Frank Böhr, Helger Ahn and Andreas Grottel are now leading the brand, which is still in Hong Kong, but has subsidiaries in Singapore and Yangon. Jung took on management positions.



**Neue Verantwortung**

Die nächste Generation übernahm die Leitung in Deutschland: Neben Frank Böhr, Helger Ahn und Andreas Grottel, die Jung in Hong Kong, aber auch Tochtergesellschaften in Singapur und Yangon Jung übernahm die Verantwortung.

2013

**From cradle to cradle**

Cradle to cradle is a certification process that ensures that products are made from 100% recycled materials and are designed to be recycled at the end of their life cycle.



**Cradle to Cradle**

Schwalbe hat sich für Cradle to Cradle zertifizieren lassen. Das bedeutet, dass alle Produkte aus 100% recycelten Materialien hergestellt sind und am Ende ihres Lebenszyklus wiederverwertbar sind.

2014

**The future of tires**

With the introduction of the new Schwalbe Marathon, we are taking a step towards a more sustainable future. The new tire is made from 100% recycled materials and is designed to be recycled at the end of its life cycle.

2024

**Shared responsibility**

Shared responsibility is a concept that emphasizes the importance of collaboration between all stakeholders in a supply chain. It is a key element of a sustainable business model.

2026

**Working together**

Working together is a concept that emphasizes the importance of collaboration between all stakeholders in a supply chain. It is a key element of a sustainable business model.

1955

**Ralf Bohle**

Ralf Bohle (1925-2010) wanted to study business administration, but after the early death of his father Eugen, he joined the company at the age of 27. He was to have a decisive influence on the company.



**Ralf Bohle**

Eigenheit: Mit Ralf Bohle (1925-2010) Betriebswirtschaft studieren. Doch nach dem frühen Tod seines Vaters Eugen, steigt er ins Unternehmen ein - im Alter von 27 Jahren. Er wird die Firma maßgeblich prägen.

1970

**From exports to imports**

Ralf Bohle's great contribution to Schwalbe was the decision to import. He reversed the business principle and began importing high-quality bike parts made in Asia for the German market.

**Von Export zu Import**

Ralf Bohles große Verdienste: nach Asien werden von europäischen Herstellern. Er wendet das Geschäftsprinzip um und importiert hochwertige Fahrradteile aus asiatischen Produktion für den deutschen Markt.

1995

**Move to Reichshof**

New address from the old location - in 20 weeks for the site. The company's headquarters moved from Bergeleustadt to Reichshof, where it is still located today.



**Umzug nach Reichshof**

Neue Adresse von alter Standort: in 20 Wochen für den Standort. Die Firmenzentrale hat sich von Bergeleustadt nach Reichshof und befindet sich bis heute.

2015

**A site in Vietnam**

Site and shop office located in the heart of the city. The site is a former industrial area and is now a modern office building.

**Standort Vietnam**

Standort und Shop Office im Zentrum der Stadt. Der Standort ist ein ehemaliges Industriegebiet und ist heute ein modernes Bürogebäude.

2015

**Rise now in recycling**

Recycling is a key element of a sustainable business model. It is a process that involves the reuse of materials and the reduction of waste.



**Wachstum in Recycling**

Recycling ist ein Schlüsselelement eines nachhaltigen Geschäftsmodells. Es ist ein Prozess, der die Wiederverwendung von Materialien und die Reduzierung von Abfall beinhaltet.

2018 BIS 2022

**The next generation**

The next generation is taking over the company. It is a process that involves the transfer of knowledge and experience from one generation to the next.



**Next Generation**

Die nächste Generation übernimmt das Unternehmen. Es ist ein Prozess, der die Weitergabe von Wissen und Erfahrung von einer Generation zur nächsten beinhaltet.

2022

**Investment in the future**

Investment in the future is a key element of a sustainable business model. It is a process that involves the allocation of resources to long-term projects.



**Investment in the Future**

Investment in the future ist ein Schlüsselelement eines nachhaltigen Geschäftsmodells. Es ist ein Prozess, der die Zuweisung von Ressourcen für langfristige Projekte beinhaltet.

1960

**Challenging times**

In the 1960s, the world was changing. Motorization was marginalizing bikes and international competition was becoming tougher. Ralf Bohle braved this time by exporting machines and their accessories.



**Herausfordernde Zeiten**

In den 1960er Jahren wandelt sich die Welt. Die Motorisierung marginalisiert das Fahrrad an allen Ecken. Der internationale Wettbewerb wird härter. Ralf Bohle überbrückt diese Zeit mit dem Export von Maschinen und deren Zubehör.

1973

**Schwalbe took off**

Ralf Bohle's new goal was to become the best possible bicycle brand. He started his cooperation with the South Korean Jung brothers and their company Jung A. Their cooperation was successful because of experience - and marked the start of Schwalbe.



**Schwalbe fliegt los**

Ralf Bohles neues Ziel: Die besten Fahrradreifen zu sein. Er startete seine Kooperation mit den Koreanern Jung und ihrer Firma Jung A. Die Zusammenarbeit war erfolgreich, weil sie Erfahrung mit sich brachte - und markierte den Beginn von Schwalbe.

1983

**Marathon benchmark**

A lasting time is a benchmark. The best of the Schwalbe Marathon, the best in South Korea, produced and the best in the world. The benchmark is a process that involves the comparison of products and services.



**Marathon Benchmark**

Ein langanhaltendes Produkt ist ein Benchmark. Das Beste der Schwalbe Marathon, das Beste in Südkorea, wurde produziert und das Beste der Welt. Der Benchmark ist ein Prozess, der den Vergleich von Produkten und Dienstleistungen beinhaltet.

1997

**A site in Indonesia**

The company's first site in Indonesia was established in 1997. It is a modern office building that is a key element of the company's expansion strategy.

**Standort Indonesien**

Das erste Unternehmen der Firma wurde 1997 in Indonesien gegründet. Es ist ein modernes Bürogebäude, das ein Schlüsselelement der Expansionsstrategie der Firma ist.

2017

**The ADDO move for success**

The ADDO move is a key element of a sustainable business model. It is a process that involves the relocation of a company's headquarters to a more sustainable location.



**Das ADDO-Experiment**

Das ADDO-Experiment ist ein Schlüsselelement eines nachhaltigen Geschäftsmodells. Es ist ein Prozess, der die Verlagerung des Firmensitzes an einen nachhaltigeren Standort beinhaltet.

2021

**New company headquarters**

The new company headquarters is a key element of a sustainable business model. It is a modern office building that is a key element of the company's expansion strategy.



**Das neue Firmensitzgebäude**

Das neue Firmensitzgebäude ist ein Schlüsselelement eines nachhaltigen Geschäftsmodells. Es ist ein modernes Bürogebäude, das ein Schlüsselelement der Expansionsstrategie der Firma ist.

# COMPANY PROFILE



## STIRRING OPTIMISM

*For almost 50 years we have dedicated ourselves to the development and distribution of high-quality, innovative products for all cyclists.*



### Vision and a groundbreaking pioneering spirit

The vision and groundbreaking pioneering spirit of our company founder Ralf Bohle and our firm trust in a positive development have shaped Schwalbe to this very day. This stirring sense of optimism continues to drive us and inspires our employees to give their very best, even when goals at first seem unobtainable.

Our courage in launching innovative projects has allowed us to make considerable progress, including the development of the pioneering Marathon and numerous other tire technologies over the past decades. A further example is our Schwalbe Recycling System that is paving the way towards a closed circular economy.

Our many years of experience and constant striving for top performance enable us to develop products that satisfy cyclists' requirements. We are proud that we are continuously enriching the bicycle industry with innovative solutions and can help to promote cycling.

### Partnership with Hung-A

Schwalbe's successful product development is founded on its long-term partnership with Hung-A. Ralf Bohle was particularly skilled in finding and enthusing the right people for each specific task and challenge. Together with our production partner Hung-A in Korea, a European/Asian cooperation was established that was built on trust and respect right from the very start.

The bond between the two companies has now evolved above and beyond a friendship that has lasted almost 50 years and is unparalleled in our branch of industry. The cooperation has since become a joint venture that produce since years millions of tires – with the trend continuing to grow. Here, Schwalbe attaches great importance to exclusive production: no tire or inner tube is brought in from any other production sites, with all Schwalbe products fully manufactured by Hung-A.



## CHANGE AND INNOVATION FOR THE FUTURE

*Our values are deeply rooted and form the foundation for a successful future.*



### Family business

#schwalbeunited: our sense of family is what makes us what we are. We achieve our goals by working together – in flat hierarchies, fairly, honestly and with integrity and respect.



### Cross-cultural

Regional anchor or international concern? Schwalbe is both – and proud of it. Close cooperation in international teams enriches us and moves us forward – this is how things have always been and will continue to be. For us, cross-cultural partnerships are not only a composite part of our story of success thus far but also serve to guarantee our future development.



### Innovative

Innovation runs like a thread through all of our work, whether in the materials we use, in our concepts, processes or services. Here, we believe in short development cycles and fast decision-making processes. This means that we can perform important lab and field trials during the start-up phase and adapt the product early on.



### Responsibility

Through our work as a global family business, we bear a great responsibility to society and the world of nature. Our international success is facilitated by us maintaining a continuous global dialogue with our stakeholders.



***Our focus on values serves as our compass in a fast-changing world.***

*Our Schwalbe brand is Europe’s leading supplier of bicycle tires.*

**Continued growth in 2022**

In the 2022 reporting year we continued to grow, achieving a turnover of €335 million – an increase of over 20% compared to the previous year (€273 million). As the market is now cooling down, we expect that we will not see a renewed growth in sales in the coming year, however. Nevertheless, we are only reckoning with a downturn in the short term. In the medium to long term the bicycle industry will again resume its healthy pattern of growth.

One key success factor in the 2022 reporting year was the persistently high demand in the e-bike segment. Here, we were able to succeed with our high-quality products, such as our powerful mountain bike tires.

At our headquarters in Reichshof, completed in 2021, we currently employ 203 people. Seventy-two more employees work at our five subsidiaries spread throughout Europe and North America. These subsidiaries considerably help to strengthen our expertise. We profit especially from the wealth of expert knowledge accumulated by these companies.

**Joint development and production with Hung-A**

Our Korean partner Hung-A plays a major role in the development of our technologies, rubber compounds and in production at our joint-venture plants near Jakarta (Indonesia) and Ho Chi Minh City (Vietnam). Around 4,000 people are employed at the production sites here. All stages of production are performed under one roof, with limited dependence on external suppliers. Our product development, sales, marketing, supply chain management, quality management and administrative departments are located at the Ralf Bohle GmbH headquarters in Germany.

**An important move towards the circular economy**

Our vision is that the bicycle will be the mode of transport of the future. An important milestone in this respect was reached in the reporting year with the official launch of the Schwalbe Recycling System in Germany: instead of incinerating used bicycle tires, Schwalbe is the only manufacturer worldwide to not only take these back through specialist retailers but also recycle them to make new Schwalbe products in an important move towards the circular economy.



**Our core strength lies in our employees**

**203**

at Schwalbe’s Headquarter

**72**

at Schwalbe International

**10**

years of service to the company an average

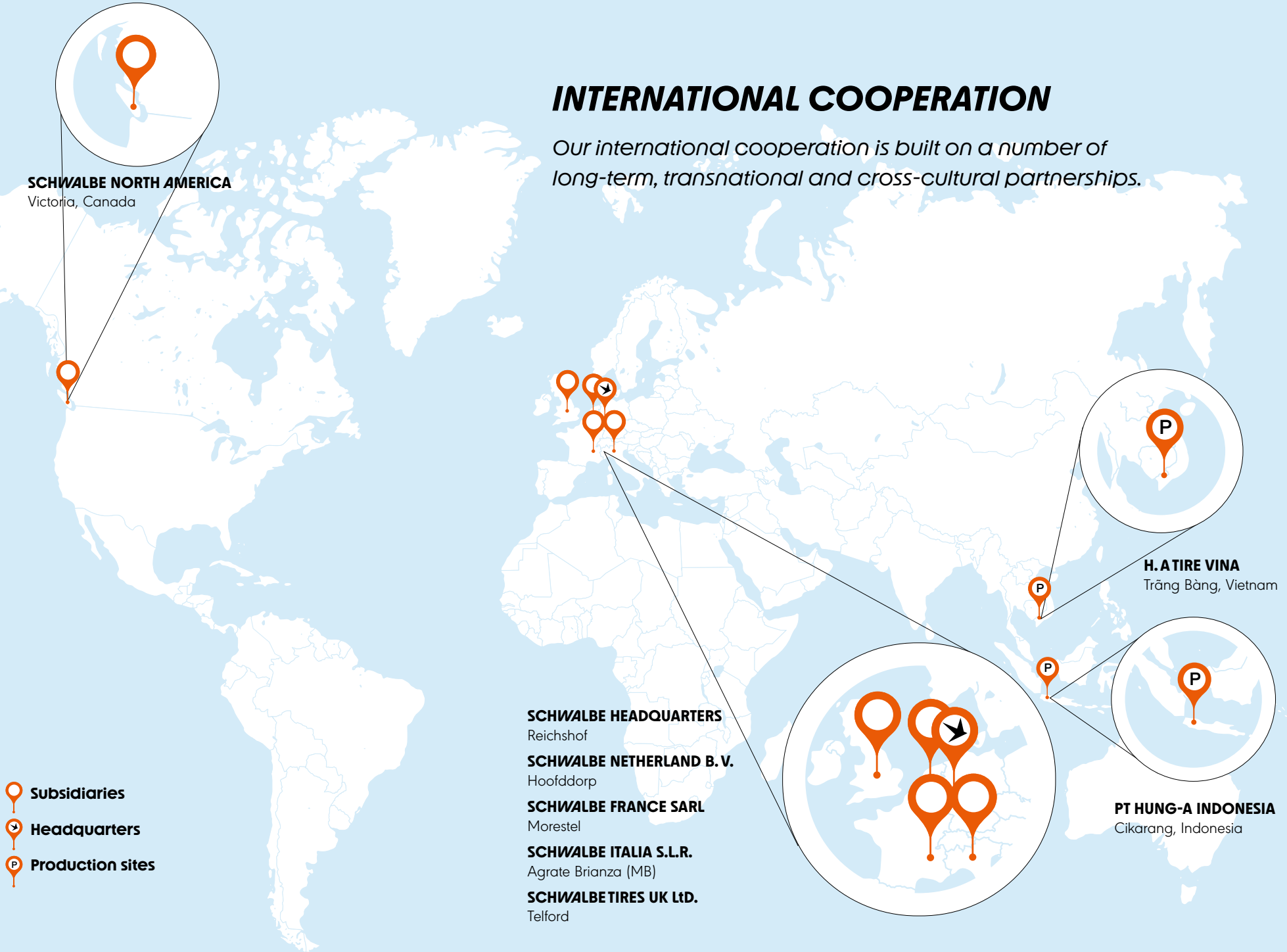
**14**




nationalities



## INTERNATIONAL COOPERATION

*Our international cooperation is built on a number of long-term, transnational and cross-cultural partnerships.*



-  Subsidiaries
-  Headquarters
-  Production sites

- SCHWALBE HEADQUARTERS**  
Reichshof
- SCHWALBE NETHERLAND B.V.**  
Hoofddorp
- SCHWALBE FRANCE SARL**  
Morestel
- SCHWALBE ITALIA S.L.R.**  
Agrate Brianza (MB)
- SCHWALBETIRES UK LTD.**  
Telford

- H. ATIRE VINA**  
Trảng Bàng, Vietnam
- PT HUNG-A INDONESIA**  
Cikarang, Indonesia

## COMPANY HISTORY

*What started out as a small family business has turned into an international player with a worldwide network*

### The origins of our company

In 1922 the two brothers Eugen and Willy Bohle started the Bohle company in Bergneustadt, Germany. To start with, the business focused primarily on the export of bicycle tires to Asia. In 1955 Ralf Bohle, Eugen Bohle's son, joined the firm. The early years were quite a challenge, until the 1960s bicycle parts from Germany could not compete on the international market due to their poor quality.

### Birth of the Schwalbe brand

In 1970 Ralf Bohle began exploiting his excellent knowledge of the Asian market and importing bicycle parts for German cycle manufacturers. In 1973 our partnership with Korean family business Hung-A was launched, a move which not only resulted in the birth of the Schwalbe brand but also caused the company to start specialising in bicycle tires. From the very beginning, our partnership has been marked by trust, loyalty and continuous exchange. Moreover, Hung-A is also our joint-venture partner for the development and production of our Schwalbe products.

### Dynamism and innovation

In 1989 the business set up its first international sales company and in 1994 production started in Indonesia. 1995 saw the company move from Bergneustadt to its new headquarters in Reichshof. This is where product development, sales, marketing, supply chain management and administration are situated. In 2012 a dedicated sales company was founded in the USA. Two years later, the new Schwalbe production site in Vietnam went into operation with our partner Hung-A. In 2021 we moved into the new Schwalbe annex at our headquarters that stands for growth, innovation, technical dynamism, creativity and responsible use of resources. Finally, in 2022 the Schwalbe Recycling System was presented to the global public at Eurobike. In the same year our first Schwalbe CSR report was published and we joined the Science-Based Targets initiative or SBTi that works to cut emissions.





# *CSR MISSION AND TARGETS*





From left to right: FELIX JAHN, head of CSR; JENS TIMMERBEIL, CSR manager; and SEBASTIAN BOGDAHN, environmental R&D manager

## CSR IN SCHWALBE CORPORATE GOVERNANCE

*We understand Corporate Social Responsibility to be an integral part of our corporate culture.*

### CSR is an evaluation criterion and guideline

We have firmly anchored CSR at management level to ensure the comprehensive integration and implementation thereof in our company. CSR is an integral part of our corporate culture and consistent with our superordinate corporate goals and values. We account for CSR in decisions made at all levels of our company and use it as an evaluation criterion and guideline.

### Scope of our CSR activities

Our CSR activities cover various fields such as environmental protection, social justice, employee well-being and stakeholder commitment. We actively support the responsible use of resources by using energy-efficient production methods, reducing waste and recycling materials. We also promote diversity, equality and inclusion in our company and encourage fair pay and working conditions throughout our supply chain.

### Cooperation with stakeholders

In order to reach our CSR targets, we work closely with internal and external stakeholders. We listen to them carefully, take their needs and concerns into consideration and include them in our decision-making processes. Transparency and open communication are of great importance here, both inside and outside the company. We regularly report on our CSR measures in our CSR reports.

### Continuous improvement process

For us, CSR is not a static concept but a continuous process of improvement. We regularly vet our performance, set ourselves new goals and develop innovative approaches to further strengthen our company's social and ecological responsibility. By holistically integrating CSR into our system of corporate governance, we aim to not only generate long-term value for our company but also for our employees, customers, business partners, local neighbourhoods and the environment.

**CSR department with interdepartmental duties**

We have organised and pooled responsibilities for the many issues concerning CSR in our new CSR department. This unit works across the departments to ensure that the principles of CSR and CSR measures are integrated into all areas of the company. It closely cooperates with other departments to ensure that CSR is implemented holistically in our business processes.

**CSR department directly assigned to the management**

Our CSR department is directly assigned to the management and specifically responsible for coordinating and promoting the implementation of our CSR strategy. The CSR department supervises our CSR reporting process and is responsible for a whole range of different tasks, such as chemicals management and materials science. These activities also include responsibility for the supply chain, calculating product carbon footprints and the climate protection measures derived from these or the funding of social projects. Our CSR department develops and manages our recycling systems and coordinates the consideration of CSR in product development. It also pursues the aim of further expanding the integration of CSR in our company into all key decision-making processes and our IT.



From left to right: **SEBASTIAN KLEESE**, chemist | material assessment  
**MARCUS LAMBERTZ**, product safety and the environment.



**CSR isn't a sprint  
but a marathon.**

## OUR MISSION – SCHWALBE’S FOUR PILLARS OF RESPONSIBILITY

*As an international bicycle tire manufacturer, we aim to be a leader when it comes to Corporate Social Responsibility.*



**Schwalbe’s four pillars of responsibility reflect our obligation to act in a more environmentally-friendly manner and with greater awareness.**

### The Schwalbe CSR approach

For us, CSR means creating social, ecological and economic added value – for ourselves and for future generations.

Our CSR approach goes beyond our own products and production sites; we try to also make a positive contribution and minimize the amount of negative impact in the value chains up and downstream of us. We are motivated to continuously improve our processes and question the status quo in order to be able to act responsibly in the long term. It is our vision to act as leaders in the development of ecofriendly products and as pioneers by introducing innovative recycling systems for the transition to the circular economy.

### Schwalbe’s four pillars of responsibility

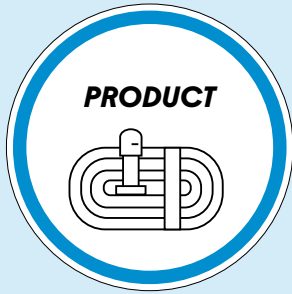
Schwalbe’s four pillars of responsibility are our mission and allow us to take a holistic view of our complex, multifaceted spectrum of business activities. They reflect our character and illustrate our obligation to act in a more environmentally-friendly manner and with greater awareness.

### The strategic fields of action in CSR

With Schwalbe’s four pillars of responsibility, we have defined four strategic fields of action in our CSR policy: products, the company, our supply chain and social commitment. These fields of action are an integral part of our commitment, designed to ensure our success in the long term and create added value for all of our groups of stakeholders.

As pioneers at product and CSR level, we are convinced that CSR is an ongoing transformation process and that we can always do better. We have therefore set ourselves ambitious targets in relation to Schwalbe’s four pillars of responsibility and are constantly working on achieving these goals and developing new campaigns and initiatives to drive positive change.





**PRODUCT**

**CIRCULAR ECONOMY**

- Tire recycling
- Inner tube recycling

**MATERIAL OPTIMISATION**

- Material screening in accordance with C2C (constituents, renewable and recycled materials)

**50 YEARS OF QUALITY**

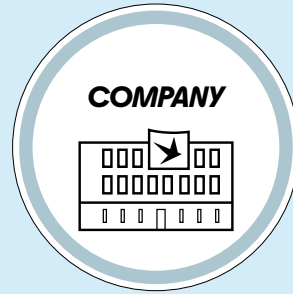
- Long-lasting quality products

**PRODUCT INNOVATION**

- Green Marathon (development of the first tire with a closed loop and 70 % renewable/recycled materials)
- Aerothan (TPU material, sustainable high-end product)
- Green Guard (first puncture protection, 33 % recycled material)
- Green Compound (rubber compound made exclusively of renewable materials)

**WASTE MINIMISATION**

- Resource-conserving packaging
- 100 % recyclable packaging



**COMPANY**

**EMPLOYEES**

- Extensive support and encouragement
- Long-term employment (further training, bike leasing, etc.)

**COMPANY HEADQUARTERS**

- Materials up to 98 % recyclable

**ENERGY CONCEPT**

- To cut emissions using renewable energies at the Reichshof facility

**MOBILITY CONCEPT**

- Sustainable mobility (cycle-friendly employer, switch to e-mobility)

**RESPONSIBLE PROCUREMENT**

- Highest standards applied to purchasing

**STBi TARGETS**

- Path to net zero



**SUPPLY CHAIN**

**IMPROVED LIVING STANDARDS**

- Fair-trade natural rubber (Fair Rubber Association)
- Higher wages and better working conditions

**GLOBAL ENERGY CONCEPT**

- Use of organic waste instead of coal at the plants
- More renewable energy at the production sites

**ECOFRIENDLY LOGISTICS**

- Selection according to CSR criteria
- Supplier code of conduct



**SOCIALS**

**SOCIAL INCLUSION**

- Promotion of the wheelchair division (extensive portfolio of everyday activities and sports)
- Sponsoring of parasports

**CHARITY PROJECTS**

- Chancenwerk e.V.
- World Bicycle Relief
- Children for a better world

**SPORTS FUNDING**

- Sponsoring of athletes
- Regional commitment (VfL Gummersbach, TTC Bergneustadt)

**PROMOTION OF BIODIVERSITY**

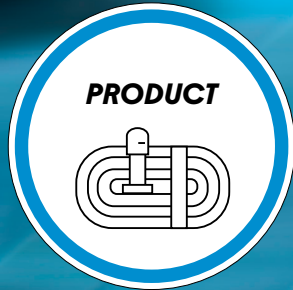
- Borneo Orangutan Survival Foundation
- Headquarters planted up for greater biodiversity
- Rooftop garden (vegetables and herbs for the canteen)

**CLIMATE PROTECTION**

- Contribution to climate

# OUR CSR TARGETS BY 2030

We're one of the first companies in the bicycle industry to set such ambitious CSR targets.



**2023**  
Launch of Green Marathon, first product containing 100 % rCB (recovered carbon black)

First product carbon footprint (old Marathon and new Green Marathon)  
Inner tube recycling extended to other markets

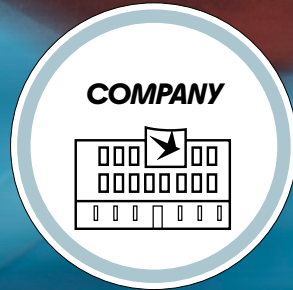
**2024**  
Expansion of the use of rCB to further product groups

**2025**  
Life Cycle Assessment (LCA) for all core products

Application of Marathon/CSR attributes to further products

CONEBI/CIE Sustainable Packaging Commitment

**2026**  
7 million recycled tires  
18 million recycled inner tubes



**2023**  
GHG balances for the entire Schwalbe Group (base year: 2018)

Full, holistic CSR onboarding programme

**2024**  
Expansion of our commitment to climate protection funding/development projectse

**2025**  
Green canteen certification: 100 % renewable energy in Reichshof

100% BEVs (Battery Electric Vehicles) for HQ

**2030**  
Climate goal for the Schwalbe Group: to reduce scope 1 and 2 emissions by at least 55% and extend the inclusion of scope 3 emissions



**2023**  
Audits of the JV factories in Indonesia and Vietnam

Expansion of Fair Rubber in the product portfolio from 3 to 18 tires

Expansion of data collection to cover tier 2 suppliers

**2024**  
Application of the code of conduct to all preliminary suppliers/subsuppliers and suppliers of accessories

GHG balance for both plants (base year: 2018)

**2025**  
Additional external auditing of the code of conduct



**2023**  
Start of support for social projects in our production countries and for people in raw material extraction

Establishment of Schwalbe Forest/ regional climate forest

**2025**  
25 Children's Advisory Council projects

**2030**  
25 % cycle mobility share of all commuting



## AGENDA 2030

*We are actively committed to helping to achieve the goals set by the United Nations (UN).*

### Our contribution to the 17 SDGs

The 17 Sustainable Development Goals (SDGs) set by the UN provide a comprehensive framework in which to tackle social, economic and ecological challenges worldwide. We have pledged to make a positive contribution to these goals and integrate them into our corporate strategy.

We have intensively examined the question as to which of the 17 SDGs can be best supported by Schwalbe and which best tie in with our company mission and core areas of expertise.

Our analysis has revealed that we as a company can make the biggest contribution by focussing on certain areas over which we have the largest influence.

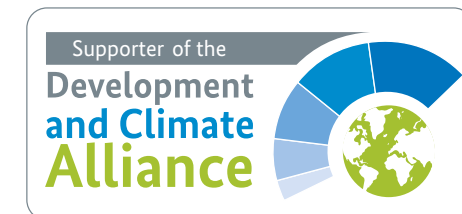
**We are therefore chiefly concentrating on SDGs 7, 8, 9, 12, 13 and 15.**



## SUSTAINABLE DEVELOPMENT GOALS

### International climate funding

For the year 2022 Schwalbe has purchased emission certificates for the emissions calculated for 2021 and thus made valuable investments in climate and development projects in Indonesia and Vietnam. The purchase of these emission certificates is not offset against Schwalbe's emissions inventory but instead contributes to achieving the NDCs in the respective countries. In the context of Sustainable Development Goals (SDGs), "NDC" stands for "Nationally Determined Contributions". These are pledges countries make to help protect the climate and promote sustainable development. The Paris Agreement requires every country to describe and communicate its climate protection measures for the period after 2020. This is recorded in the NDCs.



# MATERIALITY ANALYSIS

*Our materiality analysis has shown that innovation, research and development hold an outstanding significance for our company.*

## We examined two perspectives during our analysis:

### Inside-out

Which positive and negative impact do Schwalbe’s business activities have on the economy, environment and society?

### Outside-in

To what extent do the defined sustainability issues affect Schwalbe’s course of business, operating results and its situation?

## Current Materiality Analysis

Our materiality matrix outlines the most important issues for Schwalbe and the impact these have on the economy, environment and society. Our current materiality matrix used to identify the most relevant topics is based on the materiality analysis we performed in the spring of 2022 with the help of an external group of experts. A compilation of potentially key issues formed the basis here that was supplemented by new and important future aspects of CSR in our branch of industry. The assessment was made according to the Global Reporting Initiative’s (GRI) definition of materiality.

## Fourteen key issues

We identified and assessed a total of 14 issues. To this end, we first ran a document analysis, in which we determined the most important effects of current sustainability trends on Schwalbe. We then made an SDG (Sustainable Development Goal) impact assessment. Here, we rated the contribution of Schwalbe’s business activities on the global sustainability targets set by the United Nations.

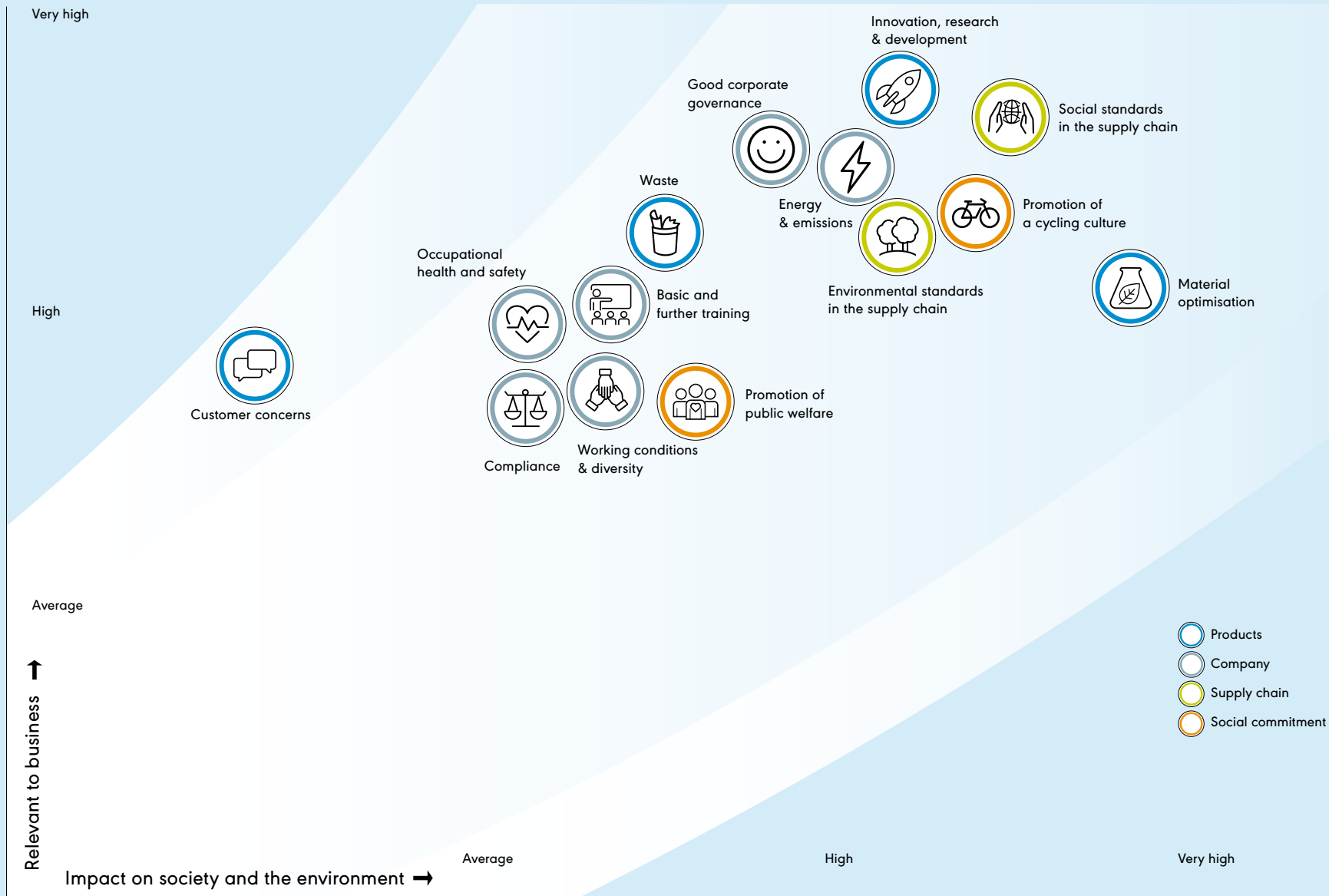
## Summary in a materiality matrix

The results document that our strategic fields of action are relevant and describe where we can develop these further. After we had conducted a final assessment of the 14 issues, we summarised these in a materiality matrix. Innovation, research and development were given the maximum rating. Responsibility in the supply chain also received a very high score.

## List of key issues

Pillar of CSR	Key issue
Product	Material optimisation
	Innovation, R&D
	Customer concerns
	Waste
Company	Good corporate governance
	Compliance
	Basic and further training
	Working conditions and diversity
	Occupational health and safety
	Energy and emissions
Supply chain	Social standards in the supply chain
	Environmental standards in the supply chain
Socials	Promotion of a cycling culture
	Promotion of public welfare

# MATERIALITY MATRIX





## COMPLIANCE SYSTEM

*Compliance is firmly rooted in our system of values here at our family business and forms the basis for ethical and responsible action.*

### Continuous review and further development

Ecological, economic and social requirements are regularly changing. Companies like Schwalbe must therefore constantly review and adapt their business models. One important aspect of this is compliance, i.e. checks to see how far laws and internal guidelines are adhered to by organisations and their employees.

As a family business under third-generation management, observing and maintaining compliance is in full keeping with our deepest convictions and system of values. We endeavour to act across cultural boundaries and see innovation as one of our greatest strengths. At the same time, we attach great value to acting responsibly and in a manner that is gentle on the environment. This is why we believe it is important to build up trusting relationships with our employees, customers, business partners and other stakeholders who can rely on Schwalbe being a legally compliant partner. We have set up a complaints office that can be reached at [compliance@schwalbe.com](mailto:compliance@schwalbe.com).

# STAKEHOLDER COMMITMENT AND DIALOGUE

*Dialogue and exchange with our stakeholders particularly help to continuously improve our commitment to CSR.*

## Interaction with our groups of stakeholders

We actively exchange information and ideas with groups of stakeholders who have a strong link to the economic, social or ecological input and achievements of our company. The knowledge we acquire through this interaction with our stakeholder groups enables us to further develop our decision-making processes and CSR policies.

## Resumption of trade fair activities at Eurobike 2022

We communicate with our stakeholder groups at regular meetings, through correspondence or during visits to trade fairs and other events, for instance. Following the pandemic, 2022 was the first year we were again able to exhibit at Eurobike in Frankfurt am Main and present the Schwalbe Recycling System to the general public.

### Forms of dialogue and issues of stakeholder commitment

Stakeholdergroup	Form of dialogue	Issues
Customers	Personal address and contact at trade fairs, sports events, functions, workshops, dialogue through the service center, customer hotline and factory tours	Products, new materials, technical advice, customer concerns and suggestions, sustainability and recycling system
Employees	Annual appraisals, employee magazine, open-door policy, joint events	Working conditions, further training, occupational health and safety, plans and projects, sustainability program, recycling system
Specialist trade	Personal interaction at annual product presentations and various specialist conferences and trade fairs, trade magazines, hotline and support	Products and product innovations, recycling system, customer innovations
Suppliers	Supplier talks and audits for new product developments and innovations	Production conditions and product quality, transport routes, sustainability requirements, contractual terms, plans and projects
Local neighbourhoods	Personal talks, personal contact during sponsoring events and funding measures, open days	Regional economic development, bicycle mobility, commitment to social issues, sports and education.
Politicians and associations	Personal talks and written correspondence, participation in events and consultations	Environmental protection, circular economy, promotion of a cycling culture
Science	Research community with Cologne Technical University, courses of study (Fraunhofer Institute)	Recycling system and material optimisation
Media	Address through corporate communications and marketing, interviews, podcasts/videos, press conferences and press releases	Schwalbe Recycling System, products, social commitment, training
Charitable organisations and NGOs	Personal talks, participation in events and consultations	Support for social projects, training, sport promotion, biodiversity

## RESPONSIBILITY IN THE SUPPLY CHAIN

*We find it very important to maintain ecological and social standards throughout our entire supply chain.*



obligations. We rely on measures such as audits and certification to make sure that our standards are met.

### The sustainability cloud platform

The sustainability cloud platform helps us to create transparency regarding purchasing and CSR in all phases of the supply chain. We use sustainability to identify CSR risks, observe our duties of care and reach our CSR supply chain targets. Using the cloud platform, all necessary data is automatically retrieved from our suppliers and assessed, measures are communicated and the implementation thereof is monitored.

### Cooperation with the Fair Rubber Association

Together with the Fair Rubber Association, we promote the fair trade of natural rubber and actively support the improvement of living and working conditions for rubber tappers. Head of our CSR department Felix Jahn is deputy chairperson of the association. To date, we are the only tire manufacturer to have joined the Fair Rubber Association – despite 70% of all natural rubber traded worldwide being used in

the tire industry. Schwalbe is the largest rubber buyer and the second-largest customer of Fair Rubber worldwide. We are constantly working to increase the amount of Fair Rubber used.

The number of members of the Fair Rubber cooperative rose from 277 in 2020 to 2,320 in 2022. By the end of 2023 we aim to have a membership of 2,500. Moreover, in 2023 we plan to raise the percentage of Fair Rubber in our products and increase the number of tire models that can be produced using fair-trade natural rubber sixfold.

### Fair trade premium

As part of our cooperation with the Fair Rubber Association, we at Schwalbe pay an additional fair trade premium of €0.50 per kilogramme of natural rubber (dry goods). This support goes directly to a specially founded cooperative that currently has 2,320 members. The cooperative is situated close to our Schwalbe factory on Java in Indonesia.

### Code of Conduct

Our supplier code of conduct was published in the reporting year and is available on our website. By 2024 we aim to have signed our supplier code of conduct with all of our relevant accessory and preliminary suppliers (tier 1 and 2 suppliers). The first audits are to be triggered in 2023.

### Transparency in the supply chain

For us, transparency in the supply chain is a central component of our CSR and an important means of ensuring that our products and our business are in accord with our values and



**By 2023 Fair Rubber will be used in 18 Schwalbe products.**

**Code of conduct by 2024 for the entire supply chain.**

**Schwalbe is the first Fair Rubber member active in Indonesia.**

## CHANGE TO OUR LOGISTICS STRATEGY

*By amending our logistics strategy, we have been able to make significant cuts in emissions*

### Switch from air cargo to sea freight

In 2018 we significantly altered our logistics strategy by making a practically full switch from air cargo to sea freight. Parallel to this, we also consistently began making more direct container deliveries. This change has resulted in us being able to reduce the air cargo tonnage in the 2022 reporting year by ca. 96 % since 2018, cutting this from 1,308 to 54 metric tons.

### Financial savings of 8,600 t CO<sub>2</sub>e per year

Compared to air cargo, one ton of sea freight produces just 3% of the emissions of the former. We are striving to continuously improve our logistics processes and identify environmentally-friendly alternatives in order to minimize our impact on the environment. Choosing to use sea freight not only permits us to considerably cut our CO<sub>2</sub> emissions but also to reduce our dependency on energy-intensive forms of transport.

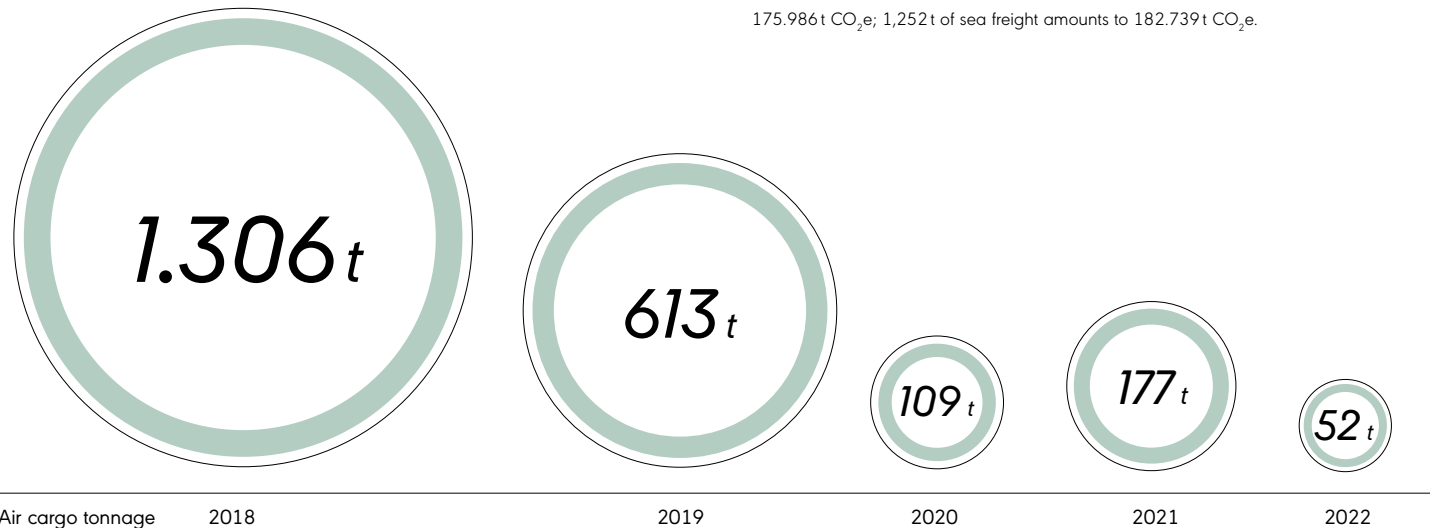
On balance, a reduction of 1,254 tons of air cargo by switching to sea freight is the equivalent of cutting 8,600 tons of CO<sub>2</sub>e emissions per year.\* Converting to sea freight as the preferred mode of transport is part of our CSR policy and our commitment to ecofriendly business practices.

\*Basis for calculation: air cargo emissions in 2018 and 2022: 8,959.278 t CO<sub>2</sub>e and 175.986t CO<sub>2</sub>e; 1,252t of sea freight amounts to 182.739t CO<sub>2</sub>e.



**Compared to 2018 the total tonnage of air cargo was reduced from 1,306 t to 52 t a year.**

**96% reduction in air cargo tonnage by switching to sea freight**



Air cargo tonnage 2018

2019

2020

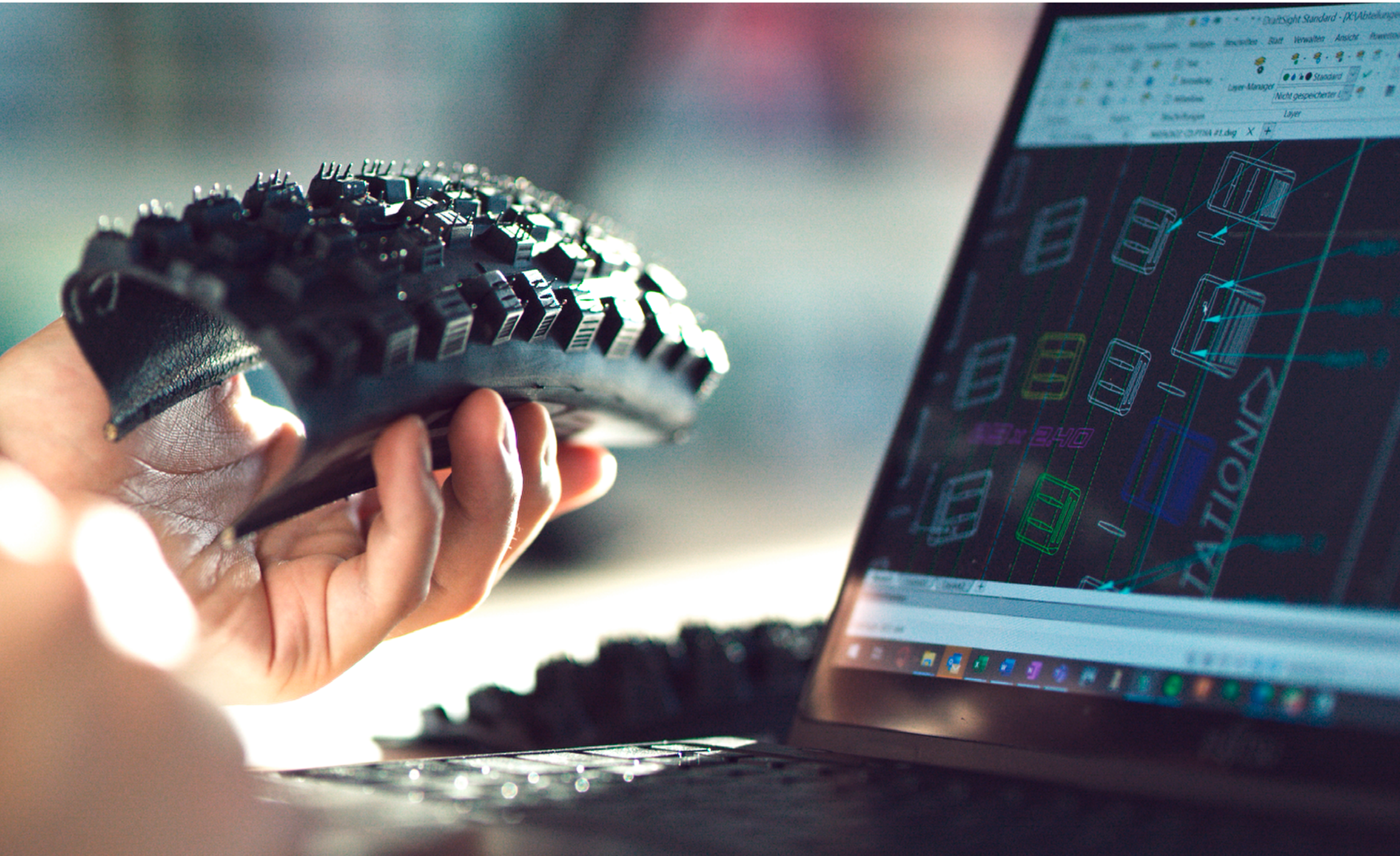
2021

2022



***INNOVATION  
AND TECHNOLOGY***





## WE THINK IN CYCLES

*Our aim is to design products and materials so that they can circulate in closed loops.*

### The cradle-to-cradle principle (C2C)

Our source of inspiration is a closed circular economy according to the cradle-to-cradle principle (C2C). In this approach, right from the beginning products and processes are designed so that all materials can be recycled after use. This circulation means that no waste is actually produced.

Since 2013 we have been working very closely with the EPEA research institute in Hamburg to implement the C2C principle at Schwalbe and gradually make our products and processes environmentally-compatible and circular. The C2C concept aims to make all materials fully reusable. As in the world of nature, all substances repeatedly form the basis of something new in an endless loop. In order to produce healthy and fully recyclable C2C products, all materials undergo a thorough chemical analysis and the entire process chain is constantly examined and optimised.

Another advantage of the C2C principle is that recycled materials are normally much more energy efficient than manufacturing new materials for bicycle tires and inner tubes. If we are consistent in implementing a circular economy, we will thus save on fossil resources and significantly reduce our carbon footprint.

### Modern, future-proof materials

We are constantly researching the development of modern, future-proof materials and recycling options. One important element of this is material screening, where together with the EPEA we subject all substances in our products to precise analysis.

### More green attributes and LCA

From 2024 we plan to use more recycled and renewable materials (green attributes) in our core products. This move aims to make our products more environmentally-friendly.

Furthermore, we have made it our aim to carry out extensive Life Cycle Assessments or LCAs of our core products by 2025. These analyses will help us to gain a better understanding of the full life cycle of our products and identify any potential impact they might have on the environment. In doing so, we would like to ensure that the resource efficiency and environmental friendliness of our products are improved.



### Our cooperation with the EPEA enables us to:

- Identify problematic substances
- Scientifically supervise the substitution of problematic substances
- Research modern, future materials and recycling options
- Create a better network throughout the entire supply chain.

### Benefits of working with the EPEA:

- Material optimisation
- Butyl inner tubes are 100% recyclable
- Take-back system with increasing recycling rates introduced
- Development of a full inner tube recycling capacity.

## OUR NEW HEADQUARTERS

*Our new headquarters represent a pioneering concept, in which the building acts as both recycling depot and source of energy.*

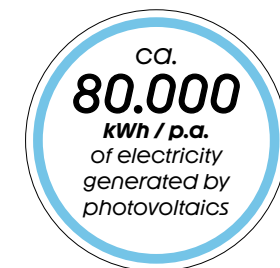
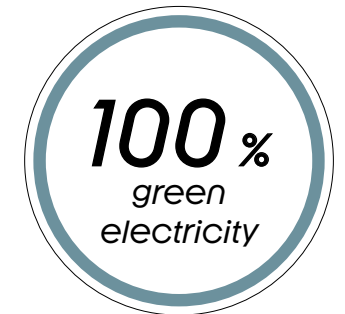
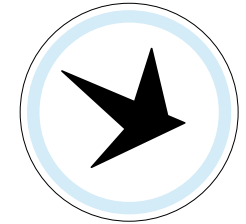
### Recyclable materials

Our notion that all materials can be recycled after use is also applied to our facility in Reichshof. In designing our new headquarters, we allowed ourselves to be guided by the cradle-to-cradle principle. A total 70% of the materials used to build our new head office can be recycled, with downcycling of a further 28% possible. A major factor in this concept is the material passport that even decades later provides information on which components were used in construction, meaning that these can be clearly sorted and separated should the building be dismantled.

### Energy supplied by regenerative sources

Regarding the power supply, we rely on renewable sources of energy. Energy is not only consumed in the building but also generated by solar panels. This allows us to produce about 80,000 kWh of electricity per annum. Heat pumps also generate heating and cooling as part of our efficient energy concept through panels installed on the ceiling.

The use of water also adheres to the principle of circulation wherever possible. Rainwater is collected in cisterns and used to flush toilets and for watering. The existing vegetation plays an important role as it has a cooling effect, helps to regulate levels of humidity, increases biodiversity and improves the air quality. All of this has a positive impact on the (micro)climate.







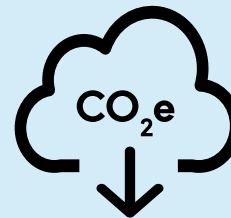
***Recycling is a core element in the move from the current system of linear economy to a holistic circular economy.***



***Use secondary raw materials***  
*for considerable savings in fossil resources*



***Minimise CO<sub>2</sub> emissions***  
*by recycling instead of incinerating*



***Reduce the carbon footprint***  
*by using secondary raw materials*



***Avoid waste by recycling***

## RECYCLING FOR THE CIRCULAR ECONOMY

*As pioneers of the transition to the circular economy, we are actively trying to abandon linear production models.*

### Pioneering work since 1993

Through our commitment to the establishment of a circular economy we have done pioneering work, as prior to this no recycling processes or systems existed for our products. In 1993, long before ecological responsibility was a social issue, we started one of the very first tire take-back campaigns. There can be a danger to humans and the environment when used tires are improperly disposed of or burned. This linear form of economy also results in the continual loss of valuable resources.

During the long and complex development process of our recycling systems, we were motivated by the idea that no waste is produced by recycling and that all components in the used products can be recycled and reused.

### Maximum possible percentage of recycled material

We also aim to include as much recycled material in our products as possible. We were therefore the first company in the bicycle industry to develop a rubber compound (Green Compound) made entirely of recycled and renewable polymers.

Recycling is an important core element in the switch from our currently predominant linear economy to a sustainable circular economy (cradle-to-cradle). Developing innovative technologies enables us to reduce our dependency on globally critical supply chains and at the same time minimise the ecological impact of our business activities by:

- Using secondary raw materials and thus saving on fossil resources;
- Reducing our carbon footprint by using secondary resources;
- Replacing incineration with recycling and thus preventing CO<sub>2</sub> emissions;
- Avoiding waste that would otherwise be generated during disposal.



## AWARD-WINNING INNER TUBE RECYCLING

*With our inner tube recycling system, we have taken the first step towards the circular economy.*

### INNER TUBE RECYCLING

 **100 % recyclable** without loss of quality

**Starting material** comprises all brands of used bicycle inner tube



**Devulcanisation** and recovery of butyl rubber at Hung-A

**90 % CO<sub>2</sub> saved** across all transport routes



**The new inner tube** consists of 20% recycled materials

#### Unique take-back system

In 2015 we became the first company worldwide to offer an innovative take-back and recycling system for used inner tubes in the specialist bicycle trade. In the development of this system, we cooperated with our production partner Hung-A and the renowned Hamburg environment institute EPEA.

#### From old to new – with the accustomed quality

Returning old bicycle inner tubes is simple: retailers in Germany, the Netherlands, Great Britain, Belgium and Switzerland can send us all brands and makes of inner tube. Our uniform conceptual framework allows more countries to be incorporated into this system. We are also planning a further rollout to significantly increase recycling volumes. In 2023 the USA, Austria, France and Italy are to be included in the process.

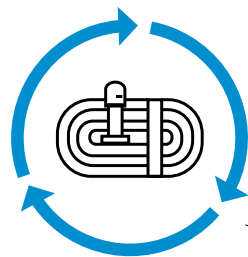
We bundle and transport the collected inner tubes to our recycling plant in Indonesia that is next-door to one of our production sites. Here, our production partner Hung-A then uses its specially developed devulcanisation process to recover butyl rubber recycle from the used inner tubes.

**Old inner tubes fully recycled**

By the end of 2022 we had already recycled 8,581,714 inner tubes. We accept all brands of inner tube which we then fully recycle. Each Schwalbe standard inner tube consists of 20% recycled material. We are constantly trying to further increase the percentage of reused material without detriment to the quality of the new inner tube.

The recycling process has an extremely positive energy balance. Taking all transport routes into account, 80% in energy and over 90% CO<sub>2</sub>e are saved compared to the production of the same amount of new material. Our outstanding sustainability efforts were rewarded in December 2020 with the German Sustainability Award in the new design category, in which we were heralded as pioneers.

**INNER TUBER RECYCLING**



**90%**  
CO<sub>2</sub>e  
saved

**80%**  
less energy  
consumed

Over  
**8,5** million  
recycled  
inner tubes

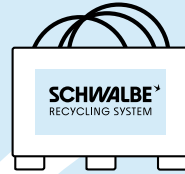
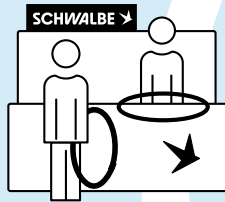




# SCHWALBE Recycling System

## The process

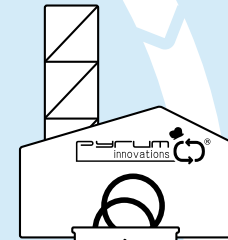
**1 Collection**  
Bicycle shops collect all brands of used bicycle tire in the Schwalbe Recycling Box.



**2 Transportation**  
The full boxes are transported from bicycle retailers from all over Germany to our recycling partner Pyrum Innovations AG.

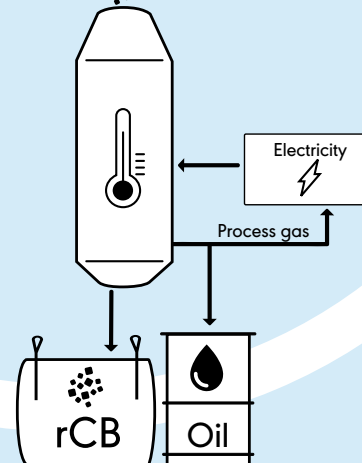
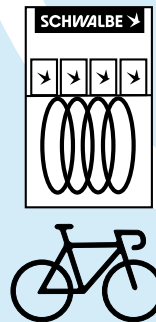


**3 Shredding**  
In the plants at Pyrum Innovations AG the tires are first shredded, with steel and textile fibres separated from the rubber granulate.



Rubber granulate

**5 Recovery**  
The recovered carbon black (rCB) is used for new Schwalbe products. Fewer valuable resources are consumed and there are fewer CO<sub>2</sub> emissions.



**4 Pyrolysis**  
The rubber granulate is fed into the pyrolysis reactor. Here, it is converted into the valuable secondary resources of gas, oil and pyrolysis coke or what is known as recovered carbon black (rCB).

## LAUNCH OF THE SCHWALBE RECYCLING SYSTEM

*With the Schwalbe Recycling System all brands of used tire can be fully recycled for the first time without producing any waste.*

### The loop closes

When we launched our Schwalbe Recycling System in 2022, we presented the international public with an innovative, holistic recycling process – as the first bicycle tire manufacturer worldwide to do so. This is the first time in the bicycle industry that all brands of used tire can be fully recycled without producing any waste.

With the Schwalbe Recycling System we aim to recover the raw materials contained in used tires and establish a genuine circular economy in the sense of the cradle-to-cradle principle. We then use the secondary resources produced in an elaborate thermochemical process (pyrolysis) to make new Schwalbe products.

### Research community with Cologne Technical University and Pyrum Innovations AG

The foundation of our success in recycling lies in our partnership: all developments are engineered by a research community comprising Schwalbe, Cologne Technical University and recycling specialists Pyrum Innovations AG. As a prerequisite for further processing, in 2019 this group conducted its first successful lab experiments, in which it separated used bicycle tires into the three material fractions of rubber granulate, steel and textile fibres.

The first hurdle had been cleared: the rubber granulate obtained in the shredding process was then broken down further by our partner Pyrum in the patented Pyrum thermolysis process. During thermolysis heat is applied to the rubber granules in an oxygen-free environment that are then converted into the valuable secondary raw materials of pyrolysis coke, also known as recovered carbon black or rCB, pyrolysis oil and pyrolysis gas.

### Schwalbe demand for quality and performance

For application of the pyrolysis process for the Schwalbe Recycling System to be successful, the project team members examined how the rCB from the used tire rubber granulate could satisfy the same demand for quality and performance Schwalbe made of the industrial coke or virgin carbon black used to date. Only when the rCB met these requirements could it be used in the development of our first recycled tire (see the chapter on the Green Marathon).

### 80% fewer CO<sub>2</sub> emissions

The launch of the Schwalbe Recycling System is an important step in the industry's shouldering of ecological responsibility: up until now, used bicycle tires were incinerated, destroying valuable resources and releasing harmful CO<sub>2</sub> into the atmosphere. Old tires can now be used to make new ones, with this process enabling ca. 80% fewer CO<sub>2</sub> emissions to be generated. The exact saving made during the process is currently being investigated in a scientific study. As soon as the results of this research are known, we will publish these in a report.

### Partnership with the bicycle trade

Before the recycling process can begin, the used tires need to be collected. By working together with our customers and specialist retailers, we can actively help to ensure that the raw materials contained in all brands of used tire are reused and not lost to the incineration process as has been the case up to now.

By the end of 2022 about 1,300 dealers in Germany had already signed up to the Schwalbe tire recycling project. They collect the used tires in special recycling boxes that Schwalbe has specifically designed for this purpose.



***The launch of the Schwalbe Recycling System is an important step in the industry's shouldering of ecological responsibility.***

## SUCCESSFUL PARTNERSHIP WITH PYRUM INNOVATIONS AG

*Pyrum and Schwalbe show that a circular economy can work.*

### Joint commitment to recycling

One of Schwalbe Recycling System's most important partners is Pyrum Innovations AG. At the plants developed and built by Pyrum, used tires are first shredded and then separated into three constituents: steel, textile fibres and rubber granulate. The latter is broken down in the downstream pyrolysis process to form pyrolysis gas and coke. The condensable parts of the gas are then treated to form high-quality oil that is procured by BASF and used as a substitute for crude oil in the chemicals industry. The remaining permanent gas is converted into electricity and powers the plant, making it completely autonomous in its energy supply. As of 2023 the recovered coke or carbon black (rCB) will be used to manufacture new Schwalbe bicycle tires.

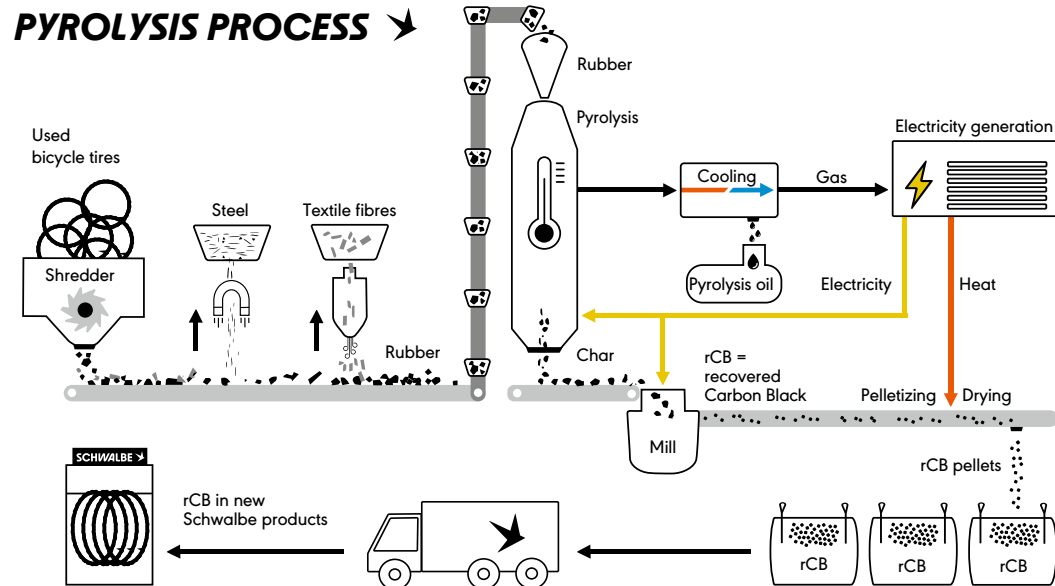
### Pyrum Innovations AG

From the Saarland in Germany, Pyrum looks back on an exemplary history any startup would be proud of. In 2007, in a tiny garden shed in Dillingen, four friends decided to set up a recycling company that uses heat and pyrolysis to break down rubber and plastic waste. Since its founding Pyrum has developed, planned and built everything itself - from its own laboratory to the present industrial-scale recycling plant.



**With the cooperation between Pyrum and Schwalbe we're driving sustainable innovation and making a positive contribution for the good of the environment.**

*Pascal Klein*







*We interviewed our environmental R&D manager Sebastian Bogdahn and Pyrum's CEO Pascal Klein about the bicycle tire recycling facility in Dillingen.*



***For us, innovation is the will to continuously improve, one that's deeply rooted in Schwalbe's DNA.***

**Pyrum Innovations AG and Schwalbe are now an established team.**

**How did you first come into contact with Pyrum?**

**Sebastian Bogdahn:** My professor suggested that I approach Schwalbe in 2019 when I was looking for a cooperating partner for my master's thesis on the recycling of bicycle tires. In my thesis I developed a holistic recycling process chain – in theory at least. However, it was always my aim and intention to put this into practice. It also soon looked as though there was a good chance of success here. In my search for a recycling partner, I came across Pyrum Innovations AG. When I approached them three-and-a-half years ago, they were still in the advanced startup phase. Pyrum is now listed on the stock exchange.

**Which role does the bicycle industry play for Pyrum Innovations AG?**

**Pascal Klein:** The bicycle industry enables us to reach out to a great many people. It's surprising just how many decision-makers and officials in politics know about us because they are cyclists and first heard of us in conjunction with their bikes. This has opened up a wealth of opportu-

nities for us. What's more, the bicycle industry gives us a good platform where we can demonstrate how a circular economy can work. On a small scale we've been able to show that it really is possible to close the loop.

**Were there any special reasons for using pyrolysis for old tires?**

**Pascal Klein:** We opted for the pyrolysis of old tires because with this we can make a considerable improvement on the old tire market in the short term and create a completely sustainable solution. At the moment, around half of the approximately 650,000 metric tons of old tires that accumulate a year are incinerated at cement plants. This number doesn't even include bicycle tires. Here, it's almost certain that most of them are disposed of with the general household waste and that they end up in the waste incinerator.

#### What were the biggest challenges of this project and what are the next steps planned?

**Pascal Klein:** The technology behind pyrolysis is extremely complex and lots of companies have already had their fingers burned and miscalculated while trying to develop a functional, efficient pyrolysis plant. Often the thinking is that if big companies haven't been able to do it, then why should a few young people from the Saarland manage it? We were always left to our own devices and were only really taken seriously when BASF invested in us. We've now earned the trust of the general public and are pursuing a long-term plan to construct up to 20 plants in Europe and thus recycle 15 to 20% of the European old tire market.

#### How do you manage to obtain a quality of recycled carbon black that can be used to manufacture powerful, durable tires?

**Sebastian Bogdahn:** Virgin carbon black or vCB is normally used to make tire compounds. This is a precisely defined, black product rich in carbon made from a basis of crude oil and gas. As opposed to this, carbon black recovered during pyrolysis (rCB) isn't as precisely defined in its properties: as we process various brands of different tire, there's a certain fluctuation in quality at the input end. We must work hard to produce as uniform a quality as possible at the output end. This calls for extensive analysis, checks and fine tuning to adjust the rubber compound according to rCB used. Our goal is to ensure a consistently high quality.

#### What are the hallmarks of the partnership between Schwalbe and Pyrum?

**Pascal Klein:** Even if we're now listed on the stock exchange, our cooperation is like working in a family business. The key advantages here are our fast decision-making processes, a high degree of flexibility and plenty of candid advice, especially in comparison with large corporations. We otherwise wouldn't have been able to implement the bicycle tire recycling system in such a short space of time. The cooperation between Pyrum and Schwalbe is an example of how companies with similar values and objectives can work together to drive sustainable innovation and make a positive contribution for the environment.

#### What's the situation like regarding tire recycling systems in other sectors outside bicycle tire manufacturing?

**Sebastian Bogdahn:** We're proud to see that our project now serves as a model and even as a pioneering example of the circular economy in the tire and rubber industry. As a medium-sized enterprise we've managed to set up a project within just a few years that can now act as a template and blueprint for others.



## THE DEVELOPMENT OF THE GREEN MARATHON – SCHWALBE'S MOST ECOFRIENDLY TIRE

*Innovative leaders Schwalbe and Hung-A develop the world's first closed loop tire.*



### The idea for the Green Marathon

And so we come full circle: when our former tour product manager René Marks started at Schwalbe in 2010, his first product was the current Marathon (HS420). Before he retired, his final project was to develop the new HS620 version under the supervision of Felix Jahn and Stefan Franken - with the aim of producing Schwalbe's most environmentally-friendly tire yet.

### New standards for our ecological responsibility

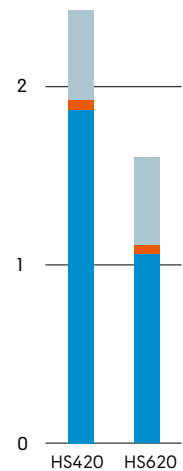
The idea for the new version (HS620) or the Green Marathon was born some time ago and the project officially launched in the autumn of 2019. We wanted to set a new benchmark in ecofriendly products without compromising on performance and quality. To date, other developments such as our Green Compound have only been used in our entry level tires. Our Marathon tires have always set standards in durability, safety and puncture protection. It thus seemed logical to extend these in an attempt to help us shoulder more ecological responsibility. With the new Green Marathon, we are combining our research and development work of the last ten years with resource protection and environmental friendliness.

### The development of the Green Marathon

In the development of the Green Marathon various technological challenges needed to be met. Through our cooperation with the Hamburg environment institute EPEA since 2013, we have been able to eliminate 98% of all harmful substances. This is an extraordinary achievement. In the Green Marathon we use all of the appropriate sustainable resources currently available, including 70% recycled and renewable materials (compared to 27% in the previous Marathon).

Another specification in the development of the new Marathon was to use 100% Fair Rubber. We endeavour to use the most environmentally-friendly materials currently available for our Green Marathon. In applying more recycled and renewable raw materials we are helping to reduce the consumption of new resources and promote the concept of the circular economy. This allows us to establish a resource-conserving production and usage chain for the Green Marathon.

**Carbon footprint reduction in kg CO<sub>2</sub>e per tire**



- Processing (energy)
- Transport
- Raw material

### The first recyclable tire

The Green Marathon is the first recyclable tire worldwide made entirely of carbon black (rCB) recovered by Pyrum Innovations AG from the Schwalbe Recycling System that is used in place of conventional industrial virgin carbon black (vCB). It comprises 100% Fair Rubber and does not contain any synthetic rubber. Recycled rubber is also used. The Green Marathon has undergone more field trials with test riders than any other Schwalbe tire before it – which proved quite a challenge in view of the difficult circumstances caused by the corona pandemic. From 2024 onwards further products will be gradually switched over to the new technology, with the attributes of the Green Marathon integrated into other Schwalbe tires.

### Development partnership with Hung-A

Our close partnership with Hung-A played a major role in the development of the Green Marathon. Countless test samples and versions were manufactured. Our venture also resulted in a more intensive cooperation between Hung-A and its suppliers as new materials had to be found and tested. Hung-A set new standards in the development of the rubber compounds for the tire treads:

the result is our ADDIX ECO compound. Our many years of collaboration with Hung-A have also allowed us to ensure high standards in relation to working conditions, human rights, environmental protection and quality at the production sites. Moreover, Vietnam and Indonesia where our factories are located have outstanding expert knowledge of the rubber-processing industry.







**Detailed PCF calculations for the Green Marathon**

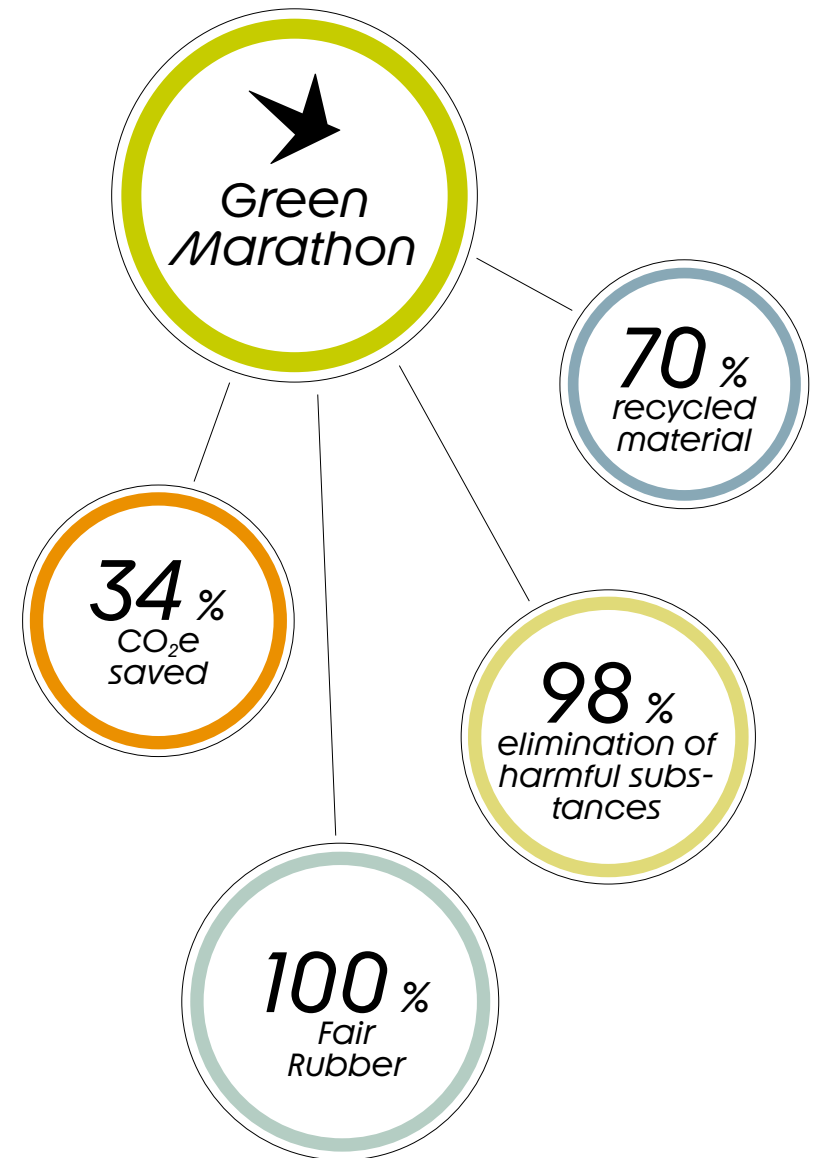
Manufacture of the new Marathon (HS620) enables more than a third CO<sub>2</sub>e to be saved compared to the previous model (HS420). Around 34% less CO<sub>2</sub> is generated. In order to calculate this savings, detailed product carbon footprints (PCFs) were drawn up for both models and evaluated according to the current IPCC AR6 standard (GWP 100, biogenic CO<sub>2</sub> only) and applying a 5% cut-off rule. Specifically, PCFs of 1.61 kg CO<sub>2</sub>e per tire were computed for the new Marathon as opposed to 2.43 kg CO<sub>2</sub>e per tire for the previous model.

**Ecological benefits from production in Southeast Asia**

Schwalbe tires, including the Green Marathon, are manufactured in Indonesia and Vietnam by Hung-A. The resources and materials for production are primarily extracted in Southeast Asia. The natural rubber, for example - one of the main components in a tire - comes from Fair Rubber plantations that are only around 130 kilometres from our production site. Ecologically, then, producing in Southeast Asia has considerable benefits over manufacturing tires in Europe.

**Move of production to Europe?**

Moving production to Europe would result in much higher transport emissions. A calculation drawn up by our CSR department in the reporting year revealed that production in Germany would result in three-and-a-half times more emissions for transportation (computed on the basis of the emission factors specified in EN 16258 and by the Global Logistics Emissions Council or GLEC with reference to the ecoinvent 3.6 database as of 2022).





# PEOPLE – PERSPECTIVES AND MOTIVATION



## OPPORTUNITIES AND DIVERSITY

*Our employees are invaluable to us and the key to our success.*

### Communicative and motivating working environment

Since the founding of our company we have felt it important to create a communicative and motivating working environment for our employees – one that also inspires creativity. Our vision and core values are shaped and supported by our personnel, with communication possible at all times thanks to our flat hierarchies. Some of our young colleagues compare our work atmosphere to a university campus, where others speak of an open-door policy. Whatever you like to call it, we create a work culture marked by respect and appreciation, promote equality and pay fair wages.

Our global setup means that cultural diversity and international networking are firmly anchored here at Schwalbe. We consider this to be a gift and are inspired by the different life experiences, skills and cultural backgrounds prevalent within our group. As a responsible family business, for us it goes without saying that all people are treated with respect and that no form of discrimination whatsoever is tolerated. For we are absolutely convinced that diversity, cultural variety and inclusion secure our company for the future.

### Strong bond

Many of our employees have long been part of Schwalbe – and we would like to honour this. This is why we offer various financial incentives and loyalty premiums and are continue to expand our system of remuneration for special payments and further development of personnel.

In addition to diverse employee events such as our annual summer party, joint cycling trips and participation in club sports at the TTC Bergneustadt create a strong bond and help us to stay fit. This is also part and parcel of our occupational health management system that we implement in cooperation with AOK health insurance and German Sports University Cologne.

Furthermore, we also offer a company pension plan, to which we contribute as an employer, and company-funded accident insurance for all personnel.

Our in-house staff restaurant also helps to create and maintain a good corporate climate; this is expected to receive green canteen certification by 2025.

TOGETHER



Employees in Germany in 2022

**203**  
employees

**7**  
apprentices and students

**2.2%**  
staff turnover

**28**  
new hires



## PERSPECTIVES AND PROMOTION

*We take every available opportunity to support our employees in their development as best we can.*

### Incentives for further development

We attach great value to the further development of our employees. To create incentives to this end, in 2021 we set up our digital unit and are also planning on establishing a Schwalbe campus for training courses. By 2023 we will develop and realise an extensive onboarding program for this purpose.

We also give personnel the chance to complete a first-aid course as part of our occupational health management system.

So we can encourage even more people to join us at Schwalbe, we offer apprenticeships, student traineeships and internships and have a dedicated contact person for recruiting student trainees at universities. We also already cooperate closely with the Cologne Chamber of Industry and Commerce on the training and supervision of our apprentices. In addition, Schwalbe is a member company of OK Ausbildung e.V., a regional coordination centre for training courses.

### Apprentices/students

	2020	2021	2022
Apprentices	3	3	4
Work/study students	0	0	0
Student workers	3	3	3
Internships	0	0	0

### Employees on parental leave

	2020	2021	2022
Women	-	6	8
Men	-	3	5



#### Health and safety are a matter of course for Schwalbe

As a family business, the well-being of our employees is our top priority. Occupational health and safety is therefore an integral part of our management process and supports our organisation and strategy. While our system of safety management complies with all legal requirements, we also actively strive to exceed these. All of the required processes and guidelines are anchored in our internal occupational health and safety management system. We also believe it is important to involve all of our employees in our work processes and to promptly implement any suggestions for improvement.

#### Cooperation with the AOK and German Sports University Cologne

In 2019 we launched our occupational health management system in cooperation with the AOK and German Sports University Cologne and organised regular mindfulness days for our employees, plus various other activities. During the corona pandemic we were sadly forced to temporarily suspend these programmes but are planning to resume them as of 2023.



#### The flexible workplace

It is important to us to promote health in the workplace. At Schwalbe, it goes without saying that all of our workstations are ergonomic and user-friendly. Furthermore, at our new company headquarters we give some departments a flexible choice of workplace, with identical IT equipment installed at all workstations. Even after the Covid pandemic we have retained the option of working two days a week from home, should the nature of a person's work permit it. This allows staff to flexibly decide where they want to work.

#### Talent and potential

Schwalbe has made it its job to encourage talent and potential and help our colleagues hone their skills for the future. If we promote life-long learning, they have better chances on the job market with their additional knowledge and expertise - further training is thus in the interests not just of Schwalbe but also of our employees. On request, we therefore make a partial or full contribution to the costs for further training.



***Our employees are our greatest resource. Only with their help can we continue to be pioneers in the transition to the circular economy.***



## WORKING FOR SCHWALBE

As of December 31, 2022, a total of 275 people worked for the Schwalbe Group. This is an increase of 15 over the previous year (260). With a low staff turnover rate of 2.2% in the reporting year, the number of newly appointed employees rose from 22 in 2021 to 28 in 2022. This is equivalent to a rate of 10.2% for new personnel in 2022. For the data on the workforce in this report, unless otherwise stated we have also taken our international subsidiaries into account alongside the statistics for our headquarters in Reichshof.

### Structure of the workforce at Schwalbe

	2020	2021	2022
<b>Total number of staff at Schwalbe</b>	<b>238</b>	<b>260</b>	<b>275</b>
of which men	179	193	206
of which women	59	67	69
of which non-binary	0	0	0
of which in Germany	167	188	203
of which in the UK	16	16	16
of which in France	2	3	3
of which in the Netherlands	34	34	34
of which in Italy	3	3	3
of which in the USA	16	16	16
of which elsewhere	0	0	0
of which full-time	205	223	239
of which part-time	33	37	36
of which temporary	3	3	4
of which permanent	235	257	271
Nationalities throughout the group	-	14	14
Average years of company employment	-	11	10



**Employee development**

	2020	2021	2022
Staff turnover rate	1.2%	3.4%	2.2%
Number of new employees	18	22	28
Rate of new employees	7.6%	8.5%	10.2%

**Age distribution**

	2020	2021	2022
Under 30 years	19	29	41
30-50 years	143	155	163
Over 50 years	76	76	71

**Diversity**

	2020	2021	2022
Women in the highest supervisory body	2	2	2
Men in the highest supervisory body	1	1	1
Women in management	3	3	3
Men in management	8	10	9

**Occupational health and safety**

	2020	2021	2022
<b>Workforce (in %) covered by an internal management system</b>	-	100%	100%
Number of work-related accidents	-	2	0
of which with serious consequences	-	0	0
of which fatal	-	0	0
Number of work-related illnesses	-	0	0



## COMMITMENT TO EMPLOYEE MOBILITY

*We encourage our employees to use their bikes to get to work.*

### Cycling to work

Cycling to work? This is what we want to encourage! Schwalbe provides its personnel with a number of incentives to use their bikes to commute.

One of these is bicycle leasing for all colleagues, with over 92 bikes leased in the reporting year. We also make monthly contributions to bike leasing fees. Since the expansion of our new headquarters, we also now have a company-owned bicycle workshop where company, private and test bikes can be serviced.

This service is free of charge for all employees. In our bicycle garage all staff can charge their e-bike batteries, park their bikes in a dry area or clean them in our special bike wash.

Even bad weather should also not be allowed to discourage anyone from cycling to work. In the new building at our headquarters we have thus installed showers and changing rooms so that all cyclists can prepare for work at the office in a suitable fashion after biking in. A further incentive is that employees can get ready for work during their working hours, as their way to the changing rooms already counts as work time.

### Certification as a bicycle-friendly employer

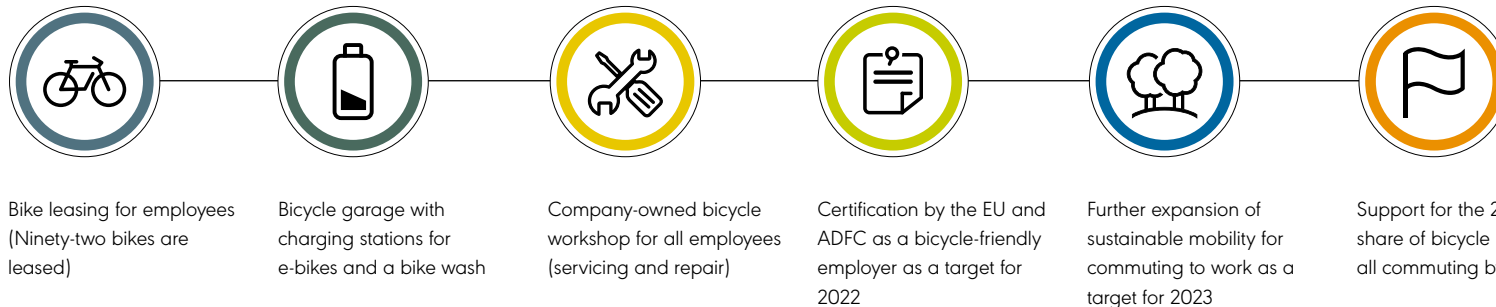
In the reporting year we were awarded a gold certificate as a bicycle-friendly employer for our infrastructure and facilities by the ADFC (Allgemeiner Deutscher Fahrrad-Club or German cycling association) and the EU.

### Electromobility

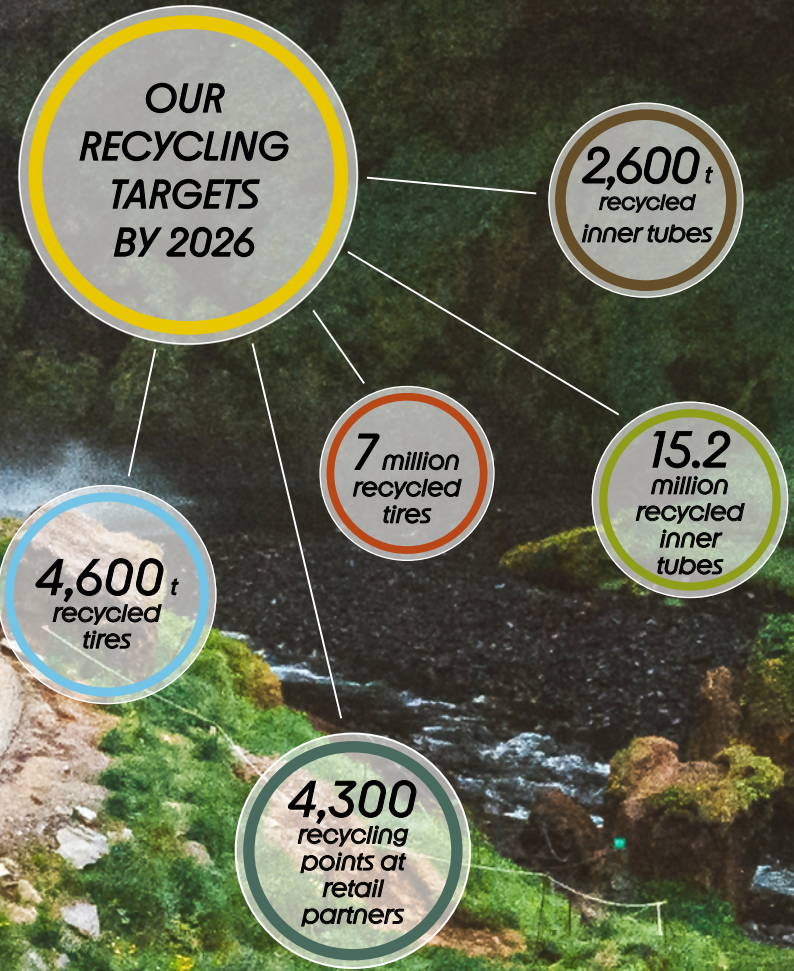
Our mobility programme not only applies to bicycles: in 2022 we installed 30 charging stations for electric cars at our Reichshof site. By 2025 we aim to have converted our entire vehicle fleet over to electromobility. For the 2022 reporting year we had already specified that non-electric-battery sources of power were only permitted in exceptional cases, such as for event vehicles.



Bicycle-friendly employer 2022 certificate



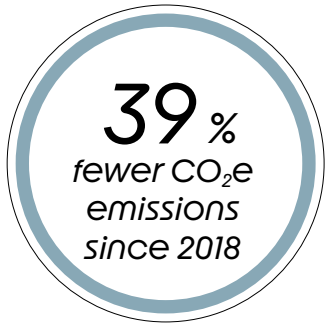




# CUTS IN EMISSIONS AND RESOURCE CONSUMPTION

## AMBITIOUS CLIMATE GOALS

*We not only aim to minimise the negative impact of our actions on the climate and our natural surroundings but also want to make a positive contribution in this respect*



### Combatting global warming

What impact do our actions have on the environment? Since the early 1990s Schwalbe has questioned its ecological footprint and reviewed its business activities with regard to environmental compatibility, efficiency and safety. In order to structure our commitment, our CSR team coordinates the collection of data and reporting on environmental issues.

As a leader in our branch of industry, we support the goal of the international community to limit global warming to well below 2°C. We are working on comprehensive concepts to this end in order to optimise our energy consumption and actively conserve resources. This also includes converting to 100% renewable sources of energy; at our headquarters in Reichshof we have already achieved 50% of this target. As of 2025 we want to do without fossil fuels completely.

### Scope 1 and 2 emission targets

Furthermore, by 2030 we plan on having reduced our scope 1 and 2 emissions by at least 55% compared to 2018. There will also be a significant cut in our greenhouse gas emissions generated by the production and transportation of our products in particular.

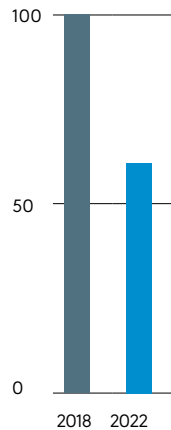
In the 2022 reporting year we cut 39%\* of our scope 1 and 2 emissions compared to base year 2018.

### Science Based Targets initiative (SBTi)

In the 2022 reporting year we joined the Science Based Targets initiative (SBTi) and aim to reduce our business-relevant scope 1, 2 and 3 emissions to net zero compared to base year 2018 by 2040.

This would mean that Schwalbe no longer pollutes the atmosphere with its emissions: net zero means that the total emissions generated in a business year are offset against the amount removed from the atmosphere by reduction measures. Here, these reduction measures cover at least 95% of scope 1 and 2 emissions and at least 90% of scope 3 emissions. The remaining emissions are cut by financing special climate protection and development projects, particularly by the permanent removal and storage of emissions from the atmosphere.

Total emissions



Reduction in %

\*Calculation of the emission reductions is based on Scope 1 & 2.



## GREENHOUSE GAS BALANCE FROM 2022

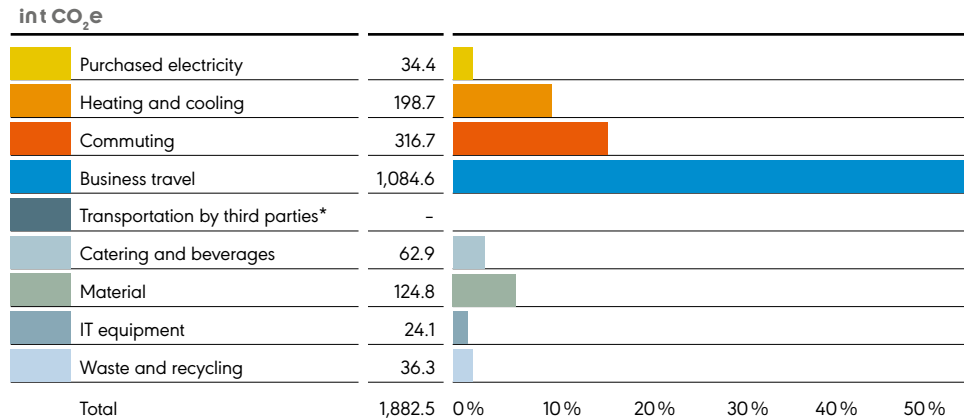
Ralf Bohle GmbH's greenhouse gas emission balance is based on the internationally recognised GHG Protocol: A Corporate Accounting and Reporting Standard and encompasses the climate-relevant greenhouse gases that fall under the 'operative

control' of the company. The data for these calculations is based on ecoinvent 3.6 and the IPCC 2013 assessment method (GWP 100a).

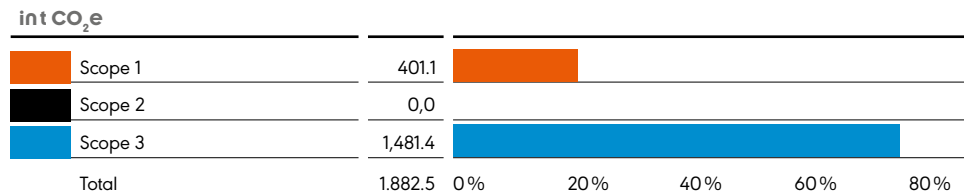


**We already use 100% green electricity at our headquarters.**

**Greenhouse gas emissions by category. All values in metric tons of CO<sub>2</sub> equivalents**



**Greenhouse gas emissions according to the three scopes of the GHG Protocol Standard**



\* Data on third-party transportation is available for the first time for the 2022 reporting year. The values for previous reporting periods will be published in the next report. In the interests of comparability, the value for 2022 will not be included in the total amount.

**Definition of the three scopes**

**Scope 1**

Scope 1 covers all direct processes, procedures and services performed by a company's own employees, machines or vehicles at its own facilities, such as the consumption of fuel for heating or for operation of the company's vehicle fleet.

**Scope 2**

Scope 2 exclusively records the sources from which electricity, steam, heating and cooling are procured.

**Scope 3**

Finally, scope 3 comprises all other indirect emissions arising from the production of raw materials and products or provision of services in the upstream and downstream value chain.

**Greenhouse gas emissions at Reichshof**

In 2022, scope 1, 2 and 3 emissions amounted to 5.5%, 0% and 94.5% respectively of the total greenhouse gas emissions for the Reichshof site.

Scope 3 emissions for freight and production were calculated for the first time for the 2022 reporting year. A total of 4,856.3 t of CO<sub>2</sub>e were accrued for freight and an additional 554.5 t of CO<sub>2</sub>e for packaging. For reasons of comparability, the corresponding values in the reporting year are not included in the total scope 3 emissions as these values are not yet available for previous years.

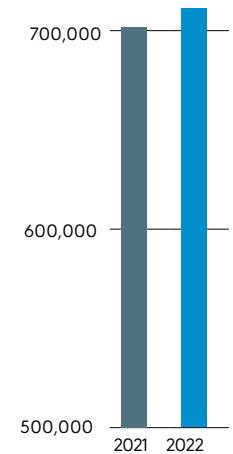
The corresponding data for past periods including the base year is currently being compiled and will be included in the next CSR report for 2023.

**Electricity and heating consumption**

In 2022 813,803 kWh of electricity were used. Of this, 75,982 kWh were self-generated from renewable sources. A further 737,821 kWh of renewable energy were purchased externally.

At the Reichshof site 731,280 kWh of gas were used for heating in 2022. In addition, 4,905 litres of heating oil were consumed at the same location in the reporting year. 103,034 litres of fuel were also consumed in 2022.

**Third-party electricity from renewable sources**



Absolute energy consumption in kWh

**Total greenhouse gas emissions**

int CO <sub>2</sub> e / cat	2019	2020	2021	2022
Scope 1, 2, 3	2,143.7	2,432.9	1,351.8	1,882.5

**Total scope 1, 2 and 3 greenhouse gas emissions**

int CO <sub>2</sub> e total	2019	2020	2021	2022
Scope 1	448.30	368.6	393.8	401.1
Scope 2	0.0	0.0	0.0	0.0
Scope 3	1,695.4	2,065.3	958.0	1,481.4



## DETAILS OF OUR CLIMATE FOOTPRINT

Our greenhouse gas balance is split into the categories transportation, mobility, waste and recycling, energy, materials and catering.

### Greenhouse gas emissions for transportation

int CO <sub>2</sub> e / cat	2019	2020	2021	2022
Vehicle fuel consumption	384.24	295.43	299.37	438.53
Transportation by third parties*				
<b>Transportation</b>	<b>384.24</b>	<b>295.43</b>	<b>299.37</b>	<b>438.53</b>

### Greenhouse gas emissions for mobility

int CO <sub>2</sub> e / cat	2019	2020	2021	2022
Business travel/accommodation	595.61	490.04	104.07	646.03
Commuting	368.72	431.12	478.49	316.69
<b>Mobility</b>	<b>964.32</b>	<b>921.16</b>	<b>582.56</b>	<b>962.71</b>

### Greenhouse gas emissions for waste and recycling

int CO <sub>2</sub> e / cat	2019	2020	2021	2022
Waste in incinerators	35.68	27.79	11.62	35.13
Waste recycling	0.20	0.42	2.55	0.29
Wastewater	0.00	0.00	0.42	0.88
Disposal	0.00	0.00	0.00	0.00
<b>Waste and recycling</b>	<b>35.88</b>	<b>28.21</b>	<b>14.58</b>	<b>36.30</b>

### Greenhouse gas emissions for energy

int CO <sub>2</sub> Eq. / cat	2019	2020	2021	2022
Heating and cooling	236.46	211.42	239.17	198.66
Electricity	8.12	11.61	11.19	34.35
<b>Energy</b>	<b>244.58</b>	<b>223.02</b>	<b>250.36</b>	<b>233.01</b>

### Greenhouse gas emissions for catering and beverages

int CO <sub>2</sub> e / cat	2019	2020	2021	2022
Beverages	36.99	31.19	18.07	21.12
Snacks and meals	60.82	64.77	72.16	41.81
<b>Catering and beverages</b>	<b>97.81</b>	<b>95.97</b>	<b>90.23</b>	<b>62.93</b>

### Greenhouse gas emissions for materials

int CO <sub>2</sub> e / cat	2019	2020	2021	2022
Office materials	4.43	4.29	50.14	122.39
Tap water	0.54	0.30	0.35	0.61
Printed materials	362.60	855.05	43.71	1.83
IT equipment	49.31	9.43	20.54	24.11
<b>Materials</b>	<b>416.88</b>	<b>869.08</b>	<b>114.73</b>	<b>148.94</b>

\* Data for transportation by third parties for the periods 2018–2021 is currently being compiled and will be published in the report for 2023. For reasons of comparability, the value for 2022 already computed is not contained in this summary.

## GREENHOUSE GAS EMISSIONS OF OUR SUBSIDIARIES

*As of the 2022 reporting year, we will be specifying the greenhouse gas emissions generated by our subsidiaries.*

This is the first time our CSR report provides information on the greenhouse gas emissions generated by our subsidiaries. This marks an important milestone in our CSR strategy that allows us to gain a more extensive overview of our environmental impact and specifically work on measures to reduce this.

Recording our subsidiaries’ greenhouse gas emissions constitutes a further step in our efforts to report on our actions in a transparent and responsible manner. The same standards are applied to the emission data computed for the above as for our headquarters in Reichshof.

Our carbon footprint is based on the internationally recognised GHG Protocol: a Corporate Accounting and Reporting Standard and encompasses the climate-relevant greenhouse gases that fall under the ‘operative control’ of the company. The data for these calculations is based on ecoinvent 3.6 and the IPCC 2013 assessment method (GWP 100a).

The scope 1, 2 and 3 emissions for our subsidiaries have not yet been fully accounted for with respect to the 2022 reporting year. A full greenhouse gas balance will be published for the entire group for the first time in 2023.

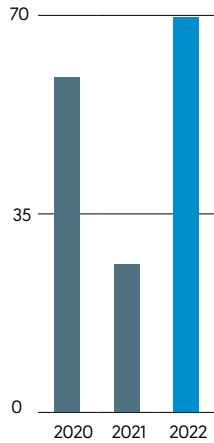
*Scope 1, 2 and 3 emissions for our subsidiaries in 2022 in total t CO<sub>2</sub>e*

Subsidiaries	Scope 1	Scope 2	Scope 3	Total
<b>Netherlands, total</b>	<b>82.35</b>	<b>46.83</b>	<b>2,370.11</b>	<b>2,499.28</b>
Energy	46.82	46.83	21.43	115.08
Mobility	-	-	49.82	49.82
Transportation	35.52	-	2,267.19	2,302.72
Catering and beverages	-	-	2.79	2.79
Material	-	-	3.33	3.33
Waste and recycling	-	-	25.54	25.54
<b>Italy, total</b>	<b>12.93</b>	<b>1.60</b>	<b>49.29</b>	<b>63.82</b>
Energy	7.19	1.60	1.02	9.81
Mobility	-	-	41.93	41.93
Transportation	5.74	-	4.61	10.35
Catering and beverages	-	-	1.47	1.47
Material	-	-	0.24	0.24
Waste and recycling	-	-	0.02	0.02
<b>France, total</b>	<b>8.48</b>	<b>0.24</b>	<b>18.76</b>	<b>27.48</b>
Energy	-	0.24	0.11	0.35
Mobility	-	-	3.45	3.45
Transportation	8.48	-	7.04	15.52
Catering and beverages	-	-	0.43	0.43
Material	-	-	7.73	7.73
<b>NA, total</b>	<b>98.25</b>	<b>14.43</b>	<b>-</b>	<b>112.69</b>
Energy	88.62	14.43	-	103.05
Mobility	9.63	-	-	9.63
<b>UK, total</b>	<b>-</b>	<b>10.53</b>	<b>49.83</b>	<b>60.36</b>
Energy	-	10.53	-	10.53
Mobility	-	-	45.36	45.36
Transportation	-	-	2.43	2.43
Waste and recycling	-	-	2.04	2.04
<b>Subsidiaries total</b>	<b>202.16</b>	<b>26.8</b>	<b>2,481.26</b>	<b>2,710.22</b>

## RESOURCE CONSUMPTION AND WASTE

*We find it extremely important to cut down on our consumption of resources and use materials efficiently in order to avoid waste.*

Total waste in t



### Amounts of waste and water withdrawal

In the reporting year the total waste accumulated at the Reichshof site amounted to 69.83 metric tons.

1,19 tons of electrical waste were successfully recycled in 2022. At our headquarters we work closely together with a waste disposal company and a recycling provider.

In the 2022 reporting year 1,818 cubic metres of water were withdrawn at the Reichshof facility, with the amount of wastewater running to 1,373 cubic metres. In future CSR reports we plan to provide a more detailed overview of our water consumption. The organic waste generated at Reichshof is used to produce renewable energies. A pilot waste optimisation project has already started.

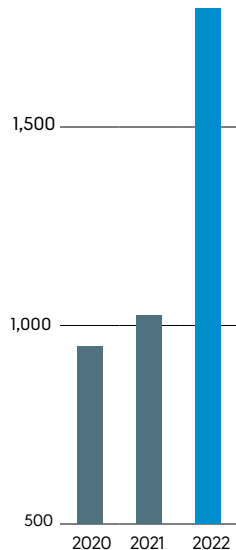
### Cardboard made from recycled packaging materials

Right from the start we have used cardboard boxes made of renewable and recycled raw materials to package our after market products. This helps us to cut down on the use of fossil resources for our packaging materials and guarantees the best-possible recyclability. We also already use FSC-certified paper in our packaging wherever possible. The FSC certificate stands for "Forest Stewardship Council" and is an internationally recognised system of certification for responsible forestry. It was founded in 1993 to promote responsible forest resource management, reduce the environmental impact of the forest industry and ensure social and economic benefits for local communities and society as a whole.

The FSC certificate is awarded to companies and organisations that meet certain standards and criteria and prove in their activities that they manufacture or distribute wood products from responsibly managed forests or made of recycled material.

In the reporting year we signed up to the industry-wide commitment to reduce packaging waste initiated by the Confederation of the European Bicycle Industry (CONEBI) and Cycling Industries Europe (CIE). Our aim is to only use 100% recycled materials for all of our packaging by 2025 and, where possible, to do away with packaging altogether.

Water withdrawal at the Reichshof site in m³



### Waste by type

in t	2019	2020	2021	2022
Industry/commercial bulky goods	-	8.78	-	-
Plastics	1.83	5.32	5.26	14.61
Paper/cardboard	50.41	29.69	-	36.35
Hazardous waste	-	-	0.29	-
Electrical waste	0.18	0.35	2.64	1.19
Remaining waste	17.58	14.74	17.15	17.68

## PREDICTED RECYCLING RATES

The volumes achieved to date are clear proof of the success of our commitment to recycling.

### Schwalbe recycling

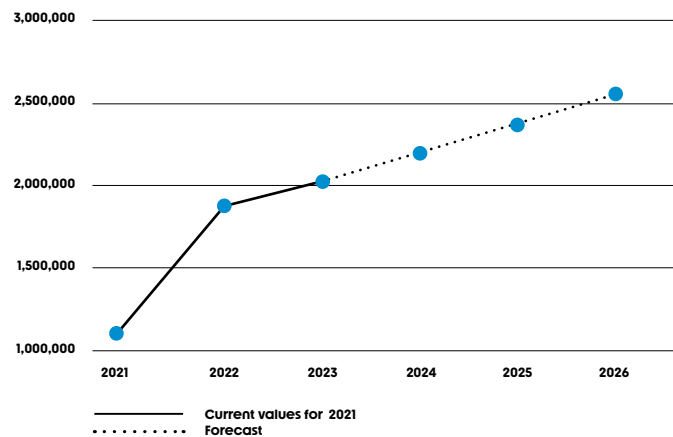
Through our bicycle inner tube recycling system, since 2015 we have recycled over 8.5 million or 1,287 metric tons of inner tubes, 1.8 million or 282 tons thereof in 2022. In the first year of our tire recycling programme (2022) 120 tons of bicycle tires were recycled.

Five countries currently participate in the inner tube recycling system: it was launched in Germany in 2015, with the Netherlands and Belgium joining in 2019. The UK began inner tube recycling in 2020 and Switzerland in 2021. In 2023 we are planning to introduce this system in the USA, Austria, France and Italy.

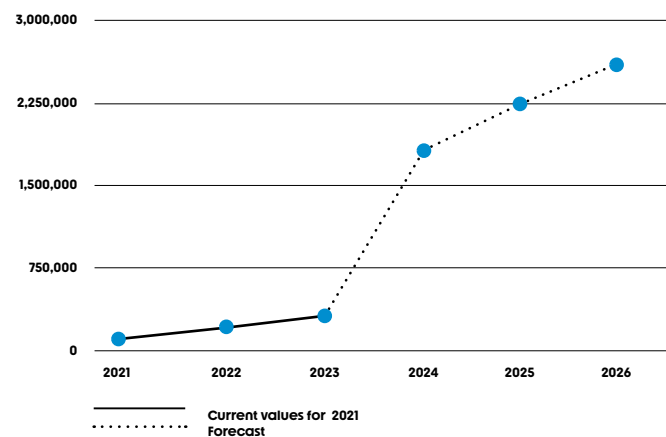
### Increasing participation by specialist retailers

We started out in 2015 with 250 participating retailers and 90,000 recycled bicycle inner tubes. By 2022 2,500 participating retail outlets in Germany had already signed up to the system, with this figure predicted to rise to over 4,000 by 2026. Based on this data, we expect our recycling rates to significantly increase. Going by our forecast\* revised in the reporting year, in 2026 we will have recycled around 18 million bicycle inner tubes and over seven million bicycle tires.

Recycled inner tubes (number/year)  
(from 2022 with forecast data)



Recycled tires (number/year)  
(from 2022 with forecast data)



\*The forecast values have been recalculated on the basis of changed assumptions.

**1.8 million**  
recycled bicycle  
inner tubes

**282t**  
recycled bicycle  
inner tubes

**120t**  
recycled  
bicycle tires

**5**  
countries using  
the recycling system



# SOCIAL COMMITMENT



## CHANCES FOR CHILDREN

*Our CSR activities are complex and multifaceted. Sponsoring children and young people worldwide holds a special significance for us.*

### Responsibility for the future of children and young people

We are absolutely convinced that children and young people are the future of our society and that we as a company have a responsibility to contribute to their wellbeing and development. We are therefore involved in a number of different areas in order to sponsor children and youngsters all over the world.

### Chancenwerk – helping children learn

As a company rooted in the Bergisches Land, a low mountain range in the German state of North Rhine-Westphalia, we are delighted to be building up a regional network of social responsibility and supporting a number of local organisations. One example of this is Chancenwerk e.V. which we support financially. It is important to us to give school pupils from the Oberbergisches Land help with their learning and in building up their self-confidence through this charitable organisation. The fact that younger and older pupils study together and benefit from one another here has us convinced. The social entrepreneurial approach this project adopts also greatly appeals to us.

### World Bicycle Relief – 76,000 bicycles for social mobility

Our international relations and partnerships of many years motivate us: since 2014, for example, Schwalbe has been committed to World Bicycle Relief (WBR). This international aid organisation provides robust bicycles in 21 countries of the world that can be assembled locally. The bikes are intended for people in rural developing regions to use, giving them greater mobility. With their own bicycles school children can attend lessons on a more regular basis, for example. Furthermore, we support health workers with this project, enabling them to reach more people and thus improving health care. In 2022 alone, over 76,000 bicycles were provided. In the reporting year our family business again supported the Christmas campaign and doubled each donation over €15 made to WBR to a total of €15,000.

### Children for a better world e.V. – better chances right from the start

One of our latest long-term sponsorship campaigns is the project run together with the donation-funded Children for a better world e.V. children's charity. It was founded in 1994 by 30 individuals from business, the arts and politics and has since won many awards. Children for a better world e.V. aims to actively fight child poverty in Germany. Together we believe in giving all children and young people in Germany a good start in a self-determined life with the same chances and opportunities. We work together to make children strong and help youngsters recognise their potential, seize opportunities and actively promote their own interests and those of others.





## CHILDREN'S ADVISORY COUNCIL DECIDES ON AID PROJECTS

*With Schwalbe personnel's Children's Advisory Council, the children of our employees' families are able to decide on the funding of children's aid projects for the first time.*



**We assume  
responsibility  
for the next  
generations.**

CEO Frank Bohle

### Start of the Children's Advisory Council

Schwalbe personnel's Children's Advisory Council has now decided for the first time which children's charities are to be supported with a total sum of €15,000. The council consists of 13 children of Schwalbe employees aged between eight and 18. Together, the selected projects enable children to hope for a more positive future.

At the first meeting in December 2022 seven local and international project proposals were submitted. The children assessed these based on five criteria: impact, urgency, long-term perspective, scope and concept. Following presentation of the proposals, the children then discussed the projects at their plenary assembly and voted on the amount to be donated. The requested funding ultimately exceeded the advisory council's budget, which is why the youngsters decided to support five projects in full, one in part and one initially not at all.

### Children's Advisory Council decides on five children's aid projects

One of the proposals submitted to the Children's Advisory Council, for instance, was for warm winter blankets for children in the Ukrainian city of Kharkiv. The children quickly agreed that urgent help is needed to ensure that these young people can keep warm and forget the war for a moment at least.

Another suggestion concerned the purchase of a wheelchair lift for a four-year-old who has been in a wheelchair since birth and lives with its family on the first floor of an apartment building. Lots of questions were discussed at the meeting such as the scope of the project, as only one child receives support – albeit in the long term. The role of the parents was also debated, as they will have to shoulder an ever greater burden the older the child gets.



### A voice for children and young people in the company

One child on the advisory council said, "With the lift the parents won't have to use up all their strength carrying their child up the stairs but can instead use it to play with their child more."

The closest contextual link to Schwalbe was established with the proposal for a bicycle workshop in Burkina Faso. Here, bicycle mechatronic training centres are to be supported in order to give young people a better future. The children immediately recognised that young people on the African continent face very different problems from themselves. They considered the training centre to be a shimmer of hope and an opportunity for social advancement.

Schwalbe personnel's Children's Advisory Council has been initiated to give children and young people a voice in the company. The aim is to sensitise them to social problems, help them learn to assume responsibility and enable them to participate and experience codetermination. The idea arose through our cooperation with the Children for a better world children's charity. Schwalbe personnel's Children's Advisory Council is one of nine such advisory councils throughout Germany.



## PROMOTING GRASSROOTS SPORT AND THE ARTS

*At Schwalbe we are actively committed to promoting the arts and regional sporting activities.*



### Schwalbe Arena

In 2013 Schwalbe Arena was opened by the state of North Rhine-Westphalia, the city of Gummersbach and VfL Gummersbach with the support of Ralf Bohle GmbH and other companies. At this state-of-the-art sports and event location top-class sport can be played at the highest international level. The facility can also be used by all for amateur and school sports and cultural events.

### Bergneustadt Theatre

Sponsorship of the arts is very important to us. We support cultural events, art projects or institutions that provide a broad public with access to the arts, one of these is the theatre in Bergneustadt. Culture and the arts enrich our lives, promote creativity and provide food for thought and encourage diversity and social development.

Bergneustadt Theatre is one of the best-known and most renowned theatres in our region and offers a wide range of entertainment for all age groups. The theatre has been awarded the prestigious venue prize of North Rhine-Westphalia.

### Wheelchair basketball – we support inclusion

We are a premium partner of German wheelchair basketball and support the national teams. As the top wheelchair basketball teams are so similar in skill, tiny differences in equipment can make all the difference. We are thus in close contact with the athletes in order to help further optimise their technical requirements.

### Table tennis club TTC Schwalbe Bergneustadt

We also enjoy a long-standing tradition of cooperation with table tennis club TTC Schwalbe Bergneustadt. Ralf Bohle joined the club in 1948 when he was just 13 years old. He held the role of chairman until his death in 2010 and had a very strong influence on the club. Many of its former top players are now employees of our company.

### The VfL Gummersbach

Schwalbe holds an exclusive partnership with VfL Gummersbach. The VfL Gummersbach is best known for the success of its first-division handball team. The team has won 30 national and international titles alone. The traditional club is also active in popular sports and appeals to sports enthusiasts with a wide range of sporting activities.



***To us, it goes without saying that we accept responsibility for both humans and nature.***

## **BORNEO ORANGUTAN SURVIVAL FOUNDATION**

*With our partnerships in Southeast Asia, we help to maintain biodiversity.*

### **BOS: partnership for the variety of species**

Schwalbe has supported the Borneo Orangutan Survival Foundation (BOS) in Indonesia for twelve years now. This is where the company has been making its tires since 1993. The BOS rescues homeless or orphaned orangutans and campaigns for the conservation of their natural habitat. Protection of these endangered great apes and the rain forest not only helps the animals but also the people in the region – and our climate.

### **Ecofriendly use of rain forests**

The foundation also teaches local inhabitants effective new methods for environmentally-friendly use of the rainforests. Locals are shown how to earn their living through near-natural management of the forest without destroying it. The BOS also supports development projects and grants microloans to promote regenerative farming and rattan and rubber production.

### **Sanctuaries on Borneo**

A total of 409 orangutans live at the two Nyaru Menteng and Samboja Lestari sanctuaries on the island of Borneo, from which 25 were set free in 2022. At these sanctuaries the animals learn how to hunt for food, build nests and climb – everything their mothers would normally teach them. After eight years the orangutans are released from captivity, at first on a protected island and one year later out into the wild. Through its commitment in Indonesia Schwalbe shows that the company attaches great value to biodiversity and the preservation of the variety of species as part of its ecological responsibility.



## **BICYCLE MOBILITY FOR THE PROTECTION OF OUR CLIMATE**

*For us, cycling is part of our everyday culture. We enthusiastically support this most environmentally-friendly and healthy form of mobility.*

### **The bicycle as the solution to individual mobility and sustainability**

It is clearer than ever that individual bicycle mobility is an intelligent, future-oriented solution: bicycles decongest our cities, help us combat the climate and energy crisis – and are good for our health at the same time.

Fortunately, more and more cities are rediscovering cycling and actively promoting it. In our opinion there are still far too few of them – yet the growing awareness for bicycle-friendly living spaces is a step in the right direction.

### **Safety on the road**

In the reporting year Schwalbe supported the road safety campaign run by the Oberbergische Verkehrsgesellschaft or OVAG (a regional transport operator) and ADFC (German cycling association), entitled "Because I don't have an airbag – for everyone's safety, please maintain a distance of 1.5 metres to cyclists". Switch now and protect the environment campaign encourages people to use climate-friendly alternatives to the car by changing over to buses, trains and bicycles.

### **Incentives for alternative commuter traffic**

We create incentives aimed at reducing commuter traffic by introducing internal premium systems for the bicycle. We also plan to provide funding for cycling facilities at the Bikepark Winterberg and the further expansion of footpaths and cycle paths in our region.

We want to act as a role model and show what can be done within an organisation to promote the cycling culture. We see ourselves as drivers and co-creators of the mobility revolution. We have already instigated a number of measures (see the People section) but are far from done yet and aim to make further improvements in this field.

### **Cooperation for the mobility revolution**

We work with lots of initiatives, organisations, NGOs, universities and associations because we believe that it is extremely important to have support and commitment in the dynamic process for more bicycle mobility, both at a political level and in society as a whole. Schwalbe is an active member of various industrial and trade associations and the driving force behind numerous sector initiatives and cycling culture projects.



***There's no getting round the mobility revolution.***



***Organisations we are involved with:***

Allgemeiner Deutscher Fahrrad-Club  
(German cycling association)

Bikebrainpool

Cycling Industries Europe

Confederation of the  
European Bicycle Industry

European Tire and Rim  
Technical Organisation

Innovation Hub Bergisches Rheinland

Unternehmen Fahrrad

Shift Cycling Culture

VeloLab

Verbund Service und Fahrrad g. e. V.

vivavelo Kongress

World Federation of the Sporting  
Goods Industry

Zweirad Industrie Verband

(bicycle industry association)



# ***FURTHER INFORMATION***





## Products

<b>Circular economy</b>	Schwalbe Recycling System Inner tube recycling, European rollout of tire recycling, pilot project	○
<b>Customer orientation</b>	Long-lasting quality products e.g. Marathon quality	○
<b>Material optimisation</b>	Material screening in accordance with C2C (constituents, renewable materials, detoxing)	○
<b>Product innovations</b>	Green Marathon (first closed loop tire with 70 % recycled or renewable materials)	○
	Aerothan (TPU material, sustainable high-end product)	○
	Green Guard (first puncture protection, 33% recycled)	○
	Green Compound (rubber compound made exclusively of renewable materials)	○
<b>Waste minimisation and packaging</b>	Resource-conserving, 100 % recyclable packaging	○

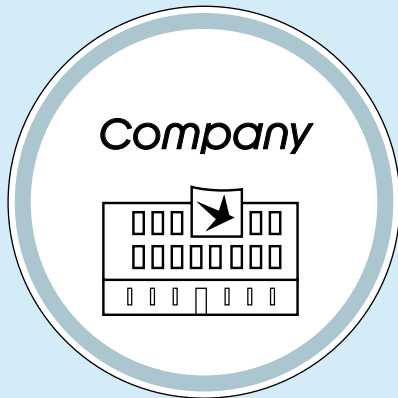


## Supply chain

<b>Fair trade</b>	Partnership with the Fair Rubber Association for the fair trade of natural rubber, higher wages and better working conditions	○
<b>Energy concept</b>	Use of organic waste instead of coal, expansion of renewable energies	○
<b>Environmentally-friendly logistics</b>	Selection according to CSR criteria, elimination of air freight, supplier code of conduct	○



- = just started
- = to be further expanded
- = to be implemented according to plan



## Company

<b>Employees</b>	Extensive support and encouragement (further training, bike leasing, etc.)	○
<b>Company headquarters</b>	New HQ materials 70 % fully recyclable and 28 % downcyclable	○
<b>Energy</b>	100 % electricity from renewable sources	○
<b>Mobility</b>	Sustainable mobility (cycle-friendly employer, switch to e-mobility)	○
<b>Responsible procurement</b>	Highest standards applied to purchasing	○
<b>Organisational anchoring of CSR</b>	Schwalbe CSR team, Schwalbe CSR reporting	○

## Socials



<b>Social commitment</b>	Promotion of the wheelchair division (extensive portfolio of everyday activities and sports)	○
<b>Social projects</b>	Sponsoring of parasports	○
	Chancenwerk	○
	World Bicycle Relief	○
	Children for a better world	○
	Advisory Council	○
<b>Sports funding</b>	Promotion of regional sporting activities, sponsoring of athletes, regional commitment (VfL Gummersbach, TTC Bergneustadt)	○
<b>Protection of the diversity of species</b>	Borneo Orang-Utan Survival Foundation	○
	Planting up of headquarters for greater biodiversity	○
<b>Arts sponsorship</b>	Bergneustadt Theatre	○

- = just started
- = to be further expanded
- = to be implemented according to plan



## SDG CONTRIBUTION

*The following summary documents how we are supporting Sustainable Development Goals 7, 8, 9, 12, 13 and 15 with our commitment to CSR.*



### Affordable and clean energy

- Schwalbe products support resource-conserving, energy-efficient mobility
- Use and expansion of renewable energies at our production sites
- Energy efficiency at our headquarters in Reichshof



### Decent work and economic growth

- Wide-ranging support for the basic and further training of our employees
- Extensive support for young people taking their first career steps
- Long periods of service to the company and high employee motivation through various interesting professional development opportunities and promotions
- Our operational practice is characterised by the highest level of occupational safety and best possible influence on the health of our employees
- Since the founding of the company, the promotion of equal opportunities and diversity has been an integral part of our corporate practice
- Schwalbe is regionally rooted and significantly contributes to the attractiveness of the Reichshof region, including the creation of attractive new jobs for the local labour market
- High working standards in the supply chain are established within the framework of Schwalbe's four pillars of responsibility
- As a value-oriented family business, Schwalbe focuses on long-term economic growth with consideration for people, the region, customers, business partners, society and the environment



### Industry, innovation and infrastructure

- Schwalbe Recycling System, development of recyclable products such as the Green Marathon
- As a component manufacturer in the bicycle industry, Schwalbe develops innovative solutions for the entire industrial value creation process, cooperating with science and industrial partners
- Modern, environmentally-friendly infrastructure and realisation of high, sustainable, innovative construction standards at the new headquarters in Reichshof



### Responsible consumption and production

- Schwalbe offers durable quality products for responsible consumption
- Comprehensive product information with a focus on partnership with specialist retailers for confident consumer decisions
- Raising of awareness among specialist dealers and end consumers for resource-saving production as the basis for environmentally-friendly mobility
- Schwalbe is a pioneer in the use of recyclable materials in the bicycle industry



### Climate action

- The Schwalbe energy concept at the headquarters in Reichshof reduces harmful emissions; they will be reduced further by future measures such as our mobility concept
- Measures for employees, such as through our new mobility concept
- Ecological standards have been introduced in the supply chain and are being further expanded
- Funding of climate protection projects in Indonesia and Vietnam



### Life on land

- Schwalbe supports the Borneo Orangutan Survival Foundation (BOS); the BOS rescues homeless or orphaned orangutans
- Encouragement of biodiversity at our headquarters by planting a rooftop garden and installing insect hotels

## GRI INDEX

### *Assignment of key topics and GRI indicators*

<b>Pillar of CSR responsibility</b>	<b>SDG</b>	<b>Key topic</b>	<b>GRI indicator</b>
Product	7, 9, 12, 13	Materials	GRI 306
		Innovation, R&D	GRI 302, GRI 305, GRI 306
		Customer concerns	GRI 416
		Waste	GRI 306
Company	7, 8, 9, 12, 13, 15	Good corporate governance	GRI 401, GRI 404
		Compliance	GRI 2
		Basic and further training	GRI 401, GRI 404
		Working conditions and diversity	GRI 401, GRI 405
		Occupational health and safety	GRI 403
		Energy and emissions	GRI 302, GRI 305
Supply chain	7, 8, 9, 12, 13, 15	Social standards in the supply chain	GRI 204, GRI 308, GRI 414
		Environmental standards in the supply chain	GRI 302, GRI 305, GRI 306
Socials	8, 12, 13, 15	Promotion of a cycling culture	GRI 416
		Promotion of public welfare	GRI 203

<i><b>GRI indicator</b></i>	<i><b>Disclosure</b></i>	<i><b>Comments &amp; references</b></i>	<i><b>Pages</b></i>
<b>GRI 1:</b>	<b>Foundation 2021</b>	Ralf Bohle GmbH has reported the information cited in this GRI content index for the period January 1 to December 31, 2022, with reference to the GRI Standards.	
<b>GRI 2:</b>	<b>General Disclosures 2021</b>		
	<b>The organisation and its reporting practices</b>		
GRI 2-1	Organisational details		15
GRI 2-2	Entities included in the organisation's sustainability reporting		96
GRI 2-3	Reporting period, frequency and contact point	January 1-December 31, 2022, once a year CSR team/Felix Jahn, csr@schwalbe.com	
GRI 2-4	Restatements of information	Recycling data planning assumptions	71
GRI 2-5	External assurance	The CSR report has not been externally reviewed.	
	<b>Activities and employees</b>		
GRI 2-6	Activities, value chain and other business relationships		15
GRI 2-7	Employees		58
GRI 2-8	Workers who are not employees		

<b>GRI indicator</b>	<b>Disclosure</b>	<b>Comments &amp; references</b>	<b>Pages</b>
	<b>Corporate governance</b>		
GRI 2-9	Governance structure and composition	The corporate bodies comprise the management and the board of shareholders. The operative governance structure of the management is split into the divisions marketing, CSR, development, technology, finance and sales.	
GRI 2-10	Nomination and selection of the highest governance body	The board of shareholders consists of members of the owner family.	
GRI 2-11	Chair of the highest governance body	Frank Bohle is managing partner (CEO); further members of the board of shareholders do not conduct any operational business.	
GRI 2-12	Role of the highest governance body in overseeing the management of impacts	All of the company's key CSR issues and CSR targets are adopted jointly by the management and the board of shareholders.	
GRI 2-13	Delegation of responsibility for managing impacts	Overall responsibility for CSR is delegated to the spokesperson for the management (CEO).	
GRI 2-14	Role of the highest governance body in sustainability reporting	CSR reporting is reviewed and approved by the management and board of shareholders.	
GRI 2-15	Conflicts of interest	Conflicts of interest are avoided by the basic principles of the management.	
GRI 2-16	Communication of critical concerns	There were no critical concerns in the reporting period.	
GRI 2-17	Collective knowledge of the highest governance body	The management informs and exchanges information with the board of shareholders on a regular basis on the current state of development of CSR in the company.	

<b>GRI indicator</b>	<b>Disclosure</b>	<b>Comments &amp; references</b>	<b>Pages</b>
<b>Corporate governance</b>			
GRI 2-18	Evaluation of the performance of the highest governance body	No evaluation is made.	
GRI 2-19	Remuneration policies	This is not published according to the annual financial statement pursuant to Section 286 IV HBG.	
GRI 2-20	Process to determine remuneration	Is not published.	
GRI 2-21	Annual total compensation ratio	Is not published.	
<b>Strategy, guidelines and practices</b>			
GRI 2-22	Statement on sustainable development strategy		4
GRI 2-23	Policy commitments		30
GRI 2-24	Embedding policy commitments		28
GRI 2-25	Processes to remediate negative impacts	Use of own risk management system (annual financial statement)	
GRI 2-26	Mechanisms for seeking advice and raising concerns	Concerns are raised with the complaints office at <a href="mailto:compliance@schwalbe.com">compliance@schwalbe.com</a> . There were no incidents during the reporting period.	
GRI 2-27	Compliance with laws and regulations	Ralf Bohle GmbH complies with the laws and regulations within and outside Germany.	
GRI 2-28	Membership associations		81
GRI 2-29	Approach to stakeholder engagement		29
GRI 2-30	Collective bargaining agreements	The company's in-house wage tariff applies.	

<i><b>GRI indicator</b></i>	<i><b>Disclosure</b></i>	<i><b>Comments &amp; references</b></i>	<i><b>Pages</b></i>
<b>GRI 3:</b>	<b>Material Topics 2021</b>		
GRI 3-1	Process to determine material topics		26
GRI 3-2	List of material topics		26
GRI 3-3	Management of material topics		20-22
<b>GRI 203</b>	<b>Indirect Economic Impacts 2016</b>		
GRI 203-1	Infrastructure investments and services supported		78, 81
<b>GRI 205</b>	<b>Anti-corruption 2016</b>		
GRI 205-3	Confirmed incidents of corruption and actions taken	No known incidents.	

<b>GRI indicator</b>	<b>Disclosure</b>	<b>Comments &amp; references</b>	<b>Pages</b>
<b>GRI 302</b>	<b>Energy 2016</b>		
GRI 302-1	Energy consumption within the organisation		67
GRI 302-4	Reduction of energy consumption		64
<b>GRI 303</b>	<b>Water and Effluents 2018</b>		
GRI 303-3	Water withdrawal		70
<b>GRI 305</b>	<b>Emissions 2016</b>		
GRI 305-1	Direct (Scope 1) GHG emissions		66
GRI 305-2	Energy indirect (Scope 2) GHG emissions		67
GRI 305-5	Reduction of GHG emissions		64
<b>GRI 306</b>	<b>Waste 2020</b>		
GRI 306-1	Waste generation and significant waste-related impacts		70
GRI 306-2	Management of significant waste-related impacts		70
GRI 306-3	Waste generated		70
GRI 306-4	Waste diverted from disposal		70
<b>GRI 308</b>	<b>Supplier Environmental Assessment 2016</b>		
GRI 308-1	New suppliers that were screened using environmental criteria	New suppliers are audited on the basis of the supplier code of conduct.	



<b>GRI indicator</b>	<b>Disclosure</b>	<b>Comments &amp; references</b>	<b>Pages</b>
<b>GRI 401</b>	<b>Employment 2016</b>		
GRI 401-1	New employee hires and employee turnover		59
<b>GRI 403</b>	<b>Occupational Health and Safety 2018</b>		
GRI 403-1	Occupational health and safety management system		57
GRI 403-2	Hazard identification, risk assessment and incident investigation		57
GRI 403-3	Occupational health services		57
GRI 403-4	Worker participation, consultation and communication on occupational health and safety		57
GRI 403-5	Worker training on occupational health and safety		57
GRI 403-6	Promotion of worker health		57
GRI 403-8	Workers covered by an occupational health and safety management system		59
GRI 403-9	Work-related injuries		59
<b>GRI 404</b>	<b>Training and Education 2016</b>		
GRI 404-2	Programs for upgrading employee skills and transition assistance programs		56

<b>GRI indicator</b>	<b>Disclosure</b>	<b>Comments &amp; references</b>	<b>Pages</b>
<b>GRI 404</b>	<b>Training and Education 2016</b>		
GRI 404-2	Programs for upgrading employee skills and transition assistance programs		56
<b>GRI 405</b>	<b>Diversity and Equal Opportunity 2016</b>		
GRI 405-1	Diversity of governance bodies and employees		59
<b>GRI 406</b>	<b>Non-discrimination 2016</b>		
GRI 406-1	Incidents of discrimination and corrective actions taken	No incidents of discrimination in the reporting period.	
<b>GRI 414</b>	<b>Supplier Social Assessment 2016</b>		
GRI 414-1	New suppliers that were screened using social criteria	New suppliers are audited on the basis of the supplier code of conduct.	
<b>GRI 416</b>	<b>Customer Health and Safety 2016</b>		
GRI 416-1	Assessment of the health and safety impacts of product and service categories		34

## ***ABOUT THIS REPORT***

The current report constitutes the second Schwalbe CSR report. It describes Ralf Bohle GmbH's corporate responsibility, associated vision and CSR targets and activities in the year 2022. With this report we have begun to include the international sales companies in the Schwalbe Group in our CSR reporting. This applies in particular to the issues of emissions and employment. Where reporting refers to our headquarters in Reichshof, this is specifically stated. This CSR report was published in September 2023 and is available in digital form on our company website at <https://www.schwalbe.com/csr>.

Our CSR report for 2022 is available in English and German.

This CSR report has been created with reference to the GRI Standards. The relevant report topics were defined by our current materiality analysis conducted in the spring of 2022. The information for the reporting period January 1 to December 31, 2022, was not externally reviewed. Information contained in the 2022 CSR report that relates to the future is based on the assumptions and plans valid at the time of the editorial deadline; actual results and developments may deviate from this.

# GLOSSARY

## CSR: Corporate Social Responsibility

CSR is the responsibility of a company for the impact of its actions on society. This includes various social, ecological and economic aspects. Companies commonly use the terms “CSR” and “sustainability” interchangeably.

## SDG

In 2015 the member states of the United Nations adopted their Agenda 2030. This centres on a catalogue of 17 Sustainable Development Goals (SDGs).

The 17 SDGs take the three dimensions of sustainability into account: social issues, the environment and the economy. These are structured around five core areas (the five Ps) as guiding principles for action: people, planet, prosperity, peace and partnership.

## Global Reporting Initiative

The Global Reporting Initiative develops guidelines for sustainability reports. The first draft was created over 20 years ago. In 2021 the GRI again revised its global sustainability reporting standards, publishing the updated guidelines as Standards 2021. The GRI Standards aim to enable better comparability of and create more transparency regarding companies’ CSR activities. Participation is voluntary. The GRI guidelines are the most frequently used framework for CSR reporting by companies worldwide.

## Sustainability

In the most frequently referenced definition (Brundtland, 1987), sustainability is a state that “meets the needs of the present without compromising the ability of future generations to meet their own needs.” This encompasses in particular various ecological, social and economic aspects.

## Scope 1, 2 and 3 emissions

This is the categorisation of greenhouse gas emissions according to their place of origin in a value chain.

Scope 1 refers to all direct processes, procedures and services performed by a company’s own employees, machines or vehicles at its own facilities, such as the consumption of fuel for heating or for operation of the company’s vehicle fleet.

Scope 2 exclusively records the sources from which electricity, steam, heating and cooling are procured.

Finally, scope 3 comprises all other indirect emissions arising from the production of raw materials and products or provision of services in the upstream and downstream value chain.

### Life-Cycle Assessment (LCA)

Life Cycle Assessment (LCA) is a process used to evaluate the potential environmental impact of a product throughout its entire service life or life cycle. Products subject to assessment can be any goods or service. According to DIN EN ISO 14040, an LCA has four phases: 1) definition of the exact goal and selected scope of the LCA, 2) an inventory analysis, in which all inputs and outputs (product, material or energy flows) of the product in question are listed and quantified, 3) an impact assessment that considers the potential impact on the environment, and 4) evaluation and assessment of the results. In general, LCA studies can be taken as a basis for analysis and appraisal of the environmental impact of products and processes and used to derive suitable optimisation measures.

### Cradle-to-Cradle

Cradle-to-cradle® (C2C) is a holistic design principle and a school of thought developed in the 1990s by Prof. Dr. Michael Braungart, William McDonough and the EPEA Hamburg. It describes the potentially infinite circulation of materials and nutrients in cycles. All constituents are chemically harmless and recyclable or circular. Waste in the present sense of the word, as produced by the current take-make-waste model, no longer exists; instead, there are only useable nutrients.

### rCB: recovered Carbon Black, Schwalbe Recycling System

Used tires are first returned to participating specialist traders. The contents of the Schwalbe Recycling Boxes are collected and transported to Pyrum Innovations AG, where the old tires are first shredded and separated into rubber granulate, steel and textile fibres. In the ensuing pyrolysis process the rubber granulate is then broken down at a temperature of 600–700°C into the valuable secondary raw materials of coke, oil and gas. The recovered pyrolysis coke is processed to form rCB (recovered carbon black) and reused in new Schwalbe products. The oil is used by chemical company BASF as a substitute for crude oil to manufacture textile fibres, for example. The gas powers the pyrolysis plant with electricity, making it completely self-sufficient in its energy supply.

### Product Carbon Footprint (PCF)

The Product Carbon Footprint (PCF) describes the sum of the greenhouse gases emitted throughout a product's life cycle, measured in units of CO<sub>2</sub> equivalents or CO<sub>2</sub>e. A PCF is computed on the basis of an LCA on application of one impact model only, namely its Global Warming Potential or GWP.

### Tier 1 and tier 2

Tier 1 and tier 2 suppliers are terms frequently used in practical supply chain management to describe the various levels of relations with suppliers. Tier 1 suppliers supply directly to the company, while tier 2 subcontractors are direct suppliers to a company's tier 1 suppliers.

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### **PHOTOS**

Ralf Bohle GmbH  
p. 75 World Bicycle Relief gGmbH  
p. 79 Bergneustadt Theatre  
p. 80 BOS Deutschland e.V.

SCHWALBE  
THE GREEN MARATHON

# SCHWALBE

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