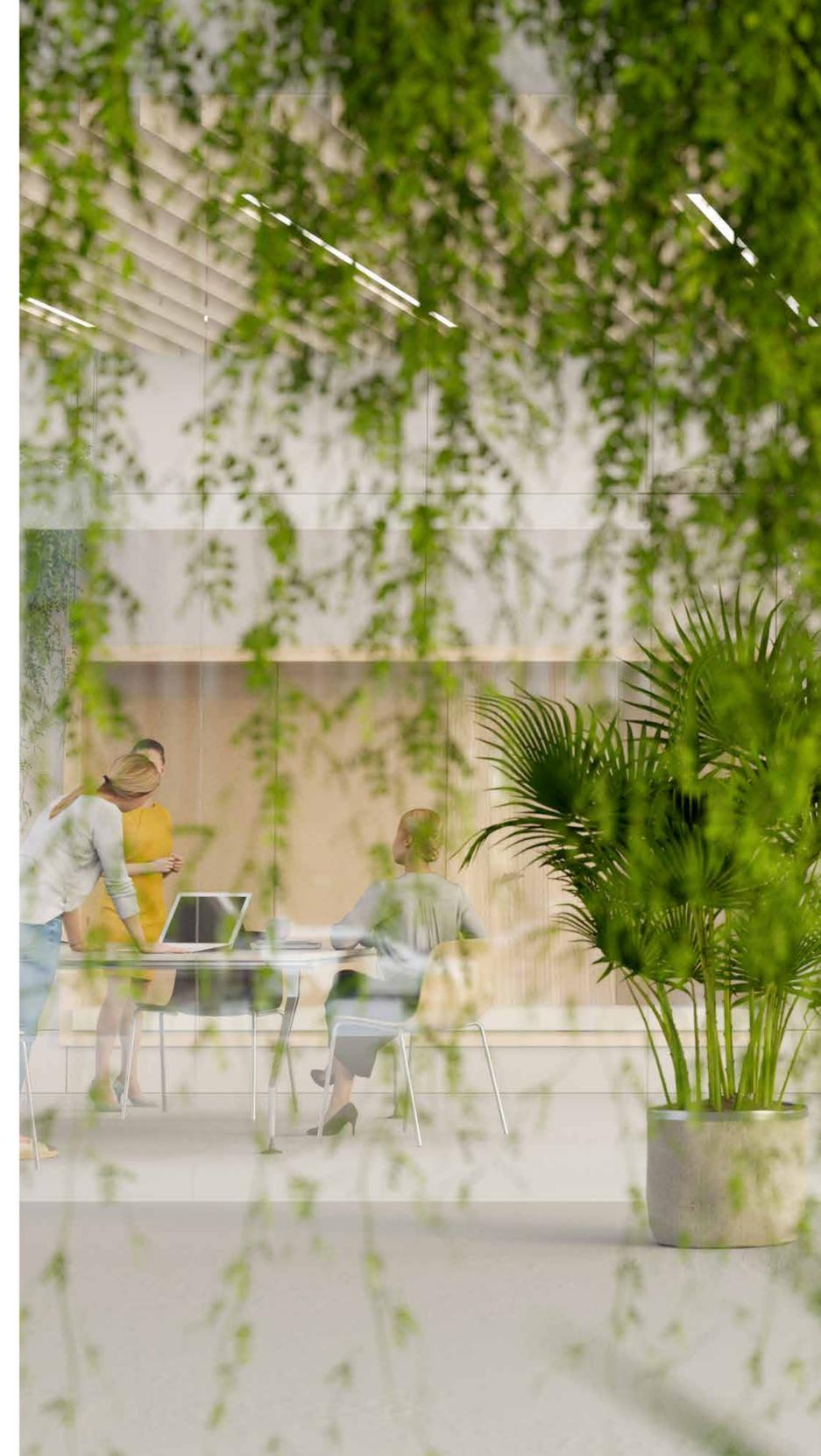


Envisioning and creating a **sustainable future**

Zühlke Corporate Responsibility Report 2021

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Letter from our CEO

Innovation and technology – our pathway to sustainability

As individuals, as organisations, as public bodies, we all have a great deal of responsibility towards people and the planet.

At Zühlke, we believe that innovation and technology are a positive force of change for business and society. We support our clients to envision and create a sustainable future. This is the commitment we anchored in our mission, it is our commitment to taking responsibility. And we have been working towards this ever since.

There are many aspects to taking responsibility. Climate change is the challenge of the 21st century. Health and well-being are threatened by climate change, pandemics, and preventable diseases. In 2021, we have chosen climate and health as the basis for our sustainability compass because with our skills and experience, we can achieve the greatest positive impact for people and the planet. Climate and health are connected, and positive actions are mutually reinforcing.

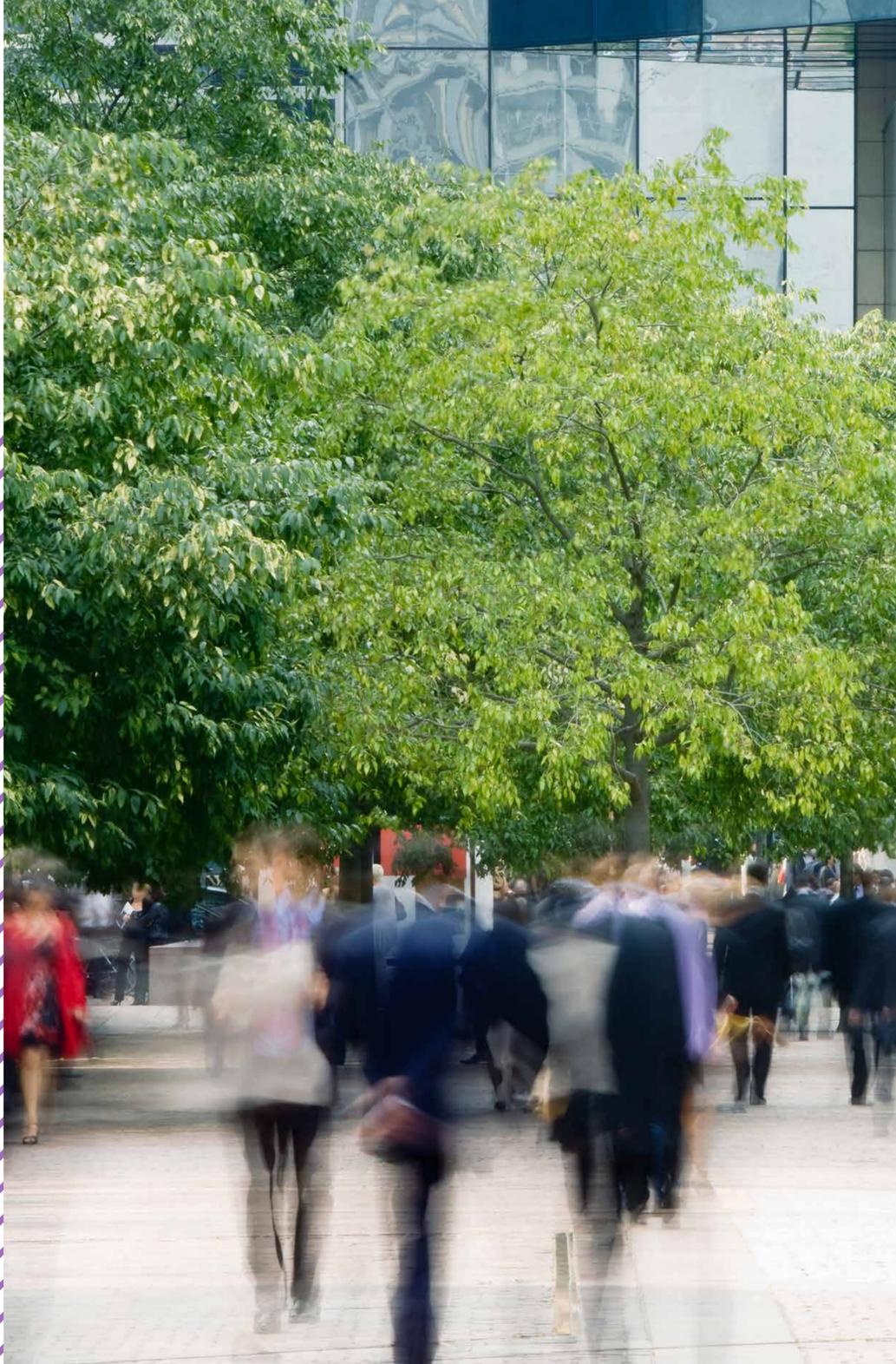
Our contribution to doing so is with innovation and technology. They are what we love, they are what we live by.

It's in our DNA. We have decades of history in applying innovation and technology as a positive force of change.

It is not enough to only stop what we have caused as a society in the past. We must turn the tide, and undo the harm.

We need to act in areas where we are currently creating a negative impact as well.





In 2021, together with our clients, we made a positive impact with innovation and technology in the areas of climate and health. We have built a covid tracing app. We have helped a Swiss start-up to develop personalised artificial skin for burn victims. We have reduced the carbon footprint of several products, including an audio system for children. We have worked on the first four-seater electric aircraft in the world, and we have built a data architecture for planning, financing, and coordinating the renewable energy infrastructure in Scotland, to name just a few.

But in the end, responsibility begins with us and our sustainable way of working. In 2021, we made sustainability a strategic goal. We created the role of Head of Sustainability and sharpened our positioning. We consolidated a group-wide approach to decarbonisation and the first of our national subsidiaries, including Zühlke Germany and Zühlke UK, became carbon neutral. The journey continues in 2022, and all national subsidiaries will follow suit and become carbon neutral.

I'm particularly proud of how we stood together in 2021, and jointly faced the pandemic, with measures to keep everyone safe. We built communities for mutual support and launched a range of employee health and well-being programs.

To me, responsibility also means making amends; renouncing privileges. In this way, we assume responsibility towards planet and people – above all towards future generations. We will not tolerate our children having ill feelings towards us.

We changed the situation for the worse, and now we're changing it for the better – together.

We're listening, we're reflecting, and we're moving forward. We're shaping the future.

Fabrizio Ferrandina
Group CEO, Zühlke

About this report

Action starts with awareness. And we are stronger together.

As the editorial team for this report, these mottos have inspired us to compile content that shows the issues we are facing at Zühlke and some solutions our teams have found.

Establishing a baseline

This is the first Corporate Responsibility Report published by Zühlke Group. While we think we have created positive change for decades, it is only now that we have streamlined this into a structured approach at group level. And we are aware we also have negative impacts like carbon emissions. We welcome standard setters and sustainability communities like UN Global Compact because they work towards transparency, experience sharing, and constructive feedback.

Therefore, one key function of this first report is publishing a baseline. This makes it possible to compare our practices with other organisations and to gauge our progress in the years to come. We welcome feedback from within and from outside the organisation. Striving for sustainability is a learning journey that benefits from openness and different perspectives.

Format of the report

This report is available in digital format only. This saves paper, water, and emissions compared to a printed version.

We have made the report as easy to use as possible. With its landscape orientation it displays well on most screens. You can navigate by clicking in the table of contents, displaying bookmarks, or using the navigation bar on the left. View this as an invitation to browse and to dive into the topics that interest you.

Additional material about some of the content is available online. Look out for the boxes marked “Learn more” to dig deeper and watch related videos.

How to find your way

The content of this report mirrors the structure in our sustainability work.

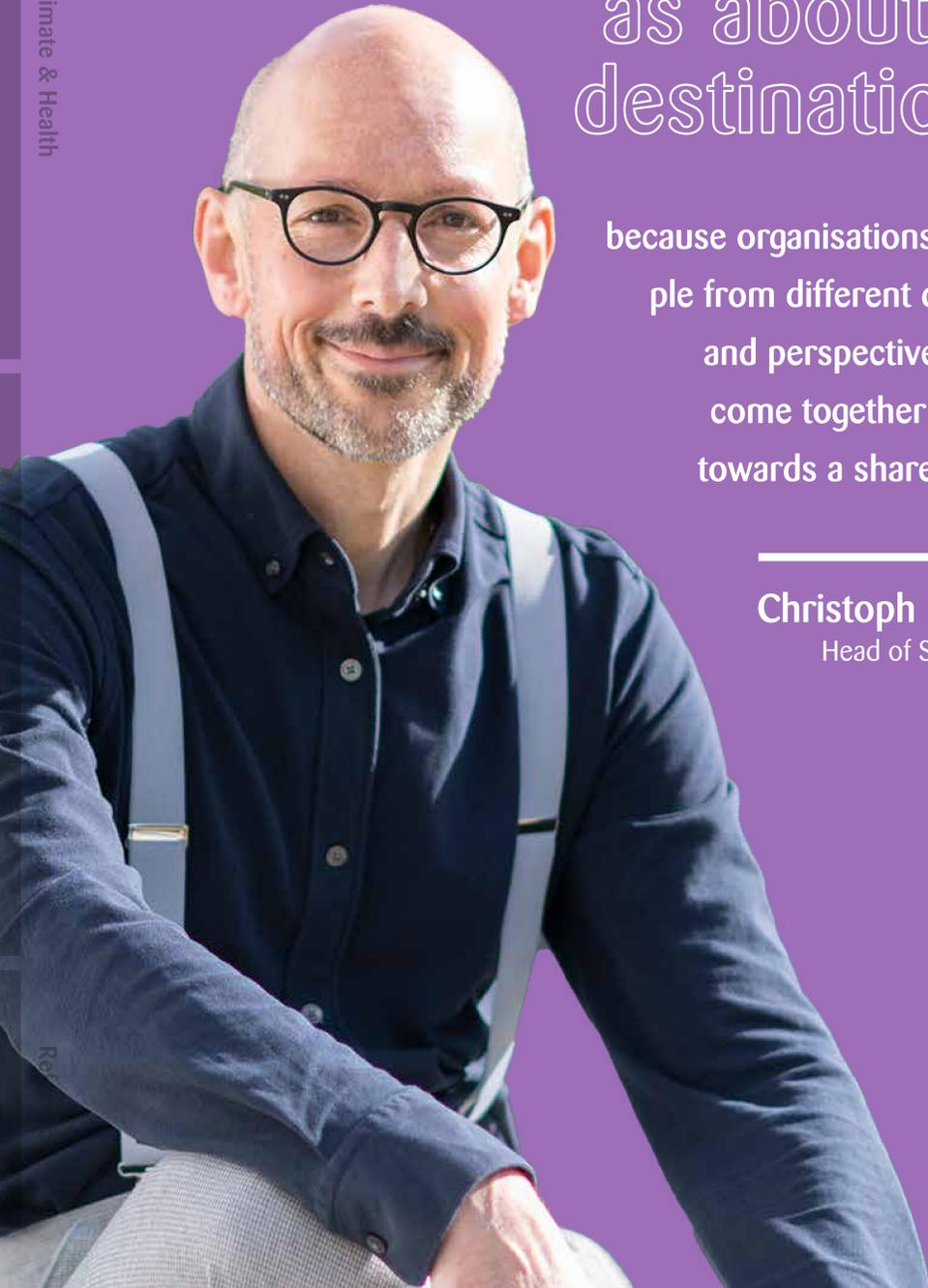
First, we introduce our sustainability focus: **climate action and health** improvement. This is at the centre of our sustainability compass, surrounded by our three pathways for change: positive project impact, sustainable way of working, and community engagement. In each of these areas, we provide examples of positive change for people and planet.



» Sustainability is about the journey as much as about the destination –

because organisations and people from different disciplines and perspectives need to come together and work towards a shared vision.«

Christoph Broecker
Head of Sustainability,
Zühlke



Second, we discuss stakeholder concerns linked to our corporate value of **integrity**, beyond our chosen focus climate and health. For example, we talk about diversity, equity & inclusion, as well as customer experience, and product quality.

Finally, the **reference and data** section contains detailed disclosures. This report is in accordance with the Global Reporting Initiative (GRI) and includes a reference to our UN Global Compact communications on progress (CoP).

You have inspired us

Sustainability is the effort of many. From inside the company and from outside. From partners, from clients, and also from competitors. This goes to everyone who was engaged in the projects and initiatives described in this report:

Thank you for your contribution to positive change!

We hope to inspire you

Sustainability reporting is not an end itself; it is only a means to drive effective positive change. Hopefully, this report will inspire action and further progress, both from our colleagues at Zühlke and from others.

Andy, Chris, Fatma, Kristina Maria, Laura, Sangho

The editorial team

Our materiality matrix

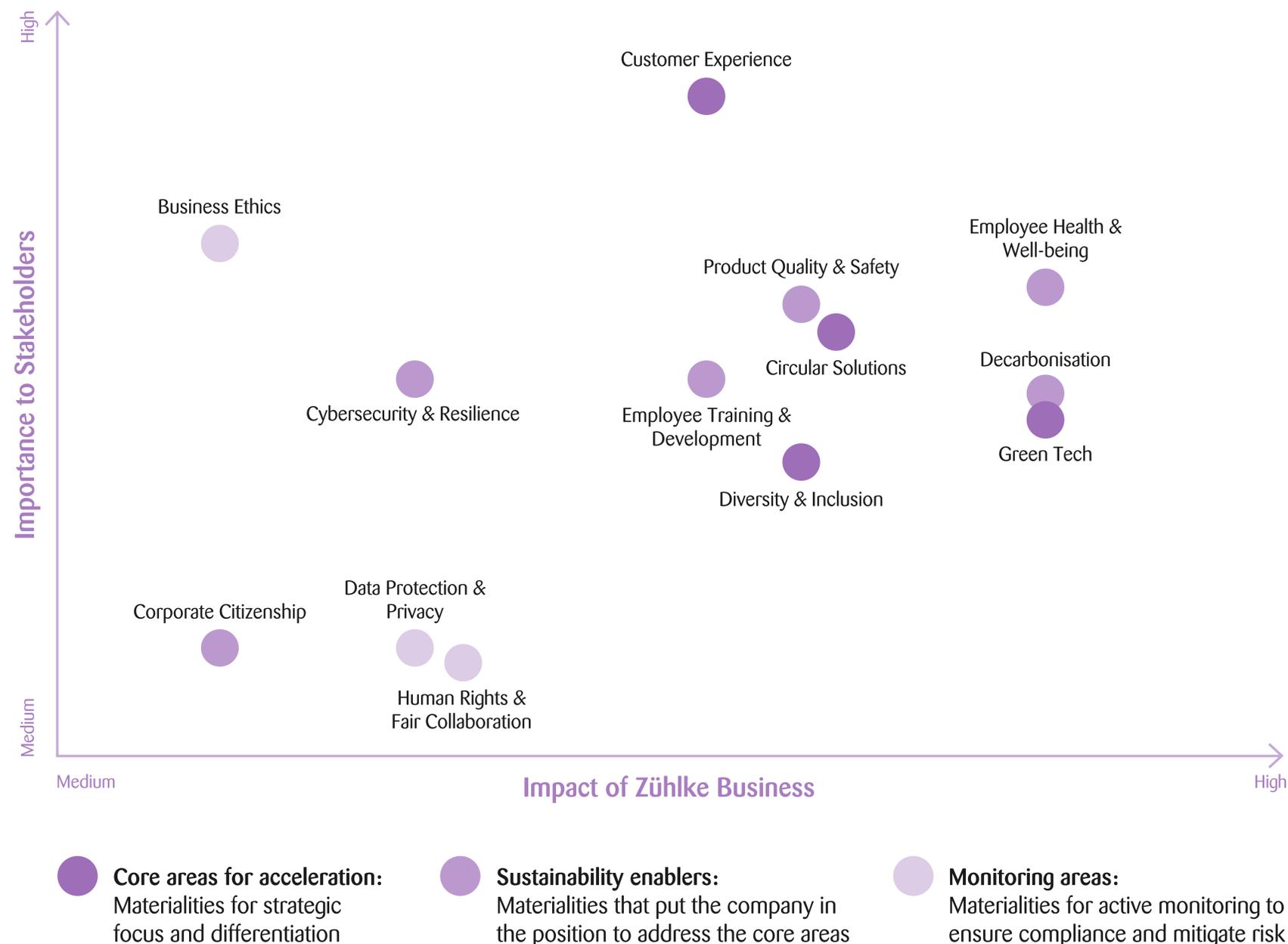
What do “sustainability” and “corporate responsibility” mean to Zühlke? We have identified the **sustainability topics most relevant to our business** with external consultation. The result is our Zühlke materiality matrix (on the right).

To arrive at the matrix, we assessed the topics in two dimensions:

- First, we asked our stakeholders about the relative importance of the topics, based on their respective priorities.
- Second, we assessed how much impact our business has on the topics, both directly and indirectly through our client projects.

Throughout this report, all 13 material topics are addressed in detail, either as part of our sustainability compass (for topics relevant for climate and health), or in the integrity section.

Read more in the section on our [material topics](#).



Supporting the UN Sustainable Development Goals

Our sustainability focus / first priority goals:

Zühlke endorses the United Nations Sustainable Development Goals (SDGs). To achieve meaningful change and to concentrate our efforts, we have decided to focus and define first priority goals.

We have selected two SDGs as our focus: Climate action and good health and well-being, as explained in the next section.

We support these focus goals through three pathways: Positive project impact, sustainable way of working, and community engagement.



Goals with strong relevance for our work:

There are several additional SDGs that we support actively and regularly. We support quality education through engagements with schools and universities. We believe in life-long learning and support the development of our employees.

We support diversity and inclusion, regarding gender, and other characteristics such as age, cultural and social background, to help reduce inequalities.

We contribute to clean energy through our projects and energy purchasing, and to decent work and economic growth as a responsible, profitable business.

We dedicate our special expertise to projects building industry, innovation, and infrastructure. Our circular solutions promote responsible consumption and production.



Goals we support in special situations:

We are mindful of our limitations, and we cannot address all issues at once. We respect all remaining goals and will grasp matching opportunities for supporting them actively.



Climate & Health:

Our sustainability focus

The Zühlke sustainability compass

Innovation and technology for climate and health

Every organisation has its unique skills and heritage. We feel that these should determine where best to contribute.

To concentrate our energy, we have chosen the linked areas of climate action and health improvement as sustainability focus.

Both areas can benefit from innovation and technology. In fact, we think that countering the climate crisis and making further progress for global health is impossible without innovation and technology. Therefore, we think our skills and experience can make the largest positive impact for climate and health.

Climate action

Climate change is the challenge of the 21st century. We use consulting, digital capabilities, and engineering to help our clients build green infrastructure and the circular economy.

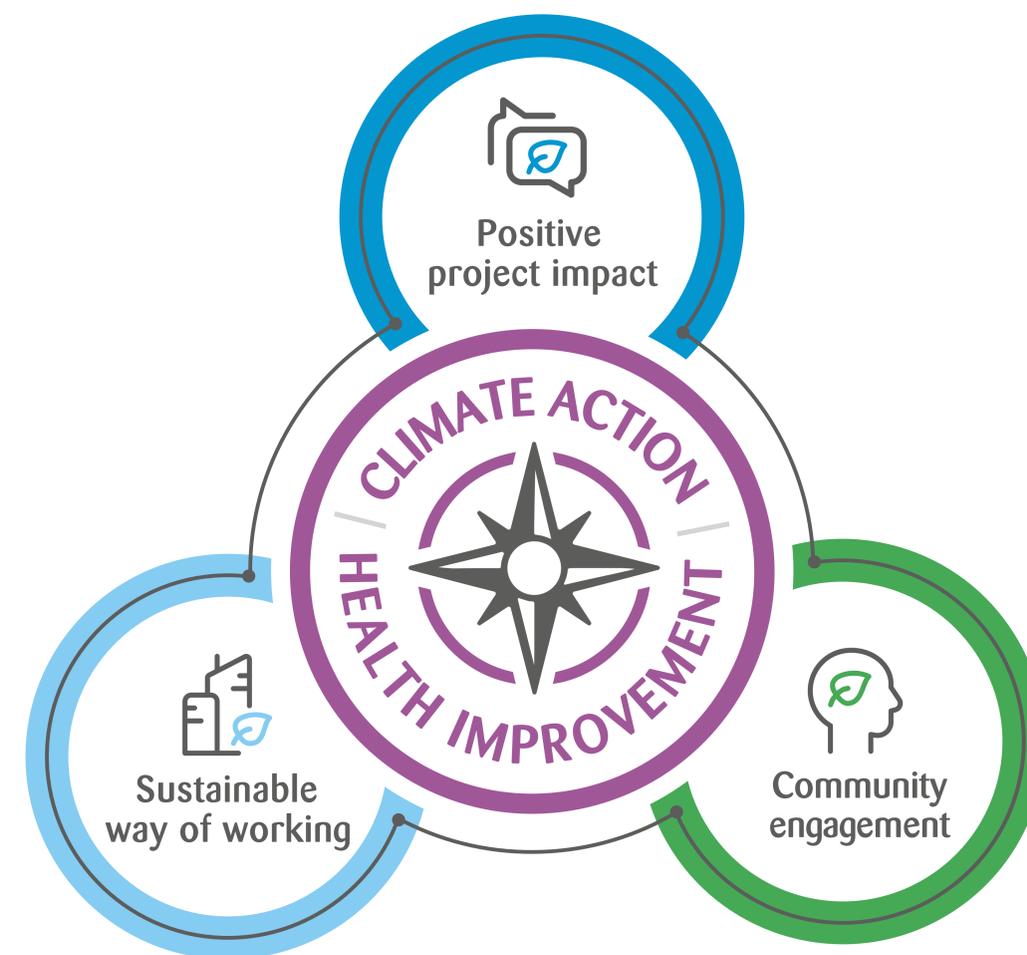
Health improvement

Health and well-being are threatened by climate change, pandemics, and preventable diseases. We provide advice and solutions for digitalised healthcare and medical devices so that our clients can provide wide access to medical innovation. Climate and health are strongly interconnected. For example, extreme weather events and pollution create major health risks.

Climate action can save millions of lives through improvements in air quality, diet, and physical activity. Vice versa, a focus on health improvements can improve the business case for climate action and provide necessary preconditions for change. Positive actions are mutually reinforcing.

Our sustainability compass

Climate and health are at the centre of our sustainability compass, surrounded by three pathways for action: Positive project impact, sustainable way of working, and community engagement. In the following, we describe these pathways in detail.



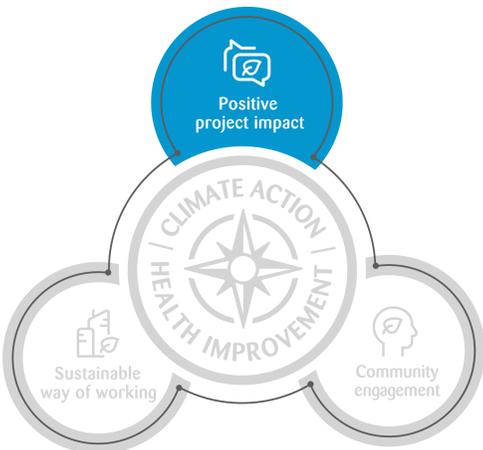


Positive project impact

The first, and most powerful pathway in our efforts to shape a sustainable future is through our client projects.

As an innovation service provider, it is our mission to help our clients envision and create a sustainable future. Positive project impact is about helping people and the planet through the services we provide to our clients.

In that sense, we consider the environmental and social impact of all our projects and help our clients reach their sustainability goals. By providing deep expertise and targeted offerings for circular solutions, green tech, patient-centred healthcare, and sustainable software.



Circular solutions

A resource-efficient and sustainable use of natural raw materials, their reuse and recycling within a closed-loop system, and the avoidance of waste: that is the essence of the circular economy. In other words, an economic model to move us away from a throwaway society and towards a long-term sustainable future. What sounded like a utopian fairy tale not long ago, is becoming more and more of a reality thanks to the global climate movement, changing consumer needs, and not least the regulatory requirements of the European Green Deal.

Sustainability engineering: an integrated approach

All product manufacturers need to master the transition to a circular economy. Zühlke supports them in rethinking and reimplementing their products, designs, processes, and even the way they do business.

This means pursuing new goals like the use of recycled materials, eco-design, reduced emissions, and reparability. Existing goals often become more challenging too, for example around costs and margins, resilient sourcing, user experience, or regulatory requirements.

In 2021, we developed our "Sustainability Engineering Method" as an extension of our existing product development processes – an approach that allows us to look at product development holistically and true to the circular economy model. The method is designed to make a product and its development process as resource and emission-efficient as possible along the entire life cycle – from raw materials to reuse and recycling.



We must view today's products as the material depot of tomorrow –

and we are convinced the manufacturer is best at recycling its products. I am glad that Wilo and Zühlke are working together on the circular economy, for example in the Sustainability Circle.«

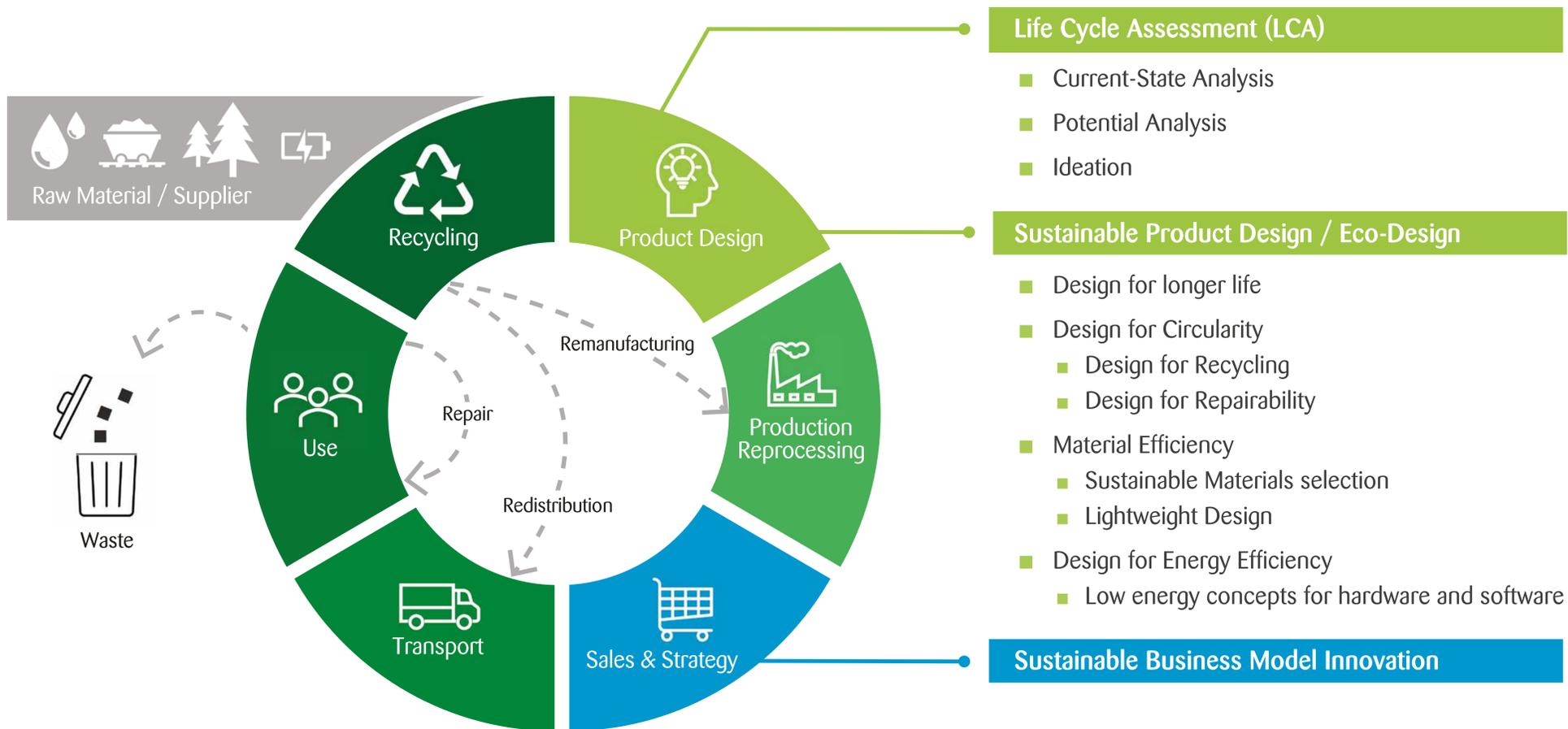
Thomas Fetting

Senior Manager,
Wilo SE



The model consists of three areas:

- **Life Cycle Assessment:** Understanding all environmental impacts in the life of a product
- **Eco-Design:** Integrating sustainability goals such as reuse of material and repairability
- **Sustainable Business Model Innovation:** Creating and capturing added value through sustainability



»» The Business Case for Sustainability? Simple:

Without a sustainable economy there will soon be no business that we can pass over to our children and grandchildren.«



Moritz Gomm

Lead Business Innovator,
Zühlke Germany

Success stories

The following client engagements illustrate how we apply the circular economy model to help our clients create more sustainable and ultimately more successful products.

- A medical equipment manufacturer wanted to make their products more sustainable. Our life cycle assessment of their products helped them identify the most critical levers for enhancements and improving the overall impact from production to end of life.
- Together with a manufacturer of kitchen appliances who wanted a new line of environmentally friendly devices, we developed entirely new design ideas in terms of materials, energy consumption, packaging, and recycling, using our eco-design method.
- On the next page, we show another project example that included a review of an existing business model.

Outlook

Data and digital capabilities play an important supporting role in the transition to a circular economy, for example by providing data platforms for digital twins and digital product passes.

We will integrate these aspects in our work and have started a strategic initiative around AI, data, and analytics.

A man and a woman are in a meeting, looking at a screen. The man is on the left, wearing a light blue shirt, and the woman is on the right, wearing a blue shirt. They are surrounded by many yellow sticky notes. The background is blurred, showing other people in a meeting room.

LCA: Sustainable product, design and business model

To support our client – a manufacturer of children's audio systems – in creating more sustainable products, we started with a life cycle assessment. This in-depth analysis of the product's impact served as the basis for a three-day workshop that produced ideas on how to improve its reusability, repairability, remanufacturability, and recyclability.

We also analysed options for new business models and their business cases. This resulted in a product-as-a-service model that allows customers to rent the product instead of buying it.

To validate the new business model, the team used “pretotyping” (presenting a product as if it is already available) and a specially developed website to test whether the new concept appeals to customers.

[Learn more](#)

Read about [key criteria that matter](#) [↗](#) for sustainable products.

Green tech

The energy sector is facing severe challenges in its transition to clean renewable energy sources. At the same time, it faces increasing demand as other industries such as transport and logistics replace fossil fuels with green electricity.

For example, switching to electric vehicles will reduce pollution from road transport but will lead to a surge in electricity demand. Other changes, like using electric heat pumps to heat homes and offices, have the same effect. Therefore, green tech that enables power generation, transport, logistics, and buildings with zero or low emissions is a critical enabler.

Our technology needs to change from what we have used in the past, for example towards the ubiquitous use of electric vehicles for private and commercial use, new forms of public or hybrid transport, and the underlying infrastructure including battery storage, solar power, or wind generators.

Zühlke supports this transformation in many ways. For example, we work with railway operators to improve their services. We know that new data and application platforms are a big part of a cleaner infrastructure. Specifically, they are catalysts for delivering a modern decarbonised and decentralised energy system.

Digitalising our net zero energy future

With these challenges in mind, the UK Government convened an Energy Digitalisation Taskforce in 2021, which Zühlke was happy to support in an advisory role based on our data and digitalisation expertise.

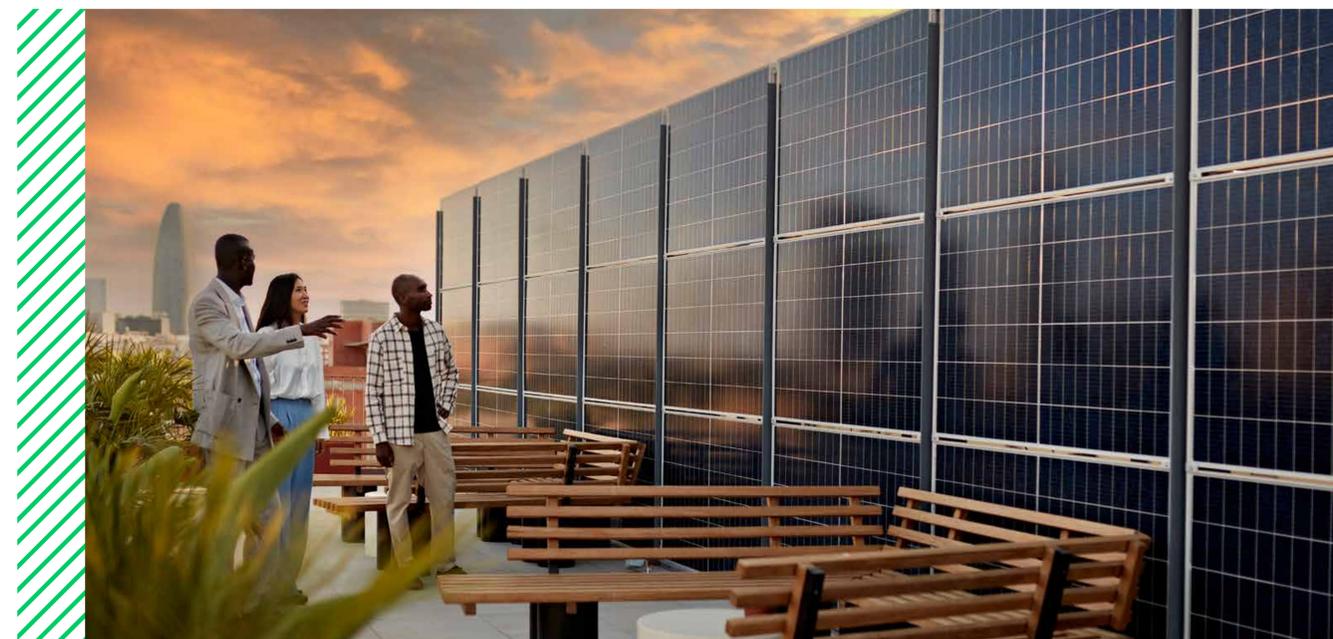
Our contribution to the taskforce has been to answer the question: how can the energy sector break free from its current limitations and become capable of continually adapting to future requirements, without interrupting our energy supply?

Our proposal: a digitalised and agile governance to harness the power of data

The net zero challenge requires sector-wide coordination and a Sectoral Digitalisation Governance solution. In our report, we proposed a new agile governance that seeks to enable:

- Continuous visioning – for stakeholders to agree on what is needed from energy services
- Continuous delivery – allowing practitioners to create services rapidly in a regulated environment
- Continuous benefits – to investors and consumers through many incremental improvements
- Continuous adaptation – ensuring the sector is resilient and can solve its future challenges

We believe that the skills to develop and implement the solutions are in place. With our report, we hope to have provided the initial steps to unlock these and offer guidance for creating digital net zero energy services and initiating the energy sectors' governance of digitalisation. By enabling the use of data with our digitalisation expertise, we hope to make a significant contribution to accelerating the green transformation.



EVIIA: Meeting net zero goals through the use of data

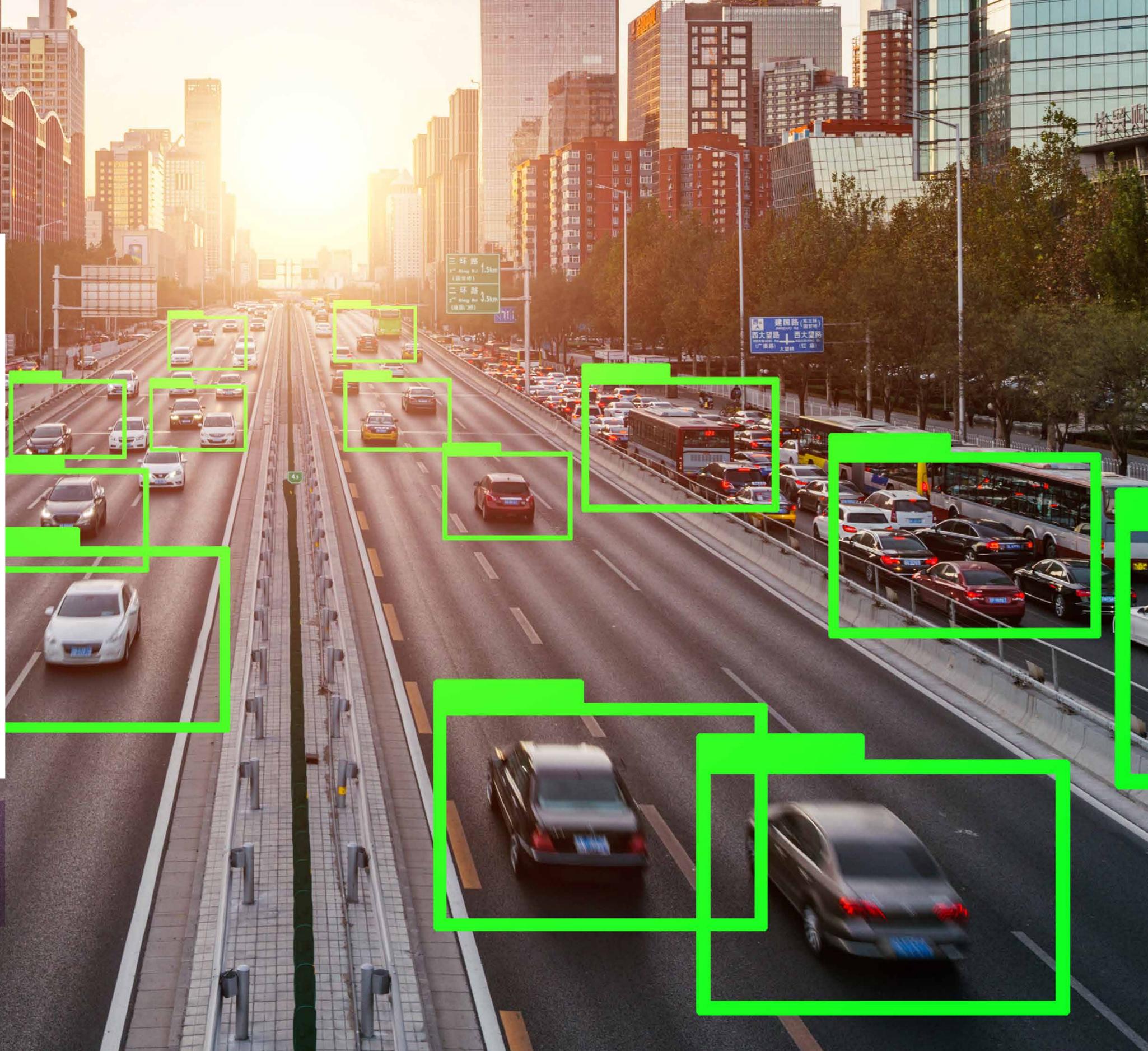
A first step towards harnessing the potential of data for a decarbonised energy system could be the new Electric Vehicle Infrastructure Investor App (EVIIA), for which Zühlke was awarded R&D funding by the government body UKRI in 2021.

Our app offers investors data, models, and insights that are currently difficult or impossible to obtain for people outside the large power suppliers. The app brings together all of the data and also models it, providing new entrants to the UK electricity market with a comprehensive basis for initial analysis and subsequent detailed research.

This saves potential green investors months of research in finding reliable data to identify specific locations where investment is needed, whether for green energy generation, charging points, battery storage, or other new infrastructure.

[Learn more](#)

Read [what users love](#) [about this prototype](#).



e-Sling: Pilot project for sustainable aviation

Aviation currently relies to a large extent on fossil fuels. Global air traffic is therefore responsible for a considerable proportion of total CO2 emissions. To counteract this trend, ETH, the Swiss Federal Institute of Technology in Zürich, electrified a 4-seater electric aircraft with a modular battery system in a research prototype.

The project required expert knowledge in many areas, especially for safety-critical aspects such as verifying self-developed components. Zühlke made their know-how available and supported ETH students on their journey to build the first electric 4-seater aircraft. The Zühlke team provided reviews of architecture, code, hardware, and user experience, FEM analysis of the wings, advice on avionics cabling assembly, calibration of instruments and natural frequency analysis as well as the analysis of the test stand. In just eight months, the project team succeeds in electrifying the Sling TSi powered aircraft.

With further development of battery technology, electric aviation will open up many economic and sustainable prospects.

[Learn more](#)

Watch [what the team says](#) [↗](#) in the project video.

Patient-centred healthcare

Innovation and technology have brought huge improvements for health and well-being. For example, in 2019 nearly 90% of one-year-olds across the globe received at least one vaccination (up from 20% in 1980). Today, digitalisation and engineering are key factors for further improvements. During the pandemic, telemedicine opened access to healthcare services for many. Digitalisation has also played a key role in fighting covid-19 by tracking infections, exposure, and vaccinations.

Health is a strategic sector for Zühlke. We support clients in life science and pharmaceuticals, medical device manufacturing and healthcare service provision. In 2021, we worked on over 100 engagements in these fields, from small proof-of-concepts to full development projects.

Improved outcomes for patients

We feel that advances in healthcare must be measured by their benefits to patients. The solutions we develop for our clients show that digitalisation and innovative technology can facilitate prevention or earlier detection of medical conditions, individualised and more effective treatment, and wider access to healthcare.

Patient-centred healthcare offers the opportunity to address the specific needs of individuals. For example, hospital, clinic,

and home treatment can be better aligned. Actual use of medication and up-to-date diagnostic information can be integrated. Our clients often look for ways to connect all “smart” medical devices and clinical information systems to better serve patients.

- **Improved diagnostics:** New forms of biosensors and biomarkers, mobile device sensors, data from wearables, and advanced imaging all create huge opportunities for diagnostics. With the right analysis, risk factors and diseases can be detected earlier to prevent or mitigate severe illness. In 2021, Zühlke Ventures added Healios to its holdings portfolio, a startup that uses sensor data from wearables and smartphones to quantify the progression of neurological diseases, for example Multiple Sclerosis (MS).
- **Improved therapeutics:** Machine learning and data engineering are enhancing treatment methods by optimising parameters like doses and timing, and also by opening up completely new possibilities. For example, Zühlke has supported MedTech company Advanced Osteotomy Tools (AOT) with deep learning computer vision technology to develop the world’s first contactless bone-cutting device. In addition, digital therapeutics can sometimes replace traditional drug-based therapies, for example in treating mental diseases.

Advanced technology can also make treatments more affordable and accessible. Life science start-up CUTISS is revolutionising the treatment of burns victims. By using customised artificial skin made in a laboratory, the company seeks to prevent or significantly reduce scarring. Zühlke assisted CUTISS to get its product ready for the market by implementing an automated process.



Innovation and the UN sustainable development targets

We are convinced technology can help to reach the targets linked to UN Sustainable Development Goal (SDG) 3: Good health and well-being. We also acknowledge that this is not yet a high priority at Zühlke in the way we select and conduct our client projects. However, we see plenty of opportunities to integrate this more strongly into our processes and metrics.

Digital health apps can help prevent premature mortality from non-communicable diseases (UN SDG Target 3.4) such as cardiovascular diseases, cancer, and diabetes. For example, they can nudge people in their lifestyle choices to increase mobility and improve diet. And they can detect warning signals such as irregular heartbeats.

Mobile phones are ubiquitous and relatively affordable devices now and come equipped with powerful cameras and other sensors. Using them as platforms for the delivery of health solutions can improve the accessibility and affordability of healthcare (UN SDG Target 3.8).

Overall, we seek to address these targets by working with our clients, and to develop a perspective that integrates health and climate concerns. The healthcare sector is starting to reduce CO₂ emissions and waste systematically, and we can help by applying techniques such as ecodesign and lifecycle assessments.



When deciding to be a scientist –

one is moved by the desire to bring technologies at the service of health, for the benefit of our planet and all its inhabitants. Working on innovative technologies is a responsibility the current generation holds toward the future one.«

Dr. Daniela Marino

CEO,
CUTISS AG





NHS COVID-19 app for England and Wales

Zühlke played a major role in developing the official COVID-19 contact tracing app for the National Health Service (NHS) in England and Wales. At its peak, the app was used regularly by 16.5 million people (28% of the total population).

The University of Oxford's Big Data Institute and the Alan Turing Institute published a paper in Nature showing that the app had averted over 600,000 cases of COVID-19, preventing more than 9,000 deaths, in the three months following its public launch.

This was a project with strict privacy, data security, and accessibility requirements, taking place in the midst of a public health emergency. The team made unusual and substantial personal sacrifices to deliver the app to the public as soon as possible, developing the core of the app in just 12 weeks. As a result, the team won the Development Team of the Year category at the UK IT Industry Awards 2021.

Learn more

Read [what our client says](#) [about this project](#).

Sustainable software solutions

In our digitalised world, software is the hidden backbone that connects and coordinates our business activities and private lives. Because it is not tangible, it is easy to assume software has no direct social or environmental impact, but the opposite is true.

On the positive side, software can run intelligent buildings, optimise traffic and logistics, and track resources across complex supply chains. But software can also have a negative impact. Greenhouse gases from data centres alone account for about 2% of global emissions. And ill-designed software can waste resources or exacerbate social problems.

A baseline for sustainable software development

Over the last few years, Zühlke has been laying the foundation for more sustainable software development in our client projects. In 2021, we turned our ideas and experience into a framework that provides guidance on how to approach software development more sustainably. Our methodology is based on two key elements: Responsible design and impact analysis, both of which address sustainability in the planning and development stage of a software engineering project.



Responsible design: Integrating different aspects of sustainability

Responsible design focuses on incorporating sustainable aspects into the software's design right from the start. The responsible design guidance we developed helps project teams navigate different sustainability aspects that should be considered in the architecture and implementation of sustainable software. These include:

- **Responsible use of technology:** The social context and the impact of an application on people needs to be integrated in the analysis and requirements activities.
- **Careful use of resources:** Energy consumption and carbon emissions should be examined in relation to the benefits achieved.
- **Maintainability and expandability:** A fast-moving world needs flexible software. It should be easy to maintain and expand software solutions. Rigid software stifles innovation.

- **Inclusion:** Sustainable software should be accessible to as many people as possible. An inclusive design should hence consider not only usability but also accessibility, language, or ambient noise, among others.
- **Security and privacy:** Cybersecurity and data protection measures need to be sophisticated enough to align with the failure scenarios and the sensitivity of the processed information.

Impact analysis: Understanding the solution's context

As outlined above, software has intended and unintended impacts in the real world. Impact analysis is the systematic planning and tracking of both positive and negative effects.

For the intended positive impact, it is important to start from a shared vision with clear objectives. Achieving these will depend on hypotheses on the context of the solution that should be tested early. For negative impacts like emissions, benchmarks can help to identify minimum performance criteria.

Throughout the entire project, the impact analysis examines whether the application has the intended effects and what conclusions can be drawn from actual usage.

Increasing awareness

Having a framework is only the start. We do not yet apply these aspects in all our client projects. But we aim to integrate the framework more tightly into our development processes.

We hope to contribute to the debate and inspire more companies to integrate sustainability in their software projects.

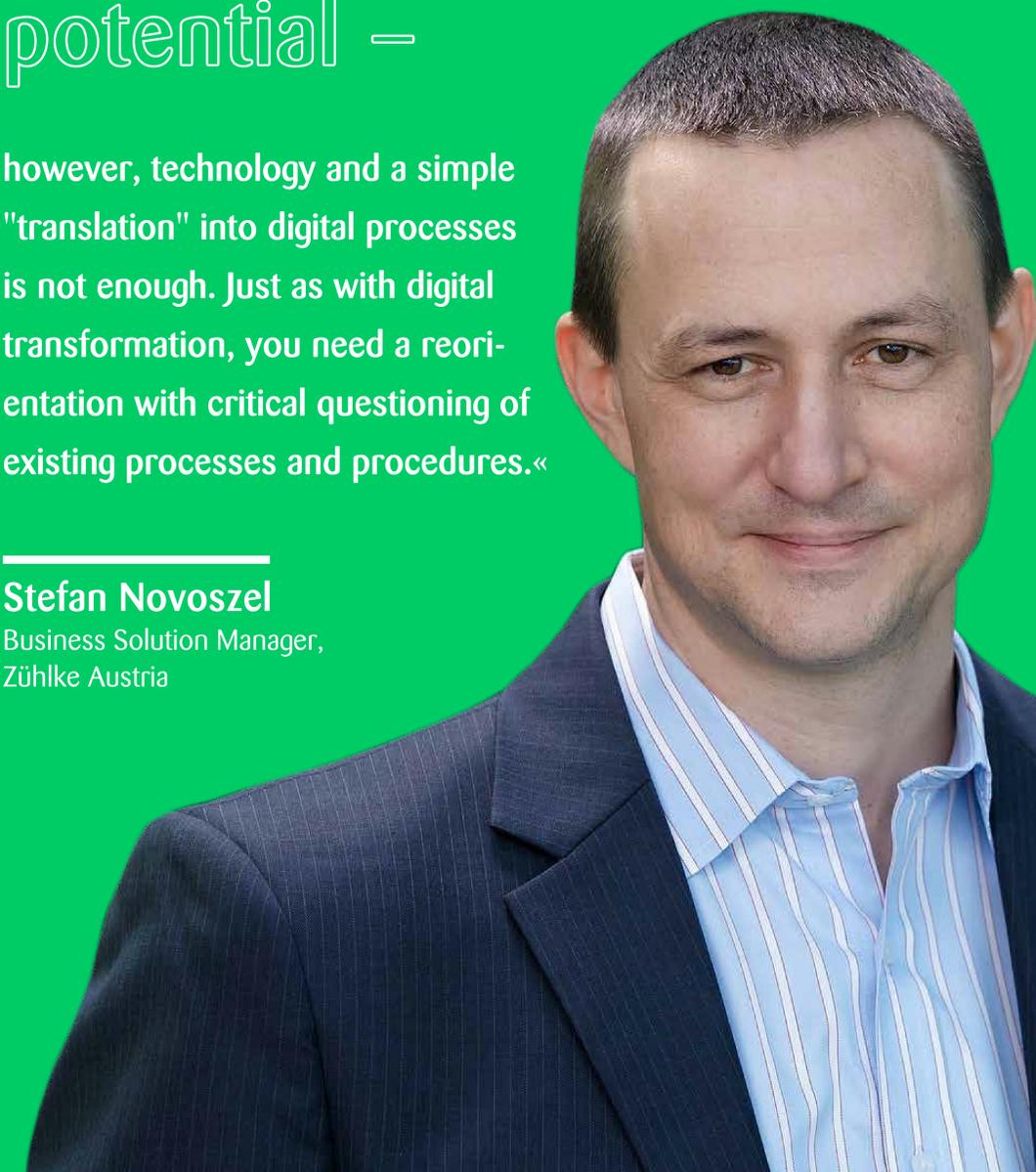


Data can help to identify sustainability potential –

however, technology and a simple "translation" into digital processes is not enough. Just as with digital transformation, you need a reorientation with critical questioning of existing processes and procedures.«

Stefan Novoszel

Business Solution Manager,
Zühlke Austria



VALOG: enabling sustainable provisioning with cloud app

Together with VALOG, a software and consulting provider for company pension schemes, we developed a simpler way for companies to manage their own social capital provisions – using a web app with a newly-developed algorithm.

Our goal was to provide a quick way to calculate social capital provisions. In this analysis, various parameters are taken into account, which previously made it very time-consuming. With our app, we managed to simplify the process.

Consequently, what previously required many steps now only takes a few minutes. Using cloud technology, large amounts of data can be handled while at the same time, automatic scaling takes care of fluctuating loads. The app is also more environmentally sustainable because of its higher energy efficiency in the cloud data centres.

Learn more

Read the [full project story](#)  from our partner Microsoft (in German).





Sustainable way of working

Change usually begins with oneself. So, in our commitment to sustainability, the second pathway for change is, naturally, our own operation.

We have committed to compensate our carbon emissions across all group locations and reach net-zero emissions in line with 1.5°C science-based targets.

Regarding our people, we create a healthy, diverse, and inclusive work environment that fosters personal growth.

Our teams strive to improve our operations, eliminate waste, and make better use of resources to continually move towards a more sustainable way of working.



Decarbonisation

Zühlke is committed to reaching net-zero greenhouse gas emissions in line with a 1.5°C pathway. To achieve this, our first step is carbon neutrality across all group locations from 2021, the year of this report. We will set further targets in line with the science-based target initiative (SBTi) before the end of 2022.

Zühlke supports the Business Ambition for 1.5°C program from UN Global Compact and the Tech Zero initiative that originated in the UK.

Carbon measurement and accounting

Our team in Germany has pioneered decarbonisation at Zühlke. Here, we have measured emissions for 2019 and 2020 and achieved carbon neutrality through offsetting projects.

Since then, we have gradually rolled out carbon measurement and accounting to all group countries. We have chosen 2021 as our base year for groupwide carbon accounting, with **total emissions** of 6,887 t CO₂e. The reference section contains more details.

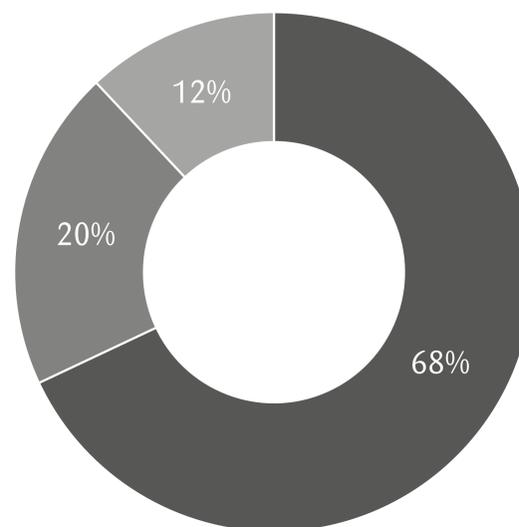
We work with Berlin-based climate tech company Planetly. They develop digital tools enabling companies to analyse, reduce, and compensate their carbon emissions and have supported us since our first measurements in Germany.

Reducing our emissions

The key reason for measurement is getting information for reducing emissions.

For Zühlke the following emission sources are significant:

- **Procurement:** Products and services from suppliers
- **Employees:** Business travel, commuting, remote work
- **Buildings:** Heating, cooling, electricity, water



Zühlke greenhouse gas emissions 2021
 ● Procurement ● Employees ● Buildings

In 2021, one of our reduction measures was the completion of our switch to renewable energy in all German locations. We realise there is still much to do, and we will base our priorities on the results from measurement.

We will continue to make trade-offs. For example, a certain amount of business travel is vital for a services business focusing on innovation.

Setting targets in line with climate goals

To ensure we are doing our fair share of reductions, we will set emission targets. The science-based targets initiative (SBTi) provides resources and guidance for this process. Our targets will be certified by SBTi so that we can be sure that they are in line with a 1.5°C climate pathway.

The SBTi net-zero standard mandates two types of science-based targets (SBTs):

- Near-term SBTs define interim targets for emission reductions in 5-10 years
- Long-term SBTs define when emissions will be reduced to a „residual“ level that is hard to further drive down. At this stage, residual emissions need to be fully neutralised through carbon removal from the atmosphere.

Neutralising carbon: Offsetting and removal

There are two basic mechanisms for neutralising carbon emissions:

- **Carbon offsetting:** Avoiding emissions through controlled interventions. These are typically projects like building renewable energy facilities or distributing cooking stoves which burn less CO₂ compared to traditional cooking methods. An independent organisation assesses and certifies these projects to ensure that funding them actually reduces emissions.
- **Carbon removal:** Removing CO₂ from the atmosphere. Here, a direct effect is achieved through planting trees, biochar carbon removal, or direct air capture technologies. Even though these interventions can look more straightforward, they still need to be independently verified.

Currently, offsetting is the more common form of neutralisation because removal options are not fully developed or costly. Over time, carbon removal should become more widespread. In 2021, we have already neutralised a part of our emissions through carbon removal to support the development of related technologies.

We feel offsetting is still valuable if projects are verified with care, addressing issues like additionality, leakage, and permanence. Standards like Gold Standard and VCS help with this. The SBTi also recommends offsetting, referring to it as „beyond value chain mitigation“.

For Zühlke Group, our commitment is to offset all emissions starting from 2021 and gradually increase the quality of our neutralisation towards full carbon removal.



Understanding the current situation is the first step –

followed by effective measures for lowering emissions. With this mindset we embarked on our journey to reduce our carbon footprint.«

Silvan Stich

Lead Project Manager,
Zühlke Switzerland



Employee health & well-being

Ensuring healthy lives and promoting well-being at all ages is essential to sustainable development. As a company, we have a duty of care towards our employees. This means we have a responsibility to ensure we support our colleagues' physical and mental health.

Physical and occupational health

Knowledge work creates strains on our bodies. Much of our time at Zühlke is spent at desks and in meeting rooms. For this reason, we deliberately do not develop a uniform workplace concept, but only guidelines which allow for differentiated solutions according to local and activity-oriented requirements. These include height-adjustable desks, multiple monitor setups, specially equipped meeting rooms for in-person and remote conversations, and spaces for physical activities and relaxation.

We follow and exceed occupational health and safety standards for our offices. These vary by location, but typically include designated trained first aiders, ergonomic workplaces, and health and safety trainings. Our lab facilities for mechanical and electronic engineering adhere to specific mandatory standards and best practices for safety.

Our frequency of injury is low, with fewer than 5 recordable work-related injuries per 1,000,000 hours worked across all our locations in 2021.

When it comes to physical health the WHO defines 150 minutes of exercise or moderate sport per week as the minimum goal for adults. Apart from the various benefits we provide, we strengthen our “Zühlke spirit” by joining charity runs like the Wings for Life World Run and supported different corporate fitness activities like the Bike to Work challenge throughout the group. We also participated in specific programs like the Austrian Corporate Challenge with 50 days consisting of health checks, trainings, nutritional advice, and various fitness workshops.

Flexibility and work-life balance

At Zühlke we believe our responsibility does not stop at providing an ergonomic workspace, but to ensure well-being in the working environment and beyond. Different initiatives were established, reaching from company doctors, local health programs to health insurance models.



»» Mental health is a state of well-being and has many faces.

Strengthening one's own resilience, respectful interaction, meeting at eye level, being in dialogue with oneself and with the other person can be a key to the necessary inner strength.«

Geraldine Mottschall-Weber

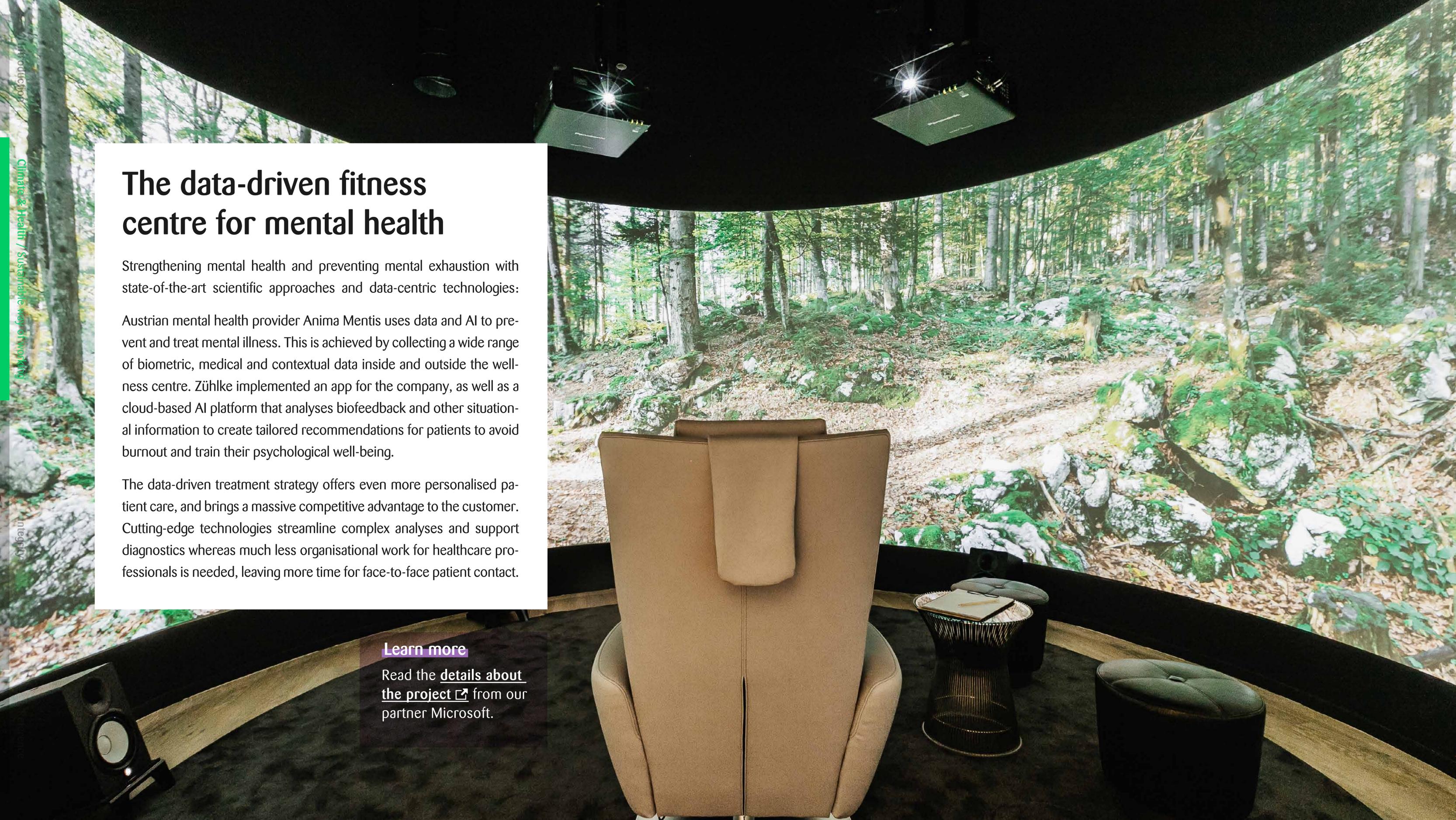
Head of Office Management,
Zühlke Germany

We support a healthy work-life balance through flexible working hour models and different approaches to cater various needs: In the UK, employees can buy up to five additional days of annual leave. In Serbia, they have the “ready” and “recharge” employment options to adjust the ratio of working time to private time. We also support sabbaticals because we believe that taking a longer break can be a powerful way to find a new perspective and regain a healthy energy level. We invest in people so that they reach their full potential for innovation, creativity, and top performance.

Mental health

Mental health includes our emotional, psychological, and social well-being. At Zühlke we foster an open and honest culture. We believe a better understanding helps us to make it normal to talk about mental health. This should also reduce any prejudice, so that we have a shared goal towards positive mental health. We aim for an environment where employees feel they can talk openly about their mental health, not only during the pandemic.

Zühlke have made a commitment to this by investing in a globally recognised Mental Health First Aid training programme for our employees to equip them with the knowledge and skills necessary to recognise mental ill health, and to build a network of colleagues to help others find the support they need. The program took place in several countries in 2021. In the UK and Austria, 20% of our colleagues are now trained & certified mental health first aiders. In addition to this, our leadership team participated in trainings to be able to support their teams even better through challenging times. Coaching was offered throughout the group to be able to cope with pandemic related issues and to shape remote leadership. Mental health and physical health are strongly connected.



The data-driven fitness centre for mental health

Strengthening mental health and preventing mental exhaustion with state-of-the-art scientific approaches and data-centric technologies:

Austrian mental health provider Anima Mentis uses data and AI to prevent and treat mental illness. This is achieved by collecting a wide range of biometric, medical and contextual data inside and outside the wellness centre. Zühlke implemented an app for the company, as well as a cloud-based AI platform that analyses biofeedback and other situational information to create tailored recommendations for patients to avoid burnout and train their psychological well-being.

The data-driven treatment strategy offers even more personalised patient care, and brings a massive competitive advantage to the customer. Cutting-edge technologies streamline complex analyses and support diagnostics whereas much less organisational work for healthcare professionals is needed, leaving more time for face-to-face patient contact.

Learn more

Read the [details about the project](#)  from our partner Microsoft.



Community engagement

Our third pathway to sustainability is creating positive change by fostering community engagement.

We believe that innovation and sustainability both thrive in an environment that allows different voices and perspectives. Therefore, we build connections to networks and communities around us. Many of us at Zühlke are involved in partnerships, industry associations, charities, and regional and local initiatives.

Whether it is through events, pro bono consulting, volunteering, or fundraising, we jointly and individually support causes related to climate action and health improvement.



Corporate citizenship

Zühlke understands corporate citizenship to mean taking an active role in society, beyond our immediate business. This includes donations and sponsorship measures, pro bono activities and charitable activities like team events and volunteering.

Team engagement

At Zühlke, these activities are usually initiated and coordinated at the local level. We aim to provide an environment where employees are encouraged to engage beyond their day-to-day roles. Here are some examples from 2021.

In the UK, Zühlke has established a payroll giving & matching gift initiative: Employees can now make payroll donations to non-sectarian, non-religious, non-denominational, non-discriminatory, non-political charities through salary a sacrifice scheme and we match these payroll donations up to a maximum value of £50 per month. We also sponsor employees who use their annual leave to volunteer for charitable organisations by paying them an hourly rate for donating their time.

In Germany, instead of giving a Christmas gift to employees, we donated to a children's hospital in Munich. In addition, the Finance and Controlling team joined a tree planting event near Frankfurt.

In Switzerland, Singapore, and Serbia, colleagues participated in several garbage collection campaigns. For example, the team in Serbia cleaned up the promenade near the Danube River and planted a Zühlke tree in one of the most visited parks in Belgrade.



It's about small changes –

every time for a long time.
We make progress by walking the talk. Very exciting to see the many initiatives driven by our teams from all locations.«

Lorraine Lai

Regional Marketing Manager,
Zühlke Asia



The next generation of innovators

Corporate citizenship is also about educating and encouraging the next generation of innovators:

We have been supporting non-profit Aiducation for several years through scholarships for young people in Kenya and the Philippines. The direct impact that we see here is inspiring. The scholarships continue, but some additional work with Aiducation has been impacted by the pandemic. We could

not repeat our Innovation Academy event in 2021. In 2020 we taught Design Thinking to a group of 42 students in the Philippines in partnership with Aiducation International Switzerland and local partner Pathways to Higher Education.

On our Mindstorms day, members of our teams in Switzerland went out to help school children in grades four to six learn the basics of programming and robotics. The children got to

build and program their own LEGO robots, then use them to solve tasks.

In Germany and Austria we participate every year in Girls' Day to help fostering enthusiasm for technology and innovation as early as possible. At the Vienna site we give school children hands-on insights into the diverse job profiles and fields of activity of an innovation service provider: from programming to creativity techniques to product design.

All Austrian events take place carbon neutral and carry the ÖKOplus Seal.

We aim to continue a wide spectrum of activities linked with our local presences, while creating additional momentum through groupwide coordination and support.



TOM Makeathon

Following the motto "People first", the global non-profit movement TOM (Tikkun Olam Makers) and Zühlke joined forces. A group of voluntary innovators implemented their ideas to resolve some of the everyday issues of people with disabilities.

Two teams were formed, named AnyChair and WalOtter, consisting of those who experienced the needs and Zühlke experts in mechatronics from Serbia, Switzerland and Germany.

Supported by TOM's innovators, the teams produced two solutions to help people with disabilities overcome the selected obstacles they face. The production method was posted on TOM's global platform, available for free download and ready for production by anyone, anywhere in the world.

[Learn more](#)

Watch the [team at work](#) [↗](#) in the event video.

UNIVERSITÄT

Building communities

To create a sustainable future, we need to work together and support each other. At Zühlke, we strive to contribute to networks and associations and build communities that harness their combined expertise to bring about change.

In 2021, examples for such activities included a mentoring program that brought together young entrepreneurs in start-ups with experienced engineers. We also supported sustainability events such as the Impact Festival in Frankfurt with more than 2,000 participants. And we initiated our participation in the UN Global Compact and Swiss Triple Impact.

Among these networking activities, one example stands out that allow us to join forces with partners that share our vision: In June 2021, we started the Sustainability Circle.

Sustainability Circle

The transition to more sustainable products, services, and business models is a complex process that requires interdisciplinary collaboration among all sectors.

To accelerate this transformation and leverage expert knowledge, we, along with our partners, founded the Sustainability Circle in 2021 – a network for sustainability transformation in consumer, industrial, and medical products manufacturing. By bringing together key stakeholders from the industry, we seek to develop innovative solutions and share best practices that foster sustainable growth, thus **speeding up sustainability innovation in manufacturing.**

It was fabulous to see our first events in 2021 bring together 150+ experts from 50+ companies to share 50+ talks on a broad variety of sustainability topics.

We are planning to expand the network further, focusing on workshops designed to encourage faster implementation and a quick check assessment to identify hot spots for action.



Listen, learn & drive ideas and practices forward –

this is my credo when it comes to sustainability transformation. My hope for the future is that nature becomes an equal stakeholder in all industries and policy decisions. And therefore, I am even happier to drive forward our network, the Sustainability Circle.«

Anna-Lena Späth

Working Student
Marketing & Communications,
Zühlke Germany



Integrity:

Exceeding stakeholder expectations

Our material topics

Zühlke follows the Global Reporting Initiative's standard GRI 3 on "Material Topics". This means identifying the environmental, social, and governance (ESG) topics that are most relevant for our stakeholders and for our business. These areas then guide our goals and activities around sustainability and corporate responsibility.

We feel this is essential because businesses are different. We mainly work in offices and small labs, which is different from industrial manufacturers. Nevertheless, **innovation and technology have far-reaching consequences, which we need to understand and manage** to the extent that is possible.

To determine our material topics, we have sought external advice from the sustainability consultants at Finch & Beak, part of SLR Consulting. They have guided us through a process to systematically analyse our positive and negative impacts. This included desk research with benchmarking against industry standards and peers, internal and external interviews with people from different roles and backgrounds, a workshop with our Group Executive, and an external panel.

Listening to our stakeholders

All our identified stakeholder groups had a part in the determination of the material topics:

- **Clients:** The organisations we provide our services to
- **Employees:** The people working for Zühlke directly
- **Customers:** The customers of our clients, often the end users of products or services, as individuals or businesses
- **Public organisations:** Industry associations, non-profits, social enterprises, regulators, government bodies
- **Board:** The board of directors overseeing Zühlke
- **Shareholders:** The company's owners, most of which have an active role as partners in the business

In the previous chapters, we have already addressed the material topics linked to our sustainability focus climate & health. In the following chapters, we look at the remaining topics, starting with diversity & inclusion and followed by customer experience, both of which we see as core enablers.



Sustainability is fuel for a long and happy future.

In much the same way we all need to keep fit, we must also strive to keep our planet green and healthy - for ourselves and for future generations. Our actions today have critical consequences for tomorrow.«

Elena Jasvojn
Group CFO, Zühlke



Diversity & inclusion

We are convinced that an inclusive culture, diverse teams, and more diversity in all core dimensions and levels contribute to new, innovative perspectives and long-term success - both for our company and for our employees. By infusing our work with a mindset of inclusion, enablement, sustainability and responsibility we create the change we want to see. This journey starts with teams built from a diversity of backgrounds, contexts, outlooks and influences. While diversity means the "what" (the variety of people), inclusion means the "how" (the participation of all).

In combination, this means creating a work environment in which people of different backgrounds, preferences, abilities, etc. feel valued and work successfully together.

In some core dimensions of diversity (such as ethnicity and nationality or age) we have made good progress, whereas in others we still have some way to go. For example, most of our top leadership positions are still held by men with a European background. This is why at Zühlke we are also committed to reducing the gender gap in tech jobs and leadership positions and advancing equal opportunities. Diversity and inclusion is a strong part of our global strategy and we are working together to tackle our status quo and gradually create better frame-

work conditions throughout all sites and divisions. Growing our culture and evolving into the Zühlke of the future can only happen when we learn at a global scale, with a multitude of diverse inputs all aligned to the task of improving the world.

Shared values

To address our current and future challenges we formed a groupwide Diversity Board, that consists of members from different countries who meet regularly on a strategic level, shoring up the many grassroots initiatives that have already blossomed in various locations throughout the group. A large online diversity community has evolved with active engagement across the group which has raised awareness of unconscious bias and produced tangible assets such as practical guides for inclusive language. We aim to take up best practices and share and adapt them through the group, fostering our "Zühlke Spirit".

Locations such as Zühlke Singapore with its very diverse talent pool and balanced leadership team serves as an example of how diversity and inclusion contribute to a unique, positive work environment for the whole group and show what we will be intensively working towards in the coming years.



»» Our diverse teams are our greatest strength –

in developing sustainable strategies, having a wealth of ideas from a range of contexts is what fuels real change, growth, and innovation.«

Maurice Roach

Head of Financial Services,
Zühlke UK

Recruiting and onboarding

Creating an inclusive culture right from the start at Zühlke is important for us. We have initiated programs for our interviewers to receive unconscious bias training before they start conducting interviews and we check to ensure that our job adverts are written with gender-inclusive language.

In Zühlke UK, as part of our recruitment processes we ensure that adjustments and provisions are made to accommodate any candidates with disabilities or special needs. We are also following the examples of our London and Manchester offices by providing wheelchair access at all Zühlke locations.

We have also revised our employee policies to re-emphasise that harassment or discrimination on the grounds of sexual or gender identity is not tolerated and ensured that our maternity and shared parental leave policy is inclusive of transgender parents. We have also developed a cultural guide – initiated by our team in Bulgaria – to provide training on cultural empathy because our decentralized teams are increasingly working on global projects across borders.

We run an internal initiative and blog post series called “culture & beyond” which celebrates our diversity and increases awareness & appreciation of our colleagues’ diverse backgrounds.

Partnerships

Another important part of our D&I efforts is the fostering of partnerships with for example Global Digital Women or Code-FirstGirls and also participating in the UK Stonewall Diversity Champions Program, with the goal of championing LGBTQ+ rights throughout the organisation.

In addition, we participate in programs such as the UK- based TechReturners, who help tech professionals mostly from underrepresented groups to return to work following career breaks.

We acknowledge that cultural and gender modesty norms as well as impostor syndrome can often prevent anyone from acknowledging their unique and remarkable attributes and expressing their achievements. Zühlke is therefore also part of the #IamRemarkable Initiative, empowering women and other underrepresented groups to celebrate their achievements in the workplace and beyond.

For this we organize monthly meetings with regular talks by colleagues throughout the group and hold 90-minute workshops on a voluntary basis to encourage the self-promotion motivation and skills of women and underrepresented groups and to challenge the social perception around self-promotion.

Customer experience

We believe what's best for the customer is best for the business. And, experience design is vital for market success. It's been proven that organisations that invest in customer centricity and better customer experiences are also more successful.

In the same way, customer experience (CX) matters for achieving sustainability goals. "Green" characteristics of products and services are increasingly seen as valuable – provided there is a real impact and customers understand it. A well-designed customer journey can also "nudge" customers towards more sustainable choices.

Experience design starts with a strategy

Our clients are increasingly recognising that investing in designing for experiences can help them to differentiate through compelling customer experiences or they risk losing market share. Together with them, we are starting to integrate environmental and social aspects into the different activities of this process:

- **CX strategy:** Putting customer experience at the heart of our clients' business strategy and reimagining end-to-end omnichannel customer journeys for seamless experiences focussing on moments that matter
- **Customer research:** Uncovering customer, employee or stakeholder needs and pain points to ensure we help solve real customer problems
- **Service design:** Enable and align people, processes and platforms to deliver seamless customer experiences across physical, digital, and human touchpoints
- **Product (UX/UI) design:** Creating engaging, sustainable, and accessible digital and physical products that scale

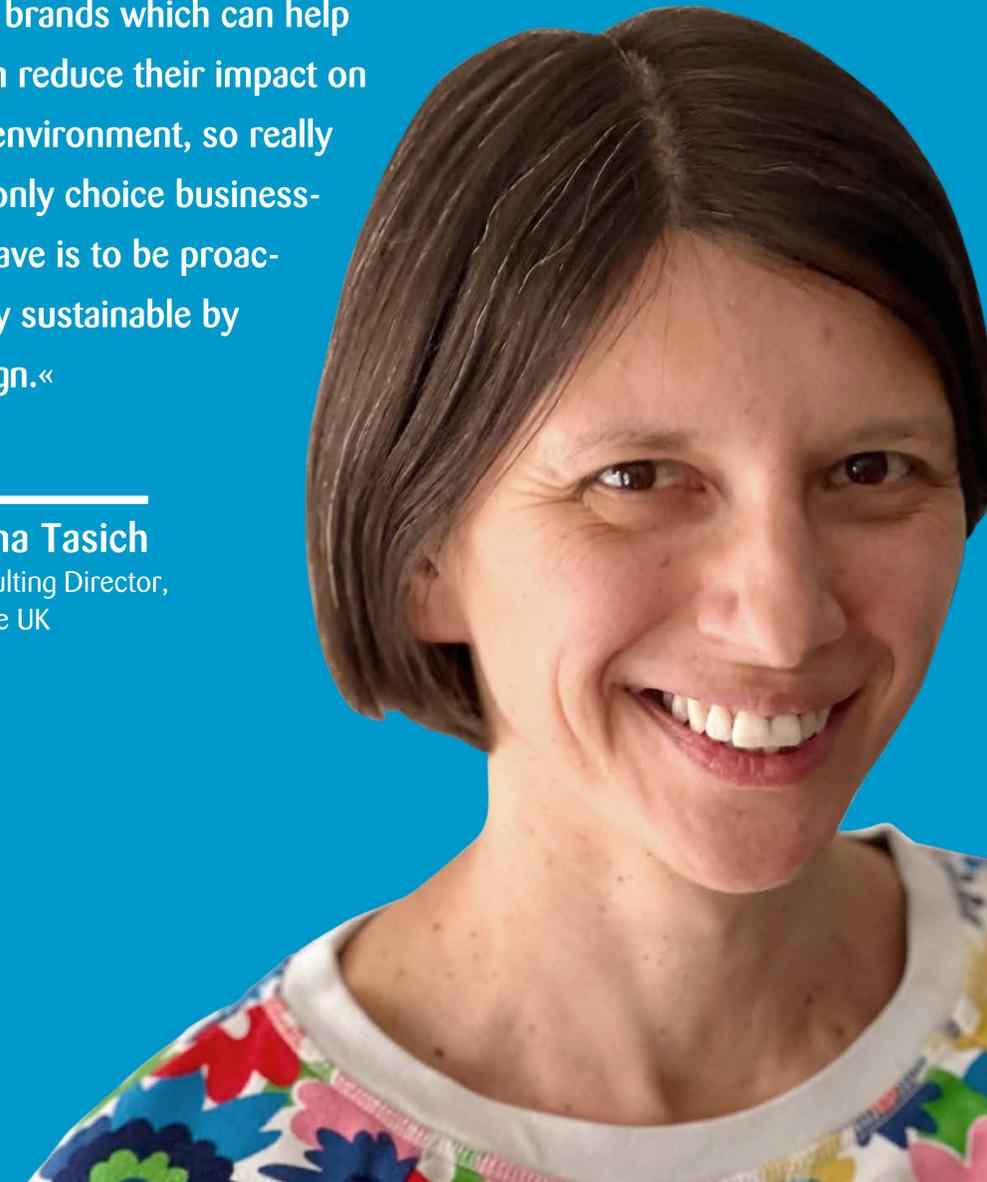


Customers are looking to engage –

with brands which can help them reduce their impact on the environment, so really the only choice businesses have is to be proactively sustainable by design.«

Tijana Tasich

Consulting Director,
Zühlke UK



Building sustainability into customer experience

Experience design empowers and encourages our clients to approach solving real customer problems and design products, services, and processes in a human-centric way.

Here, the scope of being “human-centric” is gradually widening from the view of a single human (the customer) towards the perspective of many humans (our society).

For us, this means that in addition to issues like accessibility, we are now looking at aspects like emissions, waste, or diversity, equity & inclusion.

Our multi-disciplinary team embed human-centric design within our agile delivery process by continuously conducting user research with target user groups as part of ongoing product development.

From discovering user needs to designing and building products and services we make sure we are compliant with WCAG 2.1 AA standards, and accessibility principles are considered at every stage of our work.

Looking at our projects in 2021, we realise that aspects like accessibility are integrated in many of our client projects, while other sustainability aspects like environmental impact are not addressed consistently.

Moving forward in 2022, we are focussing our efforts on helping our clients to be inclusive by design, sustainable by design, and global by design.



Employee training & development

As an innovation service provider, our clients expect us to understand new trends and opportunities. We are curious and work hard to stay at the cutting edge of technology. Learning and personal development have, therefore, always been at the heart of our company culture.

Introducing the Zühlke Growth Mindset

In 2021, we aligned personal and professional development at Zühlke with our strategy, establishing a new framework with more learning opportunities. We introduced our new training & development program, the Zühlke Growth Mindset (ZGM). The program is driven by the principles of intentional learning, development goal setting, and a strong and honest feedback culture. Over the year, we implemented the group-wide upskilling and innovation concept and introduced intentional learning in projects.

With the ZGM, we go beyond the idea that learning is an activity separate from project work. We support our people to identify learning opportunities in every situation and increase the number of lessons "on the job". We encourage employees to spend time and money on training in alignment with Zühlke's goals. In doing so, we strive to make working at Zühlke a journey of constant growth – from learning to knowledge exchange, helping others grow, for example, through

our coaching & mentoring program, to driving innovation and organisational evolution.

Camps as learning hubs

An essential part of ZGM are our annual Zühlke Camps, bringing together people from a certain region or practice. These camps provide a platform to meet, learn, network, and exchange ideas outside of our main daily responsibilities and client meetings, engaging us in continued development as a company and as individuals.

The year 2021 saw many online sessions and several remote camps due to covid-19 restrictions. This required new formats, but also meant we were able to bring people together from different locations.

Targeted investment with a positive impact

Zühlke makes a substantial investment in individual and collaborative training and development every year, significantly above the industry average.

In 2021, this amounted to an average of 105.9 hours of training per employee.



Product quality & safety

For Zühlke, the quality and safety of the products we create with and for our clients is vital. We feel responsible for what we deliver: poor quality can harm end users as well as our clients' businesses. In the case of medical products, we are even potentially talking about physical harm.

We therefore invest in our people and our processes. Our groupwide quality policy is the basis for our ISO 9001 certified quality management system. It is founded on the five principles of responsibility, leadership, diversity, fit for purpose, and continuous improvement. The principle of responsibility explicitly refers to safety, security, and sustainability.

Our modernised process management system The Zühlke Way (TZW) was fully rolled out in 2020. In 2021, we have extended the ISO 9001 certification to our locations in Asia.

Every employee is trained on our approach to quality and has access to our guidelines and processes. Additional requirements must be met for all development projects in regulated environments. We invest in specialised training and perform regular project reviews to consolidate our experience.

Medical products require special attention

Patient safety is our key concern when developing medical devices, in-vitro diagnostic medical devices, or other medical products such as software as a medical device.

We are certified according to ISO 13485 and follow a documented medical device development process (MDDP). Every colleague on such a project receives training on MDDP. We also work with external training providers for deeper project-specific topics.

Key elements of the MDDP are clarifying the product requirements, identifying applicable directives, regulations, standards, and norms, setting up a compliance strategy, and analysing and mitigating safety risks. Milestones and gate reviews at the end of each development phase assert our quality goals during project progress.

We consider quality from start to finish

The quality of a product or service is the degree to which it meets its requirements. Quality assurance is not just testing the final product, but a continuous stream of activities that includes planning, verification, and validation, considering risks and priorities. We aim to integrate and review early to understand issues when they can still be addressed quickly and at lower cost.

In a world that increasingly depends on technology, we understand that quality in the form of ease-of-use, accessibility, reliability, and safety is critical for our stakeholders.



Cybersecurity & resilience

Information security has become increasingly critical in recent years as organisations face more targeted cyber-attacks whose devastating effects extend far beyond financial loss or reputational damage for the company itself. Cybersecurity breaches have long since reached the point where they can severely affect our environment and our society as a whole. And with the increasing demand for businesses to become more sustainable and responsible, **organisations are under more pressure than ever to assume their responsibility for information security.**

Over the last years, we have developed cyber security offerings for our clients that ensure that their critical assets and private data remain protected and withstand the increasingly perilous threats of an ever-connected world. We cover all relevant areas: security engineering, security consulting, security assessment, governance, risk management and compliance, security awareness training, and technical training – because we believe cyber security must be addressed holistically.

Regarding our own operations, we likewise committed to a holistic security strategy and **achieved group-wide certification according to ISO 27001** in 2021. ISO 27001 is an international standard that defines the frame of how we manage in-

formation security in our organisation. The standard specifies the requirements for establishing, implementing, maintaining, and improving our Information Security Management System (ISMS). A number of measures, including incident reporting, security runbooks, yearly web-based training for all staff, regular „security reminders“ and phishing tests, along with an accompanying awareness campaign, set the foundation for this crucial certification achievement. With an ISO 27001-compliant ISMS now in place, we are able to significantly improve the mitigation of risks for data breaches, the protection of assets from threats, and compliance with data protection regulations - not only within Zühlke but throughout our entire supply chain.

Moving forward in 2022, we intend to establish a full security operations centre and make further progress on implementing our business continuity plan.



Data protection & privacy

At Zühlke, we process a multitude of customer and employee data, and our customers and employees trust us to handle this data carefully and protect it appropriately. This includes sensitive internal information like employee and financial data and intellectual property created in the course of our projects as well as our clients' intellectual property entrusted to us as input.

Different data protection laws in the countries in which we operate oblige us to handle personal data carefully to ultimately protect the data subjects. We follow established legal rules like the "need-to-know" principle and the requirement of consent of the person affected.

Groupwide data protection approach

Our approach goes back to our core value of integrity. **We realise that personal data and intellectual property are essential elements of our society.** Even beyond specific laws and regulations, this is why we are committed to handle such information with care. To be able to do so, we employ a set of specific measures:

We have appointed one data protection officer and three data protection coordinators. Operationally, the data protection coordinators are the first point of contact for the Zühlke operating companies for which they are responsible. They help employees from these companies with data protection issues like filling out a data protection agreement or the mandatory documentation of new or modified processes at Zühlke. The data protection officer is involved in regularly adjusting our IT infrastructure to ensure that we always comply with current data protection principles.

Our systems at Zühlke process a high volume of personal data. Our data protection officer uses audit questionnaires to determine the status quo and derive measures for improvement. This includes informing employees and creating policies for all legal entities.

Taking responsibility seriously: Going further from GDPR compliance

Zühlke is GDPR-compliant since 2018, and all employees have to complete a course on data protection with a certificate every year. All new employees complete the course as part of their onboarding. Apart from this mandatory part several training offers are provided on demand via our academy.

Data protection is an ongoing process. The data protection team meets regularly and collects, evaluates, and prioritizes all the important data protection topics for the coming months and years.

» Integrity is one of our key values –

for us it means doing the right thing with a long-term perspective. This goes beyond compliance. All Zühlke colleagues aim to behave in a manner that is fair and correct to all our stakeholders.«

Adrian Dudle

Chief Compliance Officer,
Zühlke

Business ethics

Doing business with integrity goes back to the values established by our founder, Gerry Zühlke. Since the company's foundation 1968, our actions have been guided by a clear set of values. We always conduct ourselves in a manner which is fair and correct, and we support each other in remaining true to our convictions even in challenging situations.

Code of conduct

Our values are set out in the Zühlke Code of Conduct, which from 2019 has taken the form of a single groupwide policy. It lays down clear guidelines for how we aim to conduct ourselves. It serves as a guide how we, as teams and as a company, ensure that our behaviour towards individuals, institutions and other companies is exemplary and ethically sound. The code of conduct sets out the legal and internal limits within which we operate.

Anti-corruption

In line with the UN Global Compact's Principle 10 regarding anti-corruption, we do not tolerate any corruption and will refuse any business opportunity that involves any form of bribery. We never offer or give a benefit to wrongfully influence a business partner's decision or action, or to persuade them to misuse their position to provide an inappropriate advantage.

Compliance

In 2021, Adrian Dudle joined Zühlke as Group General Counsel and Chief Compliance Officer. This appointment shows our commitment to further strengthen the compliance framework we have in place. For example, we are aiming to take our code of conduct public and establish an integrity and compliance policy together with an anonymous reporting mechanism.

Human rights & fair collaboration

Our culture at Zühlke is based on mutual respect and support, regardless of role in the company or any other characteristics such as race, gender, age, or social and cultural background. We value individuals beyond business benefits.

Based on our culture, we fully respect and support the human rights as defined in the International Bill of Human Rights. More specifically, Zühlke adheres to the UN Guiding Principles on Business and Human Rights.

We support basic human rights by providing safe and healthy working conditions and by ensuring non-discrimination. Looking further at more salient topics like child and forced labour, many human rights issues are not directly relevant in our business as a service provider for innovation and technology. This was also confirmed by our stakeholders in the materiality matrix, where human rights have a medium importance.

Regardless, we seek to understand more about the indirect impacts of technology use, for example through company's supply chains and critical issues such as conflict minerals or the disposal of electronic waste.

We use our participation in the UN Global Compact to learn about human rights issues as they relate to our business and how we can take positive action to support and uphold the human rights, including in our supply chain and in our client projects.

Fair collaboration

Zühlke believes in a competitive and free enterprise system that guarantees the reward of hard work and innovation. We also believe regulation is justified and beneficial when it creates markets that work for the benefit of our society and make use of environmental resources in a sustainable way.

Zühlke and our business partners (customers and suppliers) have a long-term interest in the business relationship with each other. We respect this relationship and work to create a win-win-situation. We expect our business partners to comply with laws and regulations, but also to take their social and environmental responsibility seriously. Zühlke provides a safe, fair, and healthy environment for employees that is the basis for a trusting relationship and successful collaboration inside and outside the company.



Reference:

Data tables & compliance

UN Global Compact communications on progress

Zühlke is a participant of the United Nations Global Compact (UNGC), a global movement of over 15,000 companies that do business responsibly by aligning strategies and operations with Ten Principles on human rights, labour, environment, and anti-corruption; and take strategic actions to advance broader societal goals, such as the UN Sustainable Development Goals (SDGs), with an emphasis on collaboration and innovation.

As a participant, we annually publish communications on progress regarding the UNGC focus areas, starting with the year 2021. Zühlke is an early adopter of the enhanced Communication on Progress digital platform, which will be fully launched in 2023.

Our **communication on progress** in this digital format is accessible from the UN Global Compact portal.

Learn more

Visit Zühlke's [participant page](#)  on the UN Global Compact portal

The UN Global Compact focus areas are also addressed in the following sections throughout this report:

- **Human rights:** We provide an overview in Human rights and fair collaboration. In the UNGC questionnaire, Digital security and Privacy are also considered in this category.
- **Labour:** We provide information on Employee health and well-being as well as Employee training and development.
- **Environment:** In our client projects, we support the environment through our offerings for Circular solutions and green tech. We also report on the status of our own Decarbonisation.
- **Anti-corruption:** Our commitment is described in the section on Business ethics.

We summarise our efforts to support the UN Sustainable Development Goals in the introduction.

We focus on Climate Action (UN SDG 13) and Good Health and Well-being (UN SDG 3).



This is our **Communication on Progress** in implementing the Ten Principles of the **United Nations Global Compact** and supporting broader UN goals.

We welcome feedback on its contents.

GRI content index

ID	Description	Disclosure
	Statement of use	Zühlke Group has reported in accordance with the GRI Standards for the period 1 January to 31 December 2021.
	Foundation / GRI 1 used	GRI 1: Foundation 2021
	Applicable GRI Sector Standards	None
GRI 2 - General disclosures		
1. Organisation and reporting		
2-1	Organisational details	Zühlke Technology Group AG is a privately owned Aktiengesellschaft according to Swiss law. As a global firm, we do not consider a single location our headquarters. 19 locations in 10 countries Facts and figures
2-2	Entities included in the organisation's sustainability reporting	Zühlke Engineering AG Zühlke Engineering GmbH Zühlke Engineering Ltd Zühlke Engineering (Austria) GmbH Zühlke Engineering d.o.o. Zühlke Engineering EOOD Zühlke Engineering, Unipessoal, Lda. Zühlke Engineering Hong Kong Ltd Zühlke Engineering Pte Ltd Singapore Zuehlke Engineering Vietnam LLC. Zühlke Ventures AG
2-3	Reporting period, frequency and contact point	This report published in July 2022 covers the period from 1 January to 31 December 2021, which is also our financial year. We are committed to annual corporate responsibility reporting. We welcome your feedback. Please contact our Head of Sustainability, Christoph Broecker, corporateresponsibility@zuehlke.com
2-4	Restatement of information	There are no restatements from previous reports
2-5	External assurance	This report has not been externally assured

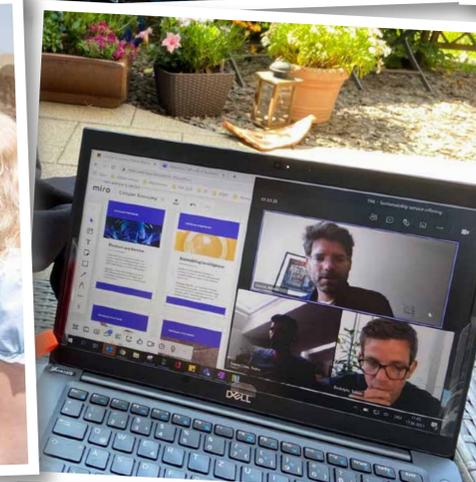
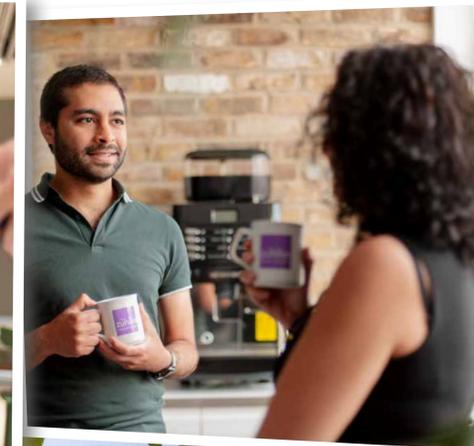
ID	Description	Disclosure
2. Activities and workers		
2-6	Activities, value chain and other business relationships	Industries Activities Partnerships
2-7	Employees	Zühlke had about 1,600 employees at the end of 2021, of which 24% were women. We offer flexible employment models and 24% of our employees work part-time.
2-8	Workers who are not employees	We work with freelancers and external experts in some of our projects and internal functions. This is a comparatively small group and we do not collect exact data.
3. Governance		
2-9	Governance structure and composition	Our highest governance body is the board of directors (Verwaltungsrat) according to Swiss law. Leadership team
2-10	Nomination and selection of the highest governance body	According to Swiss law.
2-11	Chair of the highest governance body	Philipp Sutter is chairman of the board of directors and does not hold an executive role in the group.
2-12	Role of the highest governance body in overseeing the management of impacts	The board of directors oversees the management of impacts through its interaction with the group executive and other organisational functions.
2-13	Delegation of responsibility for managing impacts	The board of directors delegates some of the responsibility for managing impacts to the Chief Compliance Officer, the Data Protection Officer, and the Head of Sustainability.
2-14	Role of the highest governance body in sustainability reporting	The board is responsible for reviewing and approving the reported information, including the material topics.
2-15	Conflicts of interest	Conflicts of interest are managed according to the principles laid out in our code of conduct.
2-16	Communication of critical concerns	During the reporting period, a controlled mechanism for critical concerns was being prepared. Results will be reported in the next period.

ID	Description	Disclosure
2-17	Collective knowledge of the highest governance body	The board of directors advances its collective knowledge regarding sustainability on the basis of our mission statement.
2-18	Evaluation of the performance of the highest governance body	Our shareholders evaluate the performance of the board in overseeing the management of Zühlke's impacts on people and environment.
2-19	Remuneration policies	The remuneration of the board is determined by the shareholders.
2-20	Process to determine remuneration	Remuneration follows our groupwide reward strategy that is based on market-orientation, fairness, and long-term incentives.
2-21	Annual total compensation ratio	The total compensation ratio (highest to median) in 2021 was 3.45. This is the average of the ratios for each operating company.
2-19	Remuneration policies	The remuneration of the board is determined by the shareholders.
2-20	Process to determine remuneration	Remuneration follows our groupwide reward strategy that is based on market-orientation, fairness, and long-term incentives.
2-21	Annual total compensation ratio	The total compensation ratio (highest to median) in 2021 was 3.45. This is the average of the ratios for each operating company.
4. Strategy, policies and practices		
2-22	Statement on sustainable development strategy	We love innovation and technology. We believe they are a force of positive change for business and society. We support our clients to envision and create a sustainable future. Supporting the UN SDGs
2-23	Policy commitments	Commitments towards UN Global Compact: - Ten principles regarding human rights, labour, environment, and anti-corruption - The 17 UN Development Goals Zühlke Code of Conduct
2-24	Embedding policy commitments	Our code of conduct and our management approaches towards our material topics are part of our quality management system "The Zühlke Way", which every employee receives training for.
2-25	Processes to remediate negative impacts	Zühlke is in the process of providing a formal whistleblower and grievance mechanism, which we aim to roll out in 2022.
2-26	Mechanism for seeking advice and raising concern	Zühlke is in the process of providing a formal whistleblower and grievance mechanism, which we aim to roll out in 2022.
2-27	Compliance with laws and regulations	In the reporting period, there were no significant instances of non-compliance with laws and regulations.
2-28	Membership associations	Zühlke Group is a participant of the United Nations Global Compact. In addition, group companies have memberships at the regional level.

ID	Description	Disclosure
5. Strategy, policies and practices		
2-29	Approach to stakeholder engagement	Exceeding stakeholder expectations
2-30	Collective bargaining agreements	Zühlke supports freedom of association and collective bargaining. Information on union membership is not tracked globally and most of our colleagues are not covered by collective bargaining agreements.
GRI 3 - Material topics		
3-1	Process to determine material topics	Our material topics
3-2	List of material topics	Our materiality matrix
Business Ethics		
3-3	Management of material topics	Business ethics
GRI 205 Anti-corruption 2016		
205-1	Operations assessed for risks related to corruption	We have not yet carried out such a risk assessment.
205-2	Communication and training about anti-corruption policies and procedures	We are in the process of creating and rolling out such a training program.
205-3	Confirmed incidents of corruption and actions taken	There were no such incidents.
Circular Solutions		
3-3	Management of material topics	Circular solutions
Corporate Citizenship		
3-3	Management of material topics	Corporate citizenship
Customer Experience		
3-3	Management of material topics	Customer experience
Cybersecurity & Resilience		
3-3	Management of material topics	Cybersecurity & resilience

ID	Description	Disclosure
Data Protection & Privacy		
3-3	Management of material topics	Data protection & privacy
GRI 418	Customer Privacy 2016	
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	There were no such complaints.
Digital Health		
3-3	Management of material topics	Digital health is a key element of our overall offerings around patient-centred health .
Diversity & Inclusion		
3-3	Management of material topics	Diversity & inclusion
GRI 405	Diversity and equal opportunities 2016	
405-1	Diversity of governance bodies and employees	24% of our employees are women. We do not yet collect international data regarding age distribution. In the reporting period, there were no women on the board of directors or in the group executive team.
405-2	Ratio of basic salary and remuneration of women to men	We are currently investigating an appropriate method for compiling such a salary ratio. Issues we are facing are the diverging salary levels by function and region and small data sets that give rise to privacy concerns.
GRI 406	Non-discrimination	
406-1	Incidents of discrimination and corrective actions taken	There were no such incidents.
Decarbonisation		
3-3	Management of material topics	Decarbonisation
GRI 305	Emissions 2016	
305-1	Direct GHG emissions (Scope 1)	220 t CO ₂ e
305-2	Energy indirect GHG emissions (Scope 2, market-based)	561 t CO ₂ e
305-3	Other indirect GHG emissions (Scope 3)	6,106 t CO ₂ e
305-4	GHG emissions intensity	4.3 t CO ₂ e per employee (including all scopes)

ID	Description	Disclosure
305-5	Reduction of GHG emissions	We have chosen 2021 as our groupwide base year and will report reductions in future reports.
305-6	Emissions of ozone-depleting substances (ODS)	There were no significant emissions associated with ozone-depleting substances.
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emission	We do not track these types of emissions separately.
Employee Health & Well-being		
3-3	Management of material topics	Employee health & well-being
Employee Training & Development		
3-3	Management of material topics	Employee training & development
GRI 404	Training and education 2016	
404-1	Average hours of training per year per employee	105.9 hours
404-2	Programs for upgrading employee skills and transition assistance programs	Employee training & development
404-3	Percentage of employees receiving regular performance and career development reviews	100%
Green Tech		
3-3	Management of material topics	Green tech
Human Rights & Fair Collaboration		
3-3	Management of material topics	Human rights & fair collaboration
GRI 206	Anti-competitive Behaviour 2016	
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	There were no such legal actions.
Product Quality & Safety		
3-3	Management of material topics	Product quality & safety



About Zühlke

We believe that innovation and technology are a positive force of change for business and society. We support our clients to envision and create a sustainable future.

Zühlke is a global innovation service provider. We envisage ideas and create new business models for our clients by developing services and products based on new technologies – from the initial vision through development to deployment, production and operation.

Zühlke draws on the experience of more than 10,000 software and product development projects and supports customers in a wide range of industries.

Imprint

Zühlke Engineering AG
Zürcherstrasse 39J
8952 Schlieren, Switzerland
www.zuehlke.com

Media requests, questions and feedback:
corporateresponsibility@zuehlke.com

Responsible for the content:
Christoph Broecker, Head of Sustainability

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Editorial team: Kristina Maria Brandstetter, Christoph Broecker, Sangho Chung, Fatma Diallo, Andy Folland, Laura Schork

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