



Co-innovating a sustainable future

The Zühlke Corporate
Responsibility Report 2022

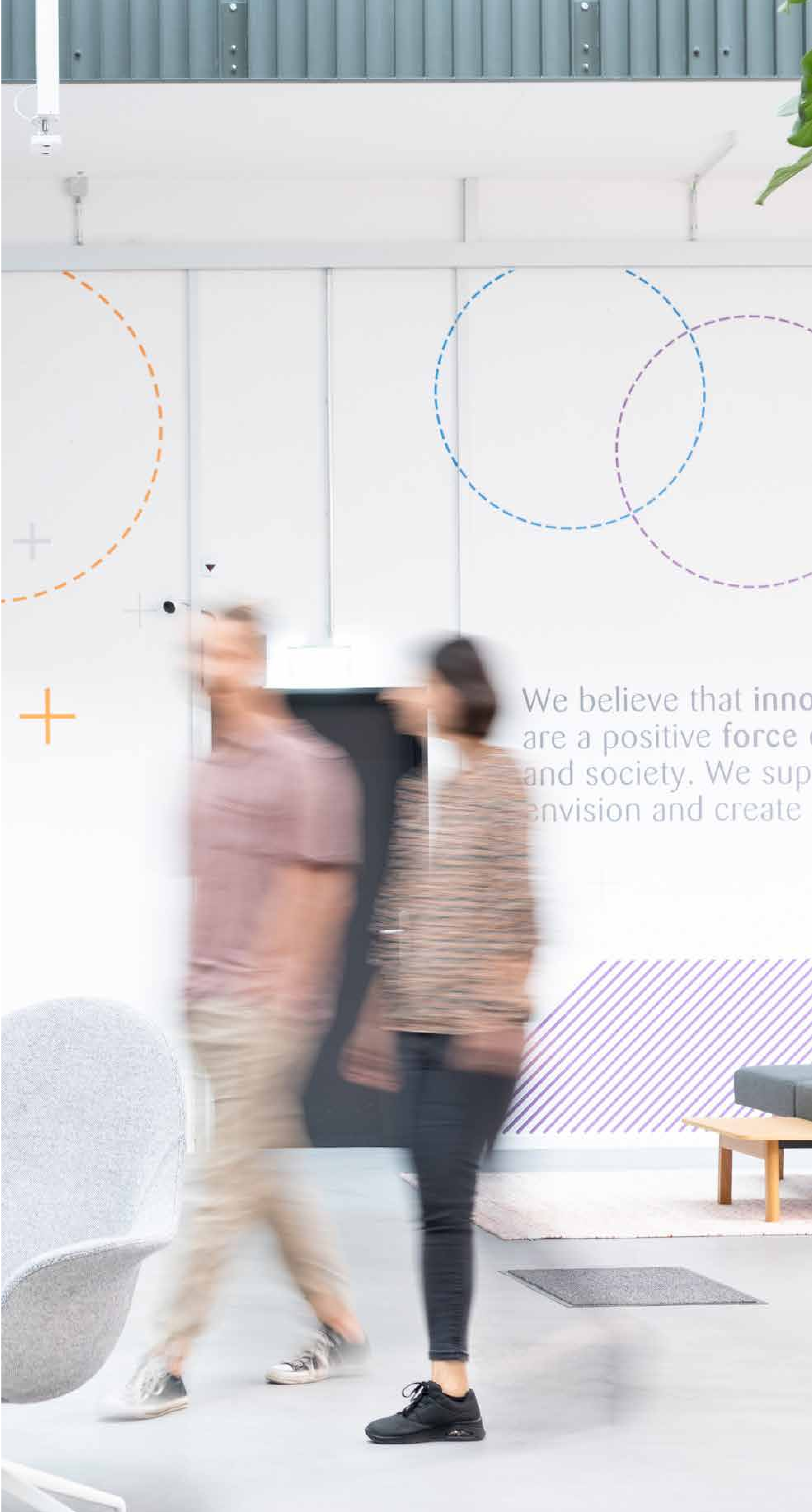


zühlke
empowering ideas

Contents

Introduction	
A letter from our chairman	3
A word from our CEO	4
Our materiality matrix	5
Supporting the UN Sustainable Development Goals	6
Impact for people and planet	
Mapping our journey to sustainability	
Our sustainability compass	8
Positive project impact	
Enabling impact at scale	10
Assessing the impact of our projects	11
Co-innovating circular solutions	12
Advancing green infrastructure	15
Pioneering patient-centric healthcare	20
Evolving sustainable software	24
Embedding sustainability in customer experience	26

Sustainable ways of working	
Decarbonising our operations	28
Promoting employee health and wellbeing	30
Furthering diversity, equity, and inclusion	33
Investing in learning and development	36
Community engagement	
Demonstrating corporate citizenship	39
Building communities	41
Integrity	
Exceeding customer expectations	
Strengthening our business ethics	44
Upholding product quality and safety	45
Safeguarding data and privacy	46
Bolstering cybersecurity and resilience	48
Protecting human rights and safety	49
Reference	
Looking at the data and compliance	
Supporting the UN Global Compact	51
GRI content index	52
About Zühlke	55



INTRODUCTION

A letter from our chairman

Co-innovating a sustainable future

The urgent issues of our time are beyond the scope of a single organisation, industry, or nation. From climate change to the mental health endemic, the big environmental and societal challenges (or opportunities if we reframe the problem) are complex, global, and borderless. Simply put, these challenges are too big to solve alone. So while individual company efforts undoubtedly have value, collective business action is essential.

Tackling these issues collectively is not just about 'doing the right thing'. The long-term success of our clients, and Zühlke in turn, is deeply connected with the world around us. To thrive in the future, we will need business models, innovation systems, and solutions that positively impact people, planet, and profit. Pursuing this triple bottom line is vital as our economy becomes increasingly connected, circular, and collaborative.

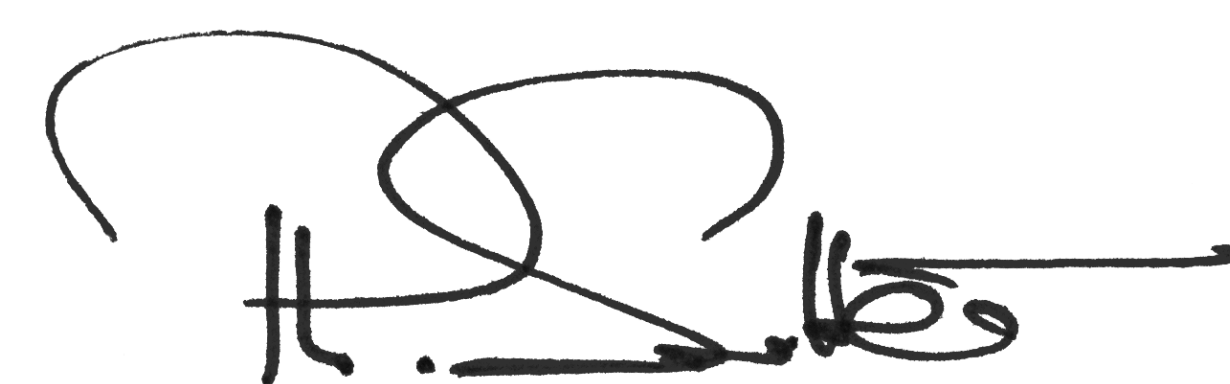
Thankfully, by teaming up with diverse partners with complementary data, capabilities, and a shared goal, we have the means to co-create better solutions – efficiently, effectively, and at scale. With the speed and agility that only modern technology, multilateral alliances, and borderless innovation make

possible. Innovation ecosystems are becoming an important business model for organisations looking to create new value at scale. And they will be essential for creating solutions that enable better customer, commercial, environmental, and societal outcomes.

This topic is close to our hearts here at Zühlke. We've seen firsthand that co-innovation and technology can be a powerful force for good. It's what inspires us every day and underpins our shared successes with clients and partners – from pioneering an AI breakthrough in healthcare, to helping labs cut their plastic waste through reuse, and co-developing a digital architecture for the UK's future energy grid.

None of these initiatives would have been possible without different players coming together around a shared goal. It's little surprise then that 'Co-innovating a sustainable future' is the theme of this, our second corporate responsibility report, which I hope serves as a reminder of what we can achieve through collective action, co-creation, and the problem-solving power of complementary business partners.

I want to take this opportunity to thank all my Zühlke colleagues, clients, and partners around the world for their incredible individual and collective efforts to shape a better, more sustainable future. I can't wait to see what we create together in the years to come.



PHILIPP SUTTER

Chairman, on behalf of the Board of Directors



INTRODUCTION

A word from our CEO

Our 2022 sustainability milestones and onward journey

My belief is that we have individual and collective responsibility for people and planet. At Zühlke, we apply our skills, our passion, and our networks to build a more sustainable future. So, concretely, what have we achieved so far?

In 2022, we enabled our clients to develop solutions with a positive impact on people and planet, as well as for business. We helped a national railway operator take concrete steps in its green IT journey. We co-developed a federated data platform that advances medical research without compromising patient privacy. And we delivered numerous other positive impact projects, from a digital platform for pre-owned fashion, to a new sensor that detects methane leaks.

We worked on ourselves too. We integrated sustainability into our offerings, embedded sustainability capabilities within our teams and services, and grew our Sustainability Circle knowledge exchange to more than 150 members, from more than 40 companies.

We also laid the foundation for systematically measuring and improving the positive impact we achieve with our clients. We plan to generate a significant share of our revenue from 'sub-

stantial positive impact' projects, and to help clients avoid CO2 and deliver significant health benefits to more people in support of Sustainable Development Goals (SDG) targets. After successful trials in 2022, we will adopt our 'Project Impact Assessments' more widely to manage the impact of all projects, and we continue to help our clients drive positive change through technology.

In 2022, we became carbon neutral groupwide and adopted science-based targets currently in review by the Science-Based Targets initiative (SBTi) – aiming to achieve net zero Scope 1+2 emissions by 2030, and to become net zero across our whole value chain by 2040. This requires a wide range of measures to reduce emissions by 90% against our 2021 baseline. In 2022, we have managed to slightly lower Scope 1+2 emissions against strong growth. However, overall emissions have risen 41% due to company expansion and the effects of coming out of the pandemic. For example, like most other organisations, we have seen a marked increase in business travel.

It is also key to encourage changemakers around us and to support those within society who have fewer options because of personal circumstances and challenges. For this reason, we will continue our community engagement initiatives, contributing to positive change in society through know-how sharing, networking, donations, and pro bono work.

At Zühlke, we're convinced that borderless innovation and technology can be a positive force of change for business and society. We take our organisational responsibility here very seriously. Our first Corporate Responsibility Report showed how we made sustainability a strategic goal and consolidated a groupwide approach to decarbonisation. In this report, we explore our 2022 milestones and onward journey.



FABRIZIO FERRANDINA

Group CEO, on behalf of the Group Executive Board

INTRODUCTION

Our materiality matrix

What does 'sustainability' and 'corporate responsibility' mean to Zühlke? To help us answer this question, we partnered with external consultants to identify the sustainability topics most relevant to our business. To uncover and prioritise these topics, we:

- Asked our stakeholders about the relative importance of the topics, based on their respective priorities.
- Assessed how much our client collaborations and internal activities relate to and can impact the respective topics, both directly and indirectly.

The result is the materiality matrix pictured. In this report, we look at all 13 material topics, either through the lens of creating impact for people and planet (which form our sustainability focus), or in our integrity section.



Supporting the UN Sustainable Development Goals

Following the development of our materiality assessment, we mapped our priority issues onto the UN Sustainable Development Goals (SDGs) to help ensure we contribute towards them. This remains our steer and baseline.

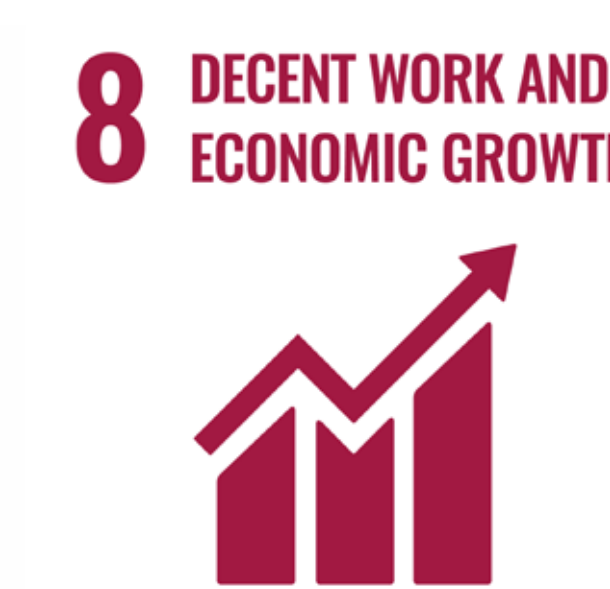
Our priority goals

We identified and prioritised two of the UN SDGs to help us be more focused and impactful. These goals are: 'Climate action' and 'Good health and wellbeing'. We support these focus goals through three pathways: positive project impact, sustainable ways of working, and community engagement.



Goals with additional relevance to our work

There are several additional SDGs that Zühlke supports proactively, and on a regular basis. We support quality education through engagements with schools and universities. We believe in life-long learning and support the development of our employees. We advocate diversity and inclusion, regarding gender and other characteristics, 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. And our circular solutions promote responsible consumption and production.



Goals we support in special situations

We're mindful of our limitations, and realise we can't tackle all the UN goals at once. That said, the remaining goals have our full support. Wherever it's possible to drive impact against these wider goals, we will pursue those opportunities.





Impact for people and planet

Mapping our journey to sustainability



Our sustainability compass

Innovation and technology for climate and health

Every organisation has unique skills and capabilities. These determine where an organisation can individually and collectively contribute towards a more sustainable future. At Zühlke, our heritage lies in collaborating with clients and partners to deliver innovation and transformation initiatives in complex, regulated ecosystems and industries such as healthcare. That's why we've chosen climate action and health improvement as our sustainability focus. Co-innovation and technology are critical to making progress in both areas, and so our experience and expertise puts us in a good position to deliver early and ongoing impact here.

Climate action

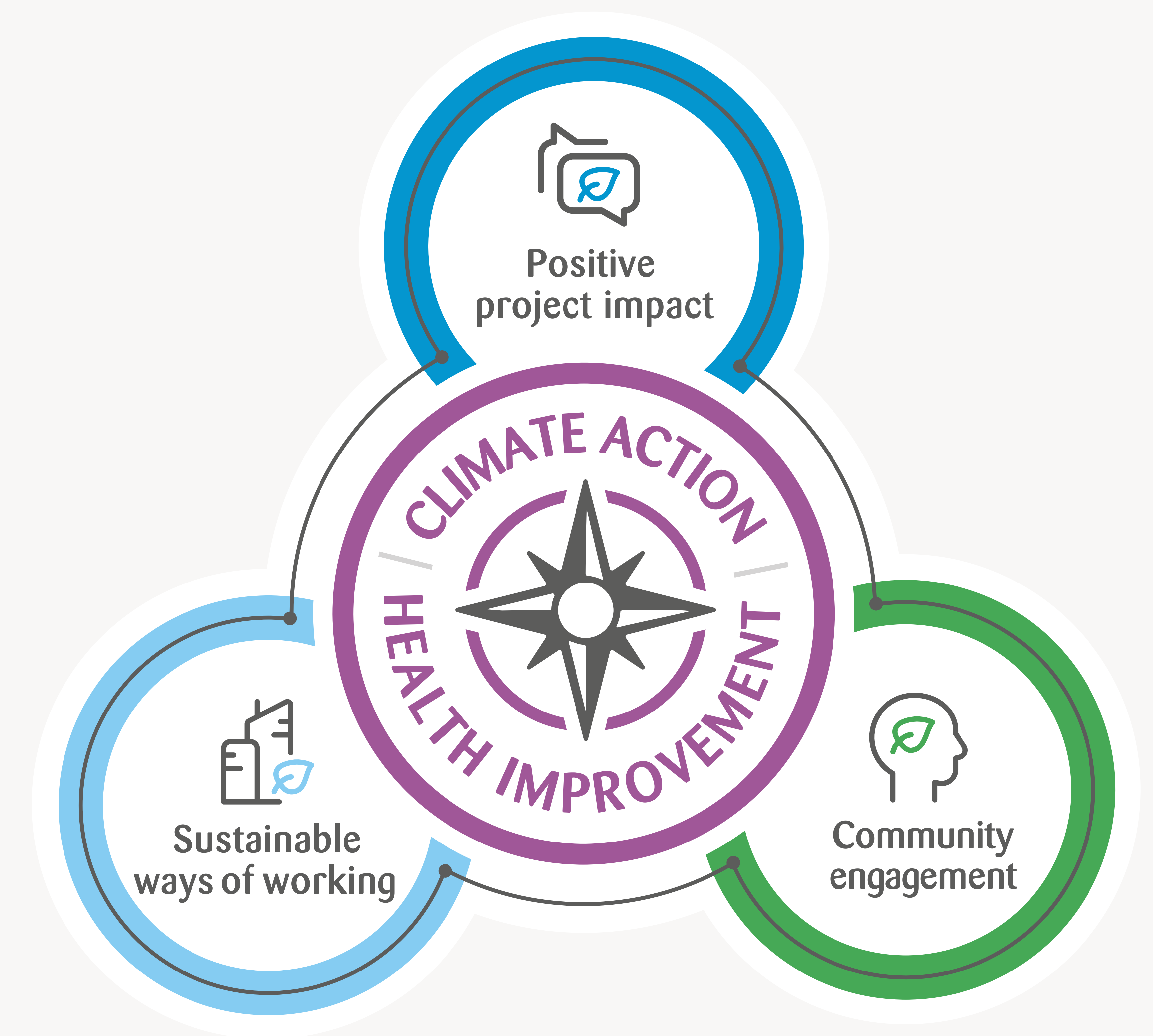
Climate change is the most urgent challenge of the 21st century. We combine consulting, digital capabilities, and data and software engineering to help our clients build green infrastructure, minimise the CO2 footprint of their products and processes, and drive ongoing value in the emerging circular economy.

Health improvement

Health and wellbeing are threatened globally 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.

Three pathways for action

Climate and health are at the centre of our sustainability compass, surrounded by three pathways for action: positive project impact, sustainable ways of working, and community engagement.





Positive project impact

Enabling impact at scale

Innovation and technology are powerful enablers. We want to tap their collective power to accelerate and scale the impact that's needed for climate action, better health, and other planetary challenges.

In 2022, we strengthened our capacity and skills to deliver on this promise. Establishing a cross-company sustainability team was instrumental in connecting our people, projects, and capabilities to advance our sustainability agenda, focusing on four areas...

Innovation for sustainability

Many organisations are yet to bridge the gap between setting their ESG goals and realising greener products or resource-efficient processes. Our team of sustainability consultants, which we grew in 2022, aims to help organisations progress from strategy to implementation and working solutions.

Sustainable devices and systems engineering

Our cross-functional team paved the way to co-create more circular consumer, medical, and industrial products in 2022. Likewise, we helped organisations understand and assess the lifecycle of their products by bringing together three key perspectives: user needs, environmental impact, and value engineering.

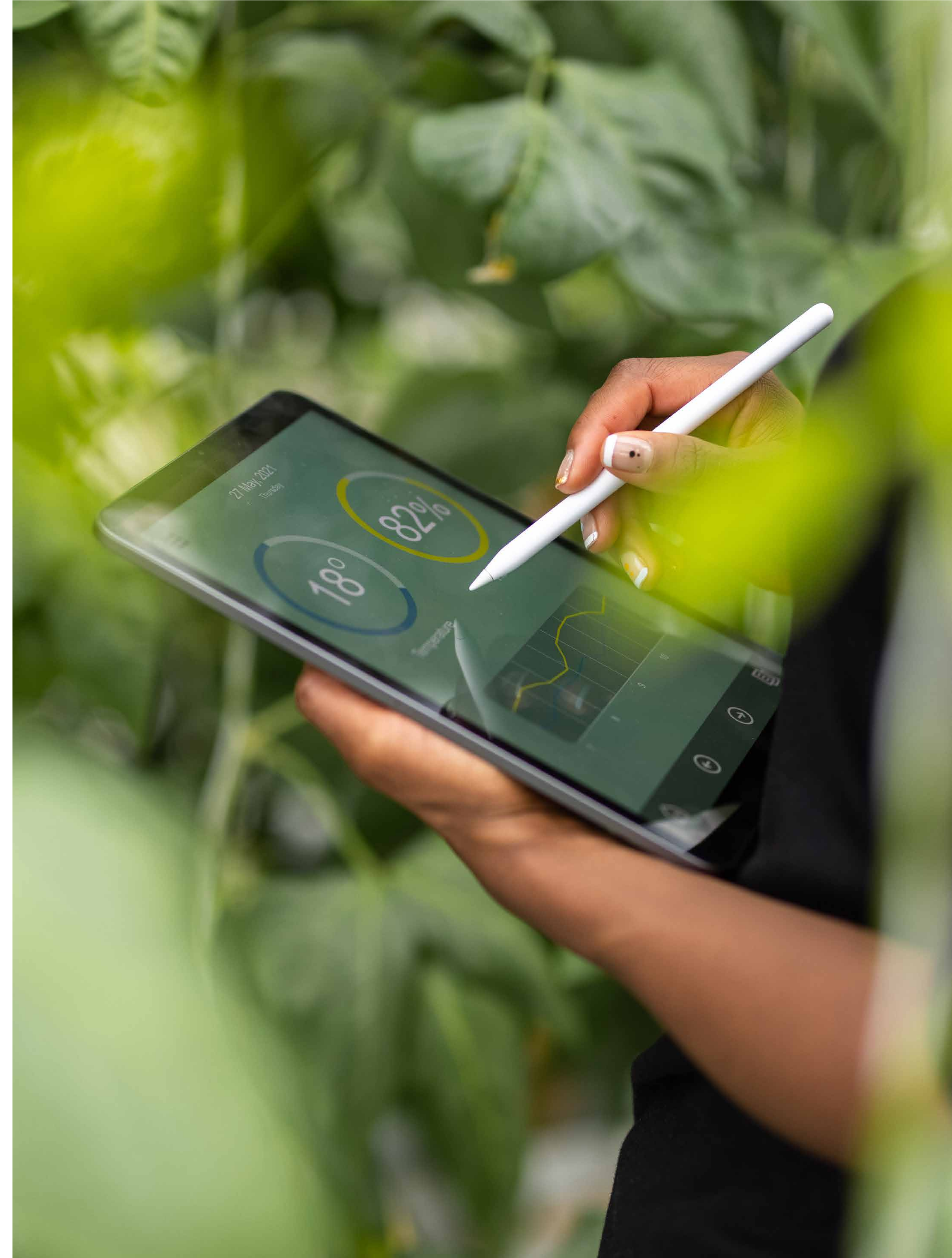
Sustainable digital solutions and applications

Measuring and optimising the carbon emissions of software solutions is not yet widespread, but we continue to promote it. Within our cloud practice, we've grown our expertise in energy efficient software development and developed a green cloud checklist.

Data & AI solutions for sustainability

Federated data platforms and AI-driven analytics are essential enablers of a more sustainable future – from ESG metrics to digital product passports. In 2022, we expanded our team of business analysts, data scientists, data engineers, and AI experts to match our clients' ambitions to become data-driven organisations.

+ The following sections on circular solutions, green infrastructure, patient-centred healthcare, and sustainable software show how we support our clients and empower their ideas, co-creating impact at scale.



Assessing the impact of our projects

Improving the impact of our client collaborations is a strategic priority. Together with clients and partners, our teams are closely focussed on taking great strides forward – and measuring the progress we make.

Our goal is to prioritise projects that create positive, long-lasting results for people and the planet, while contributing to the profitability and success of our clients. That's why we want to hold ourselves, our clients, and our collaborators accountable to high sustainability standards.

To ensure this accountability, we need a standardised, rigorous way to assess the impact of our projects. Here's how we kickstarted this journey in 2022...

Piloting a measurement framework

We developed and piloted a Project Impact Assessment (PIA) method, giving us clear targets and a strong measurement framework to put our aspirations into action. The PIA provides a standardised framework for understanding and mapping the economic, environmental, and social impact of all our projects. We perform our impact assessment at several points in a project's lifecycle, including negotiation and setup, initiation, and review. This allows us to influence projects at an early stage and get a clear picture of how our impact is playing out.

It assesses both positive and negative impacts. We aim to shift our portfolio towards positive impact – in which a project has (co-)benefits for society and/or the environment, beyond a purely commercial business case – and substantial positive impact – in which a project has a key objective that's directly linked to an environmental or social benefit.

Embedding and scaling our approach

In 2023, we want to create a baseline by assessing a representative sample of our projects. The PIA helps us identify ways we can collaborate to improve a project's positive impact and mitigate risks of negative impact. It also enables teams to formulate a project impact statement and develop a project rating – before and after delivery of a project. Right now, we're largely using qualitative measures, though we're using quantitative measures where we see opportunities. For example, where possible we're measuring concrete reductions in CO2 emissions.

So far, feedback on our PIA has been encouraging. Clients and Zühlke teams alike have told us that the structured approach opens new perspectives and helps uncover fresh opportunities to improve a project's impact.

Sharing our positive impact journey

Our goal is to fully embed impact assessment into our project processes. This will help us to systematically influence and shape client engagements to achieve positive impact. The PIA model will give us a framework to do this in a clear, rigorous, and collaborative way, but we have some way to go. That's why we'll continue to iterate, test, learn, and share our progress.

Co-innovating circular solutions

Reduce. Repair. Reuse. Remake. Recycle. Repeat. In a circular economy, we work together to keep products, materials, and resources in circulation as long as possible. It's a sustainable economic model, aimed at minimising waste, using resources efficiently, and regenerating nature.

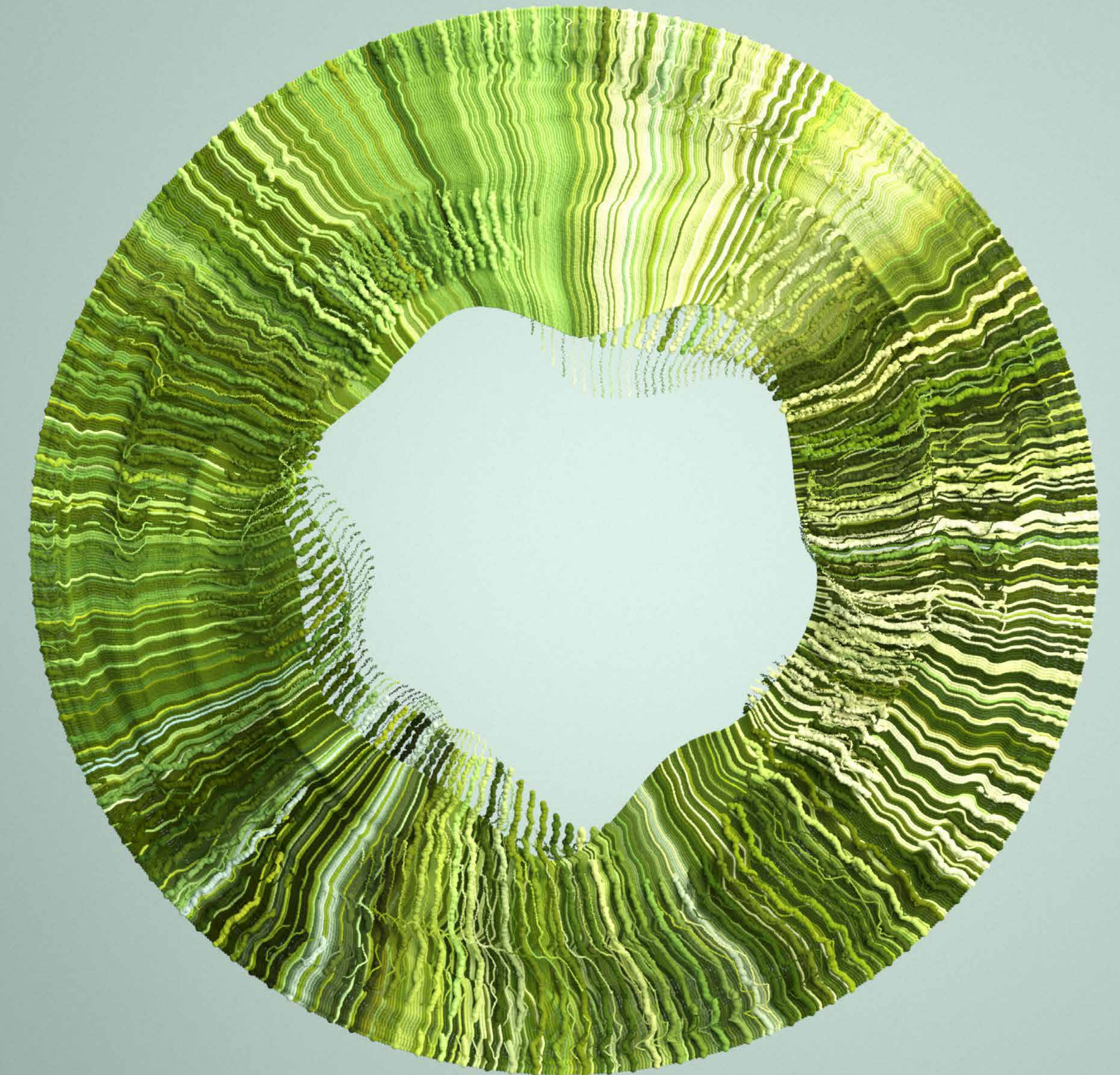
As a global community, we have a long way to go to achieve circularity. According to the Ellen MacArthur Foundation, only 8.6% of the world's economy is currently circular. The opportunity, though, is huge. Transitioning to a more circular model could generate vast economic benefits, generating numerous job opportunities.

At Zühlke, we believe collaboration is vital to innovating circular solutions and reducing strain on the world's finite resources. Our Sustainability Circle network, for example, brings together manufacturers, startups, sustainability experts, and service providers for circularity to share insights and inspiring examples (also see our chapter on '[Building communities](#)').

HELPING CLIENTS SUCCEED WITH CIRCULARITY

Our lifecycle assessments (LCA) help clients find their biggest levers to enhance usage, save resources, and mitigate negative impacts. Based on insights from the LCA, we're pursuing new goals including the use of alternative or recycled materials, eco-design, reduced emissions, and repairability. Creating 'digital twins' of products helps provide the transparency required to pursue these goals. Meanwhile, we're also exploring innovative ways to stay true to existing goals – for example around costs and margins, sourcing, user experience, and regulatory requirements.

The following engagements show some of the ways we're applying the circular economy model to help clients create more sustainable and more successful products...





‘The challenges of our planet's finite resources must be addressed with circular solutions. To bring these to life, we need to work together in ecosystems. This will inevitably lead to changes in our familiar ways of collaboration’.

MARIO SCHMUZIGER
Head of Industry and Consumer Products, Zühlke Switzerland

Reducing waste in artificial skin production

Working closely with Cutiss – a startup creating customised artificial skin for burns victims – we helped automate their process to prepare for market, significantly reducing the amount of resources used and waste created.

Optimising metal processing

Together with an industrial product manufacturer, we analysed resource use and emissions for a metal processing machine. Looking at the full lifecycle, we assessed a range of change scenarios to uncover opportunities to optimise the process during production and use.

Facilitating pre-loved fashion

Vestiaire Collective, a leading global luxury ecommerce platform, wanted to bring sustainable luxury fashion to Asia. We worked closely with Vestiaire to modernise its system and enable more people to buy and sell pre-owned fashion items to keep them in use.

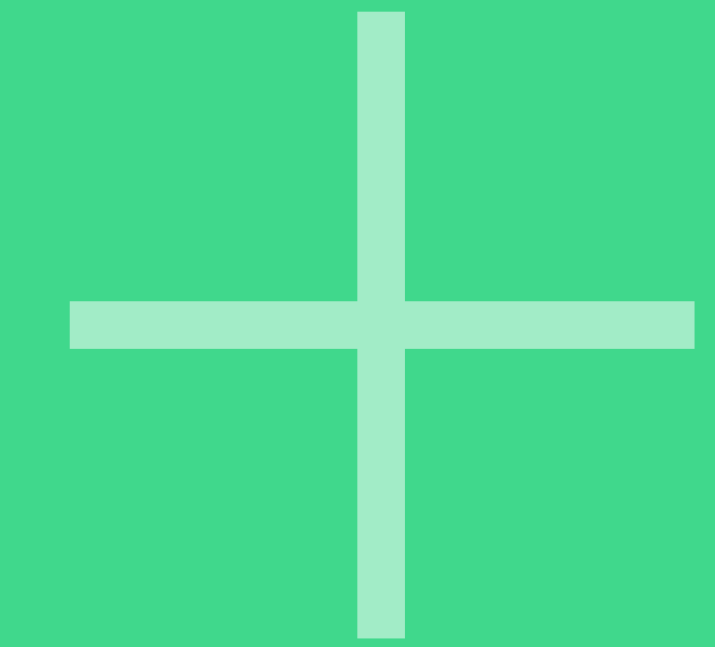
BECOMING CIRCULAR – TOGETHER

In the circular economy, collaboration is essential. By integrating circularity into the whole product lifecycle, we're enabling our clients to reimagine their products, designs, processes, and even the way they do business.



POSITIVE PROJECT IMPACT · CASE STUDY

Enabling labs to cut waste and emissions



Pharma laboratories generate huge amounts of plastic waste – from pipette tips to microplates. Labs are unable to recycle these plastic products, which are burned or sent to landfill.

IonField Systems is on a mission to change this. The team wants to cut lab waste with the help of its pioneering plasma cleaning technology. But to make that happen, the organisation must help labs understand the tangible benefits of adopting its tech. That's why the team appointed Zühlke to conduct a lifecycle assessment of its products.

With our help, IonField Systems was able to verify that its cleaning tech can reduce emissions by 60-90% compared with single-use consumables. The team can now demonstrate the scenarios where its tech is more sustainable than alternatives, and help prospective customers quantify the environmental improvement in kg CO2. Our analysis also uncovered emission hotspots within the cleaning tech itself. So IonField Systems has a clear view of how to further improve the sustainability of its devices.

[Learn more](#)

‘Zühlke helped us show the tangible sustainability benefits of our plasma cleaning tech. This will be key to its adoption’.

PAUL HENSLEY
CEO, IonField Systems

Advancing green infrastructure

Green infrastructure is the future – but how do we get there? At Zühlke, we're championing the transformative potential of diverse partnerships and data-led collaboration to shape a more sustainable future.

Across the energy, water, and engineering sectors, innovation is taking place at an unprecedented speed. The collective goal is to create a future that's cleaner and greener, while unlocking new, sustainable value – at scale.

This transition comes with its challenges. Providers are also facing rapidly increasing demand – driven by the effects of a highly interconnected ecosystem. The move to electric vehicles, for example, will cut road transport pollution, but spark a

surge in electricity demand. Likewise, as communities switch to electric heat pumps to keep their homes and offices warm, further demand will be placed on electricity providers.

While interconnectedness brings its challenges, it's also the key to shared success. Along the decarbonisation journey, data-led collaboration has the power to ensure green infrastructure initiatives lead to positive change for people and planet. Co-innovation is fundamental to this future. And new technologies that enable cleaner power, transport, logistics, and buildings will unlock rapid transformation across company and industry borders.

Green infrastructure will thrive on unique partnerships, digitalisation expertise, and smart data use. We're passionate about supporting this evolution. In 2022, we worked with numerous manufacturers and with regulators to realise the potential of digitalisation...

Facilitating smart cities

CM1's digital beacon provides automated GPS tracking with pinpoint precision. It supports key smart city applications – from enabling congestion forecasts for roadworks, to automatically monitoring traffic diversions.

The manufacturer was able to further enhance its solution and demonstrate added end user value with the help of our multi-disciplinary support, spanning device engineering, cloud infrastructure, and data visualisation.





‘With expertise in business and technology consulting, and agile development, Zühlke is the perfect partner for long-term collaboration’.

SUSANNE BÖHM
Managing Director, CM1 GmbH

Advancing the UK energy system

Ofgem is Great Britain’s independent energy regulator and works to protect energy consumers, especially vulnerable people, by ensuring they’re treated fairly, and benefit from a cleaner, greener environment.

The regulator commissioned Zühlke to assess the National Grid’s Electricity System Operator (ESO), which has a central role in Great Britain’s energy system, as part of a report on the ‘Independent Review of the GB National Grid Electricity System Operator £556M Enterprise IT Investment Plan’.

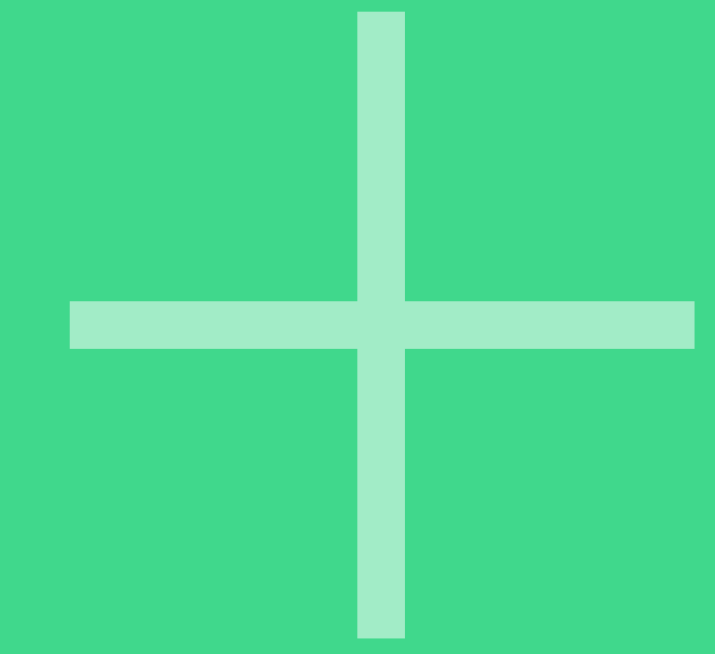
Delivery of the National Grid ESO’s Business Plan can unlock substantial benefits for consumers by helping shape the best pathways to a net zero energy system while keeping the system operating securely. Our partnership supported and informed Ofgem’s Draft Determination positions on the plan.

Advancing a modern digital energy system

The Energy Digitalisation Taskforce (EdiT) was established to deliver a set of actionable recommendations that help deliver the digitalised energy system needed to reach net zero. Its ‘Delivering a Digitalised Energy System’ report was commissioned to help shape a digitalised energy system, enabling net zero compatible business models, markets, and industry structures.

Zühlke contributed towards this collective effort with strategic recommendations on the digital governance of the future energy system. Our recommendations stressed the need for an agile, iterative approach to regulation, with guidance on anticipated future governance challenges and how to proactively address them.

Enabling the energy sector to cut methane emissions

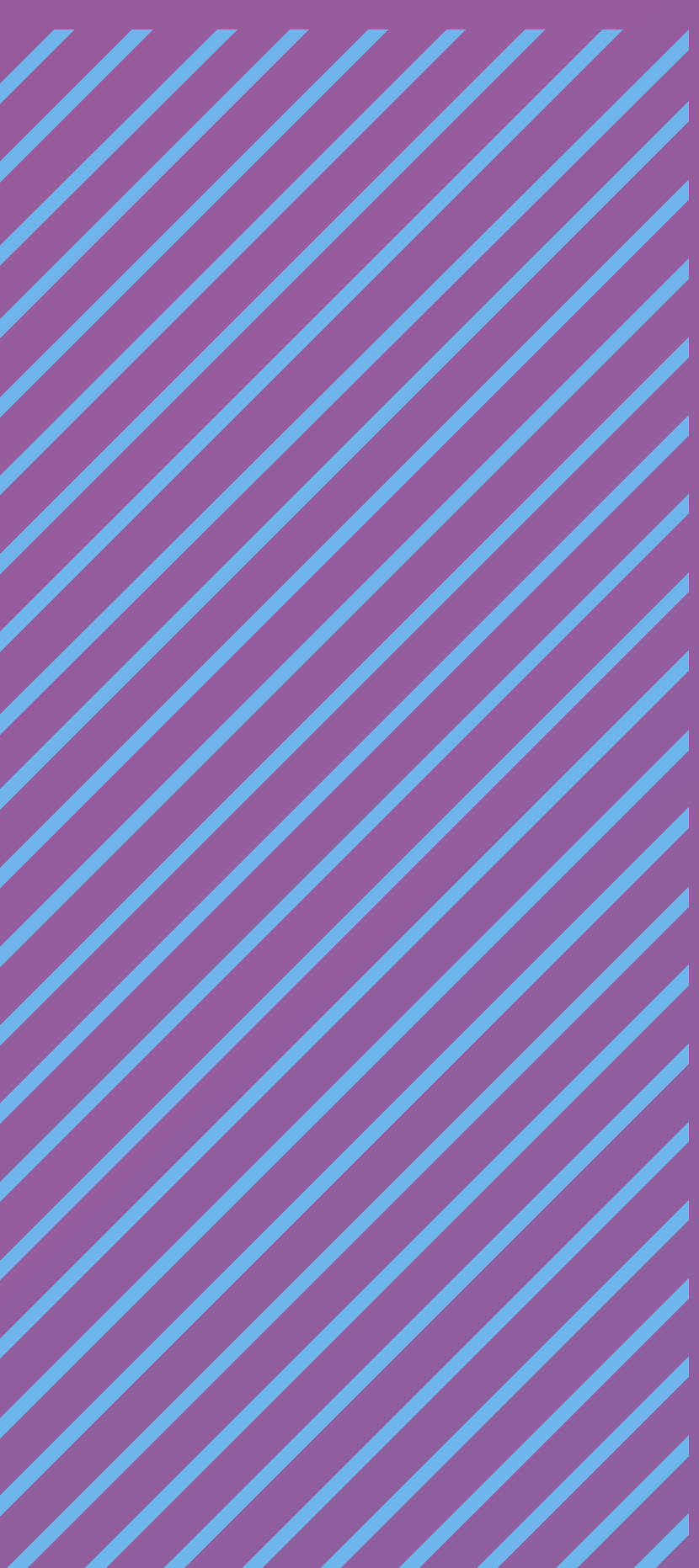


Methane is a greenhouse gas with a warming potential that's 84 times higher than carbon dioxide. As such, it's a major driver of global warming. But many methane detection technologies aren't good enough for focused and impactful action.

Sensirion Connected Solutions AG wants to change this with an accurate, sensor-based, end-to-end approach that enables energy companies to detect, localise, and quantify methane leaks around the clock.

Together with Zühlke and Microsoft, the company developed Nubo Sphere – a continuous methane emissions monitoring solution. With a focus on data access and quality assurance, the solution is enabling energy companies around the world to minimise methane emissions, efficiently and sustainably.

[Learn more](#)



‘Zühlke’s software and cloud expertise was instrumental in helping us realise our vision of a more sustainable future’.

DOMINIK NIEDERBERGER

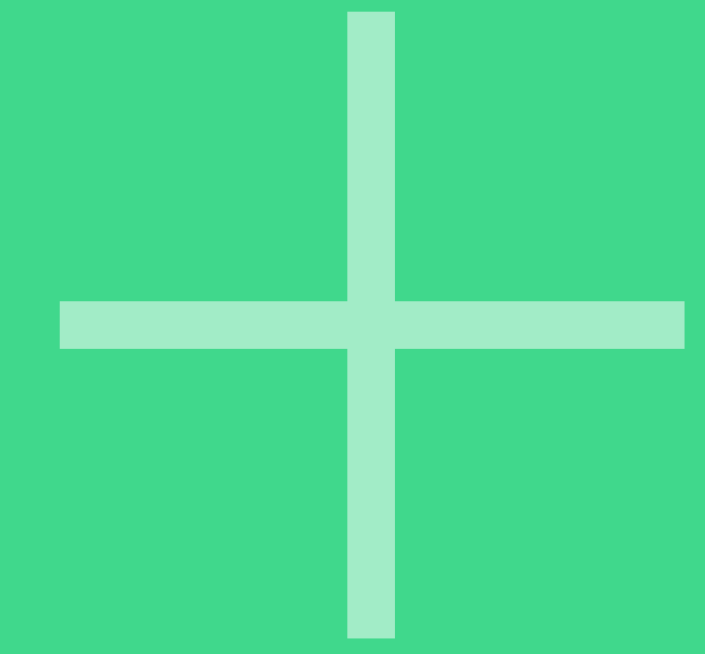
Research & Development Director, Sensirion Connected Solutions AG





POSITIVE PROJECT IMPACT · SHOWCASE

Prototyping intelligent energy management



‘HackZurich’ is one of Europe’s leading tech events, inviting tech talents from various countries to solve a series of large-scale challenges by developing innovative prototypes in just 40 hours. In 2022, Zühlke partnered with HackZurich to create and run one of the challenges on the agenda.

The result was an example of how we can identify ways to tackle urgent and complex challenges like the energy crisis by combining software excellence, sustainable software, and creative problem solving. The focus of Zühlke’s challenge? To find intelligent ways to optimise energy usage and avert potential power blackouts – a critical concern across Europe.

After many hours of work, the ‘GridGuard’ team emerged as the winners with a prototype demonstrating how a vast network of private smart devices could be centrally controlled to shut off non-essential devices. It showed how – with the push of a button – the crisis response team could selectively deactivate non-essential private devices like microwave ovens throughout the country. This innovative approach would effectively prevent potential blackouts and minimise adverse effects on communities.

Pioneering patient-centric healthcare

Healthcare digitalisation and patient-centric innovation shows no signs of slowing in a post-pandemic world.

Together with clients and partners, we're co-innovating digital solutions that provide greater value to patients and medical professionals – and facilitate the shift towards smarter, more preventative healthcare systems.

COLLABORATING TO SAVE LIVES

The latest independent data shows that the NHS COVID-19 app for England and Wales prevented an estimated 1 million infections, 44,000 hospitalisations, and 9,600 deaths.

Together with a diverse range of partners, Zühlke designed, developed, and launched the app and supporting infrastructure in just 12 weeks, scaling it to support more than 22 million users.

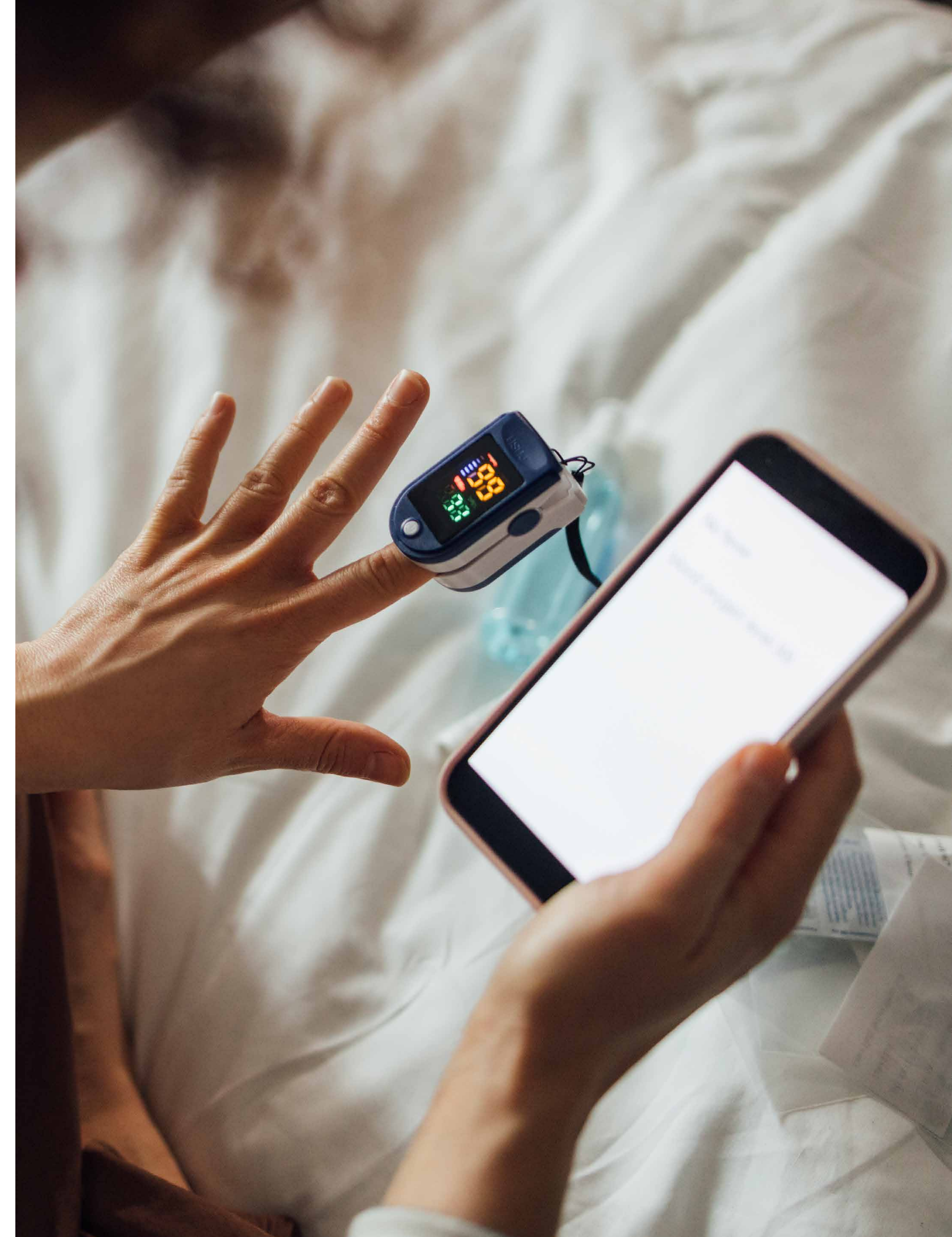
This collaboration – across science, technology, government, civil society, and beyond – demonstrates how data-led co-innovation across company and industry borders can transform public health.

BOOSTING OUTCOMES FOR PATIENTS

Advances in healthcare must be measured by how they benefit users, but today's healthcare services are significantly stretched. In this context, the most impactful course of action is to harness the power of digital technologies to prevent people from becoming sick in the first place.

This approach makes sense for healthcare providers and also reflects patient needs and expectations. In a recent study we conducted with 3,200 people, 70% of under-40s said they want to use digital solutions to stay well.

Improving collaboration and dataflow between multidisciplinary teams and diverse partners opens the door to innovative solutions that empower people to actively track, maintain, and improve their health. Here are two recent examples of how this can create positive change...





‘Thanks to Zühlke, we developed a marketable and reliable assistance system and laid the foundation for our start-up’.

DOMINIK HANISCH
CEO and Co-founder, Siima Solution GmbH

Living safely in old age

Data can be harnessed to help prevent illness in later life. We supported Siima Solution GmbH in the development of a solution that detects patterns in the energy consumption data of elderly people in their homes.

The system automatically alerts relatives if it detects any irregularities, for example if cooking stoves are not being used as usual, so potential health issues can be detected and checked out sooner.

Improving the patient-doctor relationship

docdok is a successful hybrid care platform from Switzerland. Its provider docdok.health wanted to expand to new channels, servicing different types of healthcare practitioners and admin staff within hospitals.

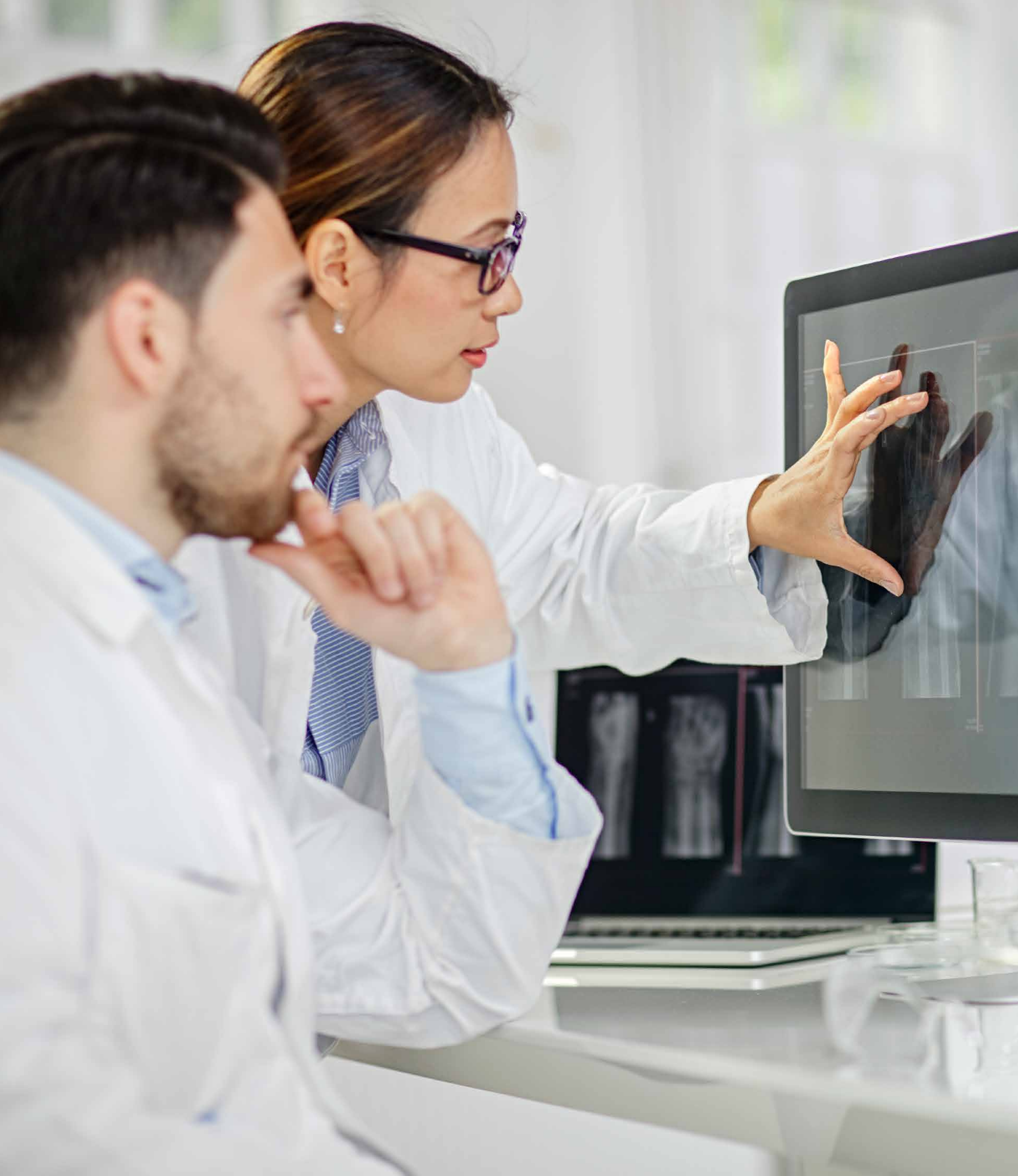
The Zühlke team helped docdok.health understand the risks that might arise from this platform extension, paving the way for safe, secure, successful scalability. We conducted a usability review, including a usability risk analysis, then developed and tested the software.

After just three months, the docdok platform enhancement was successfully introduced at the first trial hospital – Simmental-Thun-Saanenland Hospital (STS). Better patient outcomes and quality of care are expected, along with improved efficiency.

ADVANCING CO-INNOVATION IN HEALTHCARE

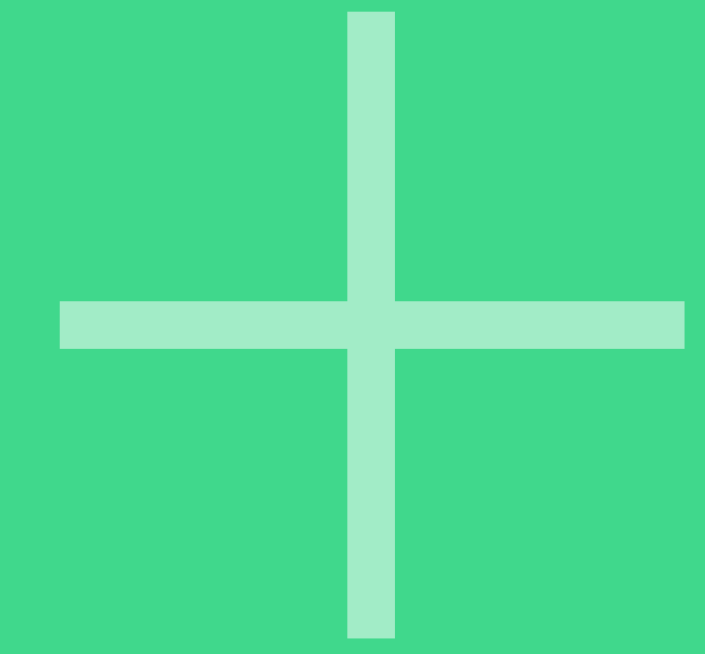
Data and collaboration have the potential to transform how people around the world experience and benefit from healthcare. We’re committed to seeking out unique partnerships, putting innovation into action – together.

As a global community, we have a far greater chance at innovating digital health solutions at scale when knowledge, capabilities, and diverse industries are connected through data and a shared goal.



POSITIVE PROJECT IMPACT · CASE STUDY

Driving an AI breakthrough in healthcare



AI has enormous potential to improve life for patients and health professionals by automating and advancing CT scan diagnoses. But the patient data needed to train the AI is highly sensitive and trapped in silos across clinics, hospitals, and research bodies.

AO Foundation wants to change this. The medical not-for-profit is at the forefront of the intersection between healthcare and technology. This pioneering spirit made Zühlke a natural fit when looking for a technical partner to support its exploratory research into AI modelling.

The team was able to show how a data ecosystem that connects datasets across clinics without compromising patient privacy can drive a breakthrough in healthcare. Our collaboration opens the door to exciting AI applications – from helping clinics plan and optimise surgeries, to automating the heavy lifting in CT scan diagnoses. Its applications extend beyond the world of healthcare – to wherever large datasets are needed to train AI, but where data privacy is of the utmost importance.

[Learn more](#)

‘Our data breakthrough with Zühlke shows how AI can advance clinical applications without compromising data privacy’.

ROLAND HERZOG
Head of Technology Transfer, AO Foundation



POSITIVE PROJECT IMPACT · CASE STUDY

Transforming oesophageal disease treatment

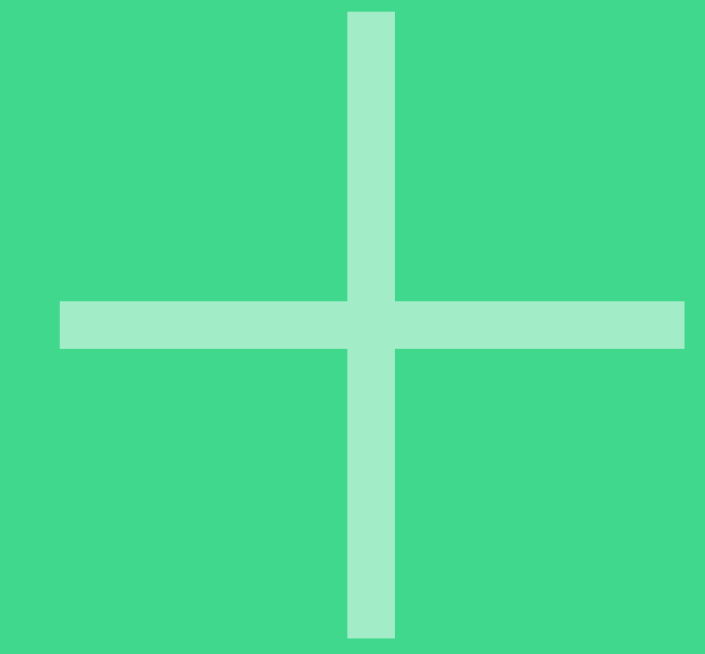
Some 370 million people are affected by diseases relating to the oesophagus – the area between the mouth and stomach.

This area is notoriously hard for topical drug treatment, because medication only comes into contact with the oesophagus for a few seconds once ingested. As a result, treatments often fail.

EsoCap wants to change this with its revolutionary smart drug delivery technology. An adhesive film within the drug capsule ensures that the drug stays where it needs to be for longer. An initial study showed the enormous potential of this safe and effective method. EsoCap then needed to take its innovative solution from the lab to the production line.

With our help, EsoCap was able to create a prototype with the scale and automation needed to make production commercially viable. Together, we advanced EsoCap's goal to improve the lives of patients with oesophageal diseases.

[Learn more](#)



Evolving sustainable software

In our digitised world, software connects and coordinates our business activities and private lives, helping industry and society operate seamlessly. Software may not be tangible, but like any product or service, it has a societal and environmental impact – which can be positive or negative.

Laying the foundation for more sustainable software development is a key focus in our client collaborations here at Zühlke. We view this through two lenses: sustainable IT and IT for sustainability.

IT for sustainability leverages data and apps as enablers for the transformation towards a greener and more equitable world. It

includes initiatives like smart connected products for the circular economy, 'Data for good' analytics, augmented reality for product maintenance, or data platforms that run renewable energy grids.

In sustainable IT, our focus is on the direct impact of the software itself, aiming for solutions that are:

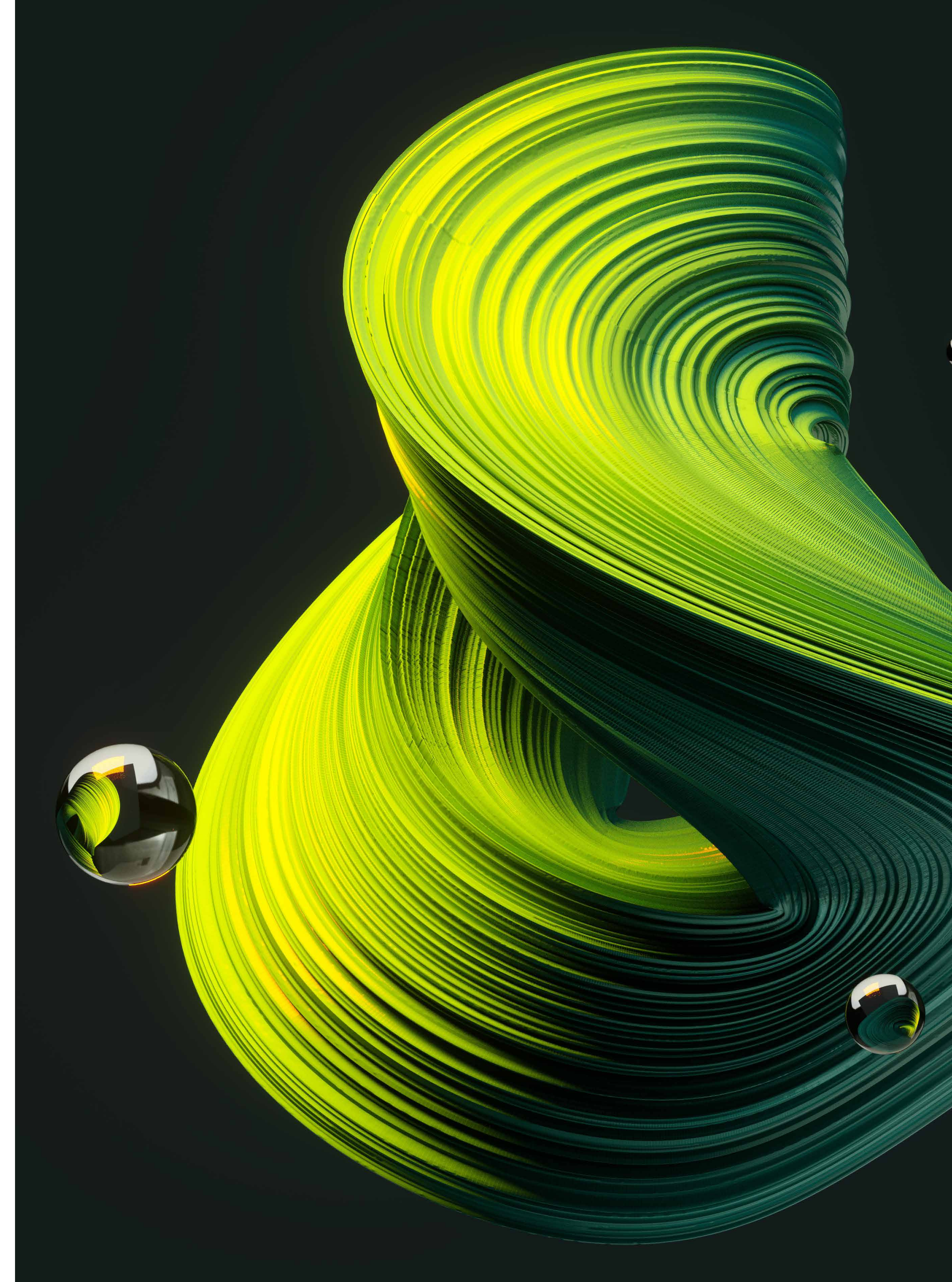
- **Ethical** – with careful consideration towards social responsibility.
- **Resource sensitive** – with efficient use of energy and hardware.
- **Maintainable** – easy to operate, deploy, maintain, and extend.
- **Inclusive** – open to all, with no barriers to participation.
- **Safe and secure** – robust and reliable, ensuring data privacy.

In 2022, we built on these principles and saw an increased interest from clients and more exchange on practical ways to measure and improve the carbon intensity of digital solutions.

We enhanced our offerings around the sustainable journey to the cloud and developed a travel guide to green IT. Our cloud practice developed a 'Green Cloud Checklist' to encapsulate our approach and best practices for a greener application landscape.

Ethical and environmental considerations are both relevant for the rising use of artificial intelligence (AI). We developed and shared a framework for responsible AI that promotes respectful and fair use, anticipating unintended consequences, explainable results, and limiting energy consumption.

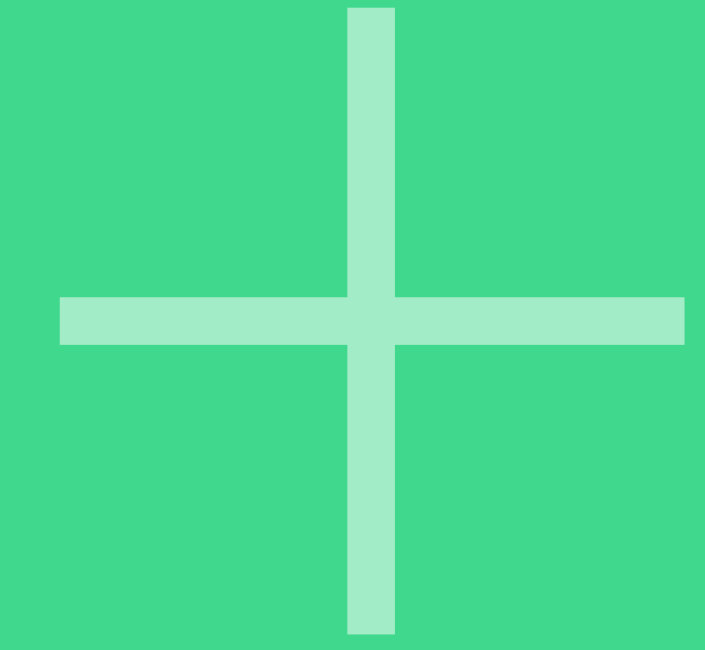
We anticipate even greater focus on sustainable IT going forward, and we're working on more ways to support data-driven decarbonisation.





POSITIVE PROJECT IMPACT · CASE STUDY

Green IT: from goals to action



To meet ESG goals, organisations must prioritise the energy consumption and CO2 emissions of their IT systems. The challenge? Identifying how and where to do this.

With an ambitious green transformation programme, Deutsche Bahn's DB Group wanted to define a robust green IT strategy, paving the way for a more sustainable digital infrastructure.

Together with key stakeholders and the Zühlke team, DB Group clarified its objectives and identified factors with the greatest potential to drive impact against those goals. This informed a prioritised roadmap of digital initiatives, supported by a measurement framework.

Within just eight weeks, DB Group had clear goals, a blueprint for action, and stakeholder buy-in to begin the rollout of its green IT roadmap.

[Learn more](#)

‘Sustainable transformation is a journey, not just a destination. Partnerships, knowledge sharing, and stakeholder engagement are key to accelerating the green IT transformation’.

RAMONA MÜLLER & DENISE BAIDINGER
Co-Leadership Team, Group Initiative Green Digitisation at DB Group

Enhancing customer experience through sustainable design

Experience design empowers our clients to solve real and changing customer needs – and develop and scale products, platforms, and processes in a human-centred, principled, and responsible way. For positive and sustainable outcomes.

At Zühlke, we're committed to helping our clients thrive in the long term. Our agile approach includes human-centred design methods and practices at its core. This ensures that every team and innovation stage is connected to user needs.

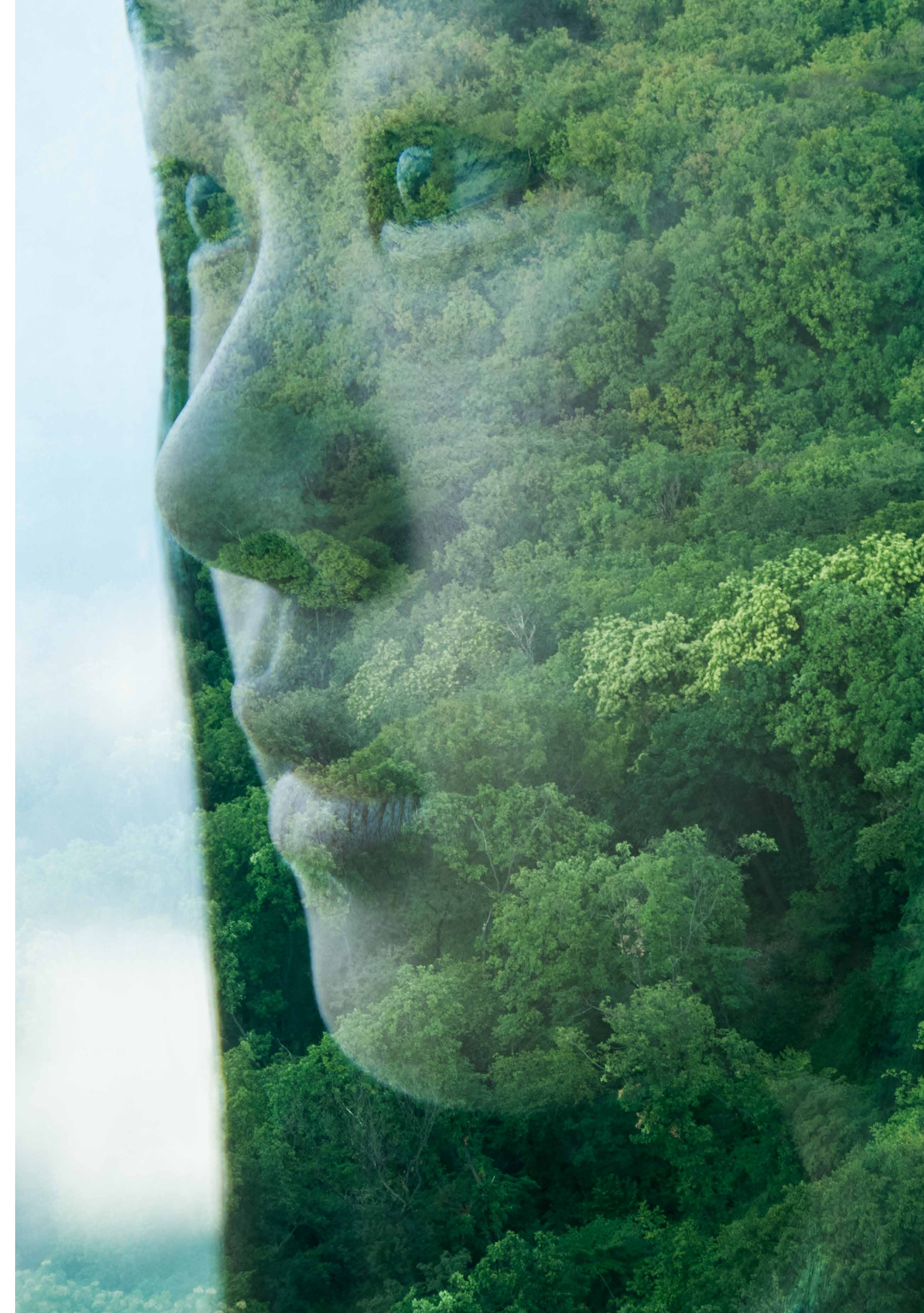
In 2022, we focused our efforts on empowering clients to be inclusive by design, sustainable by design, and global by design – to understand the strategic value of prioritising issues like digital inclusion, waste reduction, and diversity, equity and inclusion in product and service design and development.

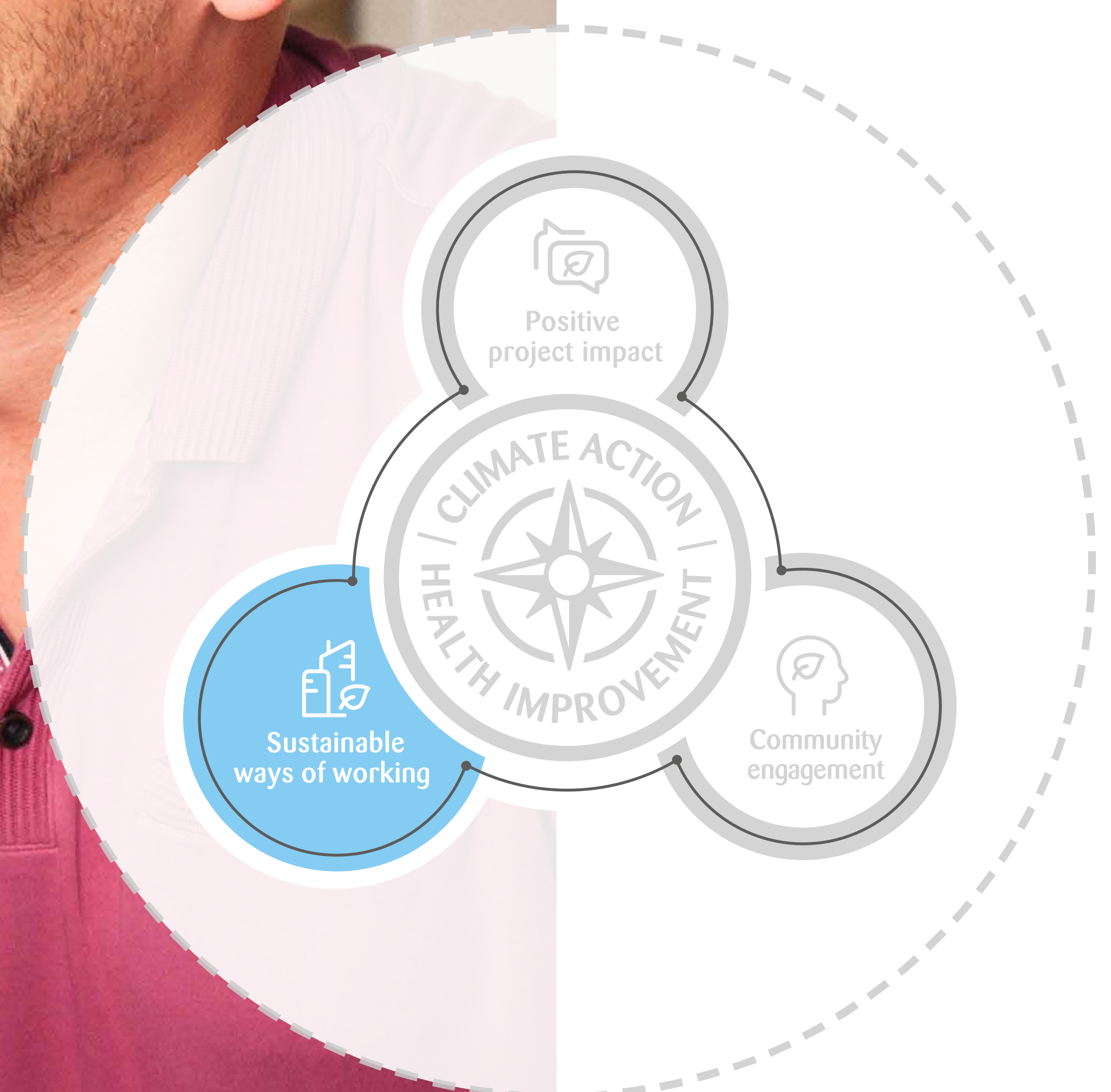
Enhancing user experience for eco-conscious consumers

Our experience design team partnered with a leading parcel company in 2022 to amplify its sustainability strategy through its customer-facing mobile app. With an extensive network of 85,000+ delivery workers, our client proudly boasts the lowest reported carbon emissions per parcel among all major UK delivery companies.

As part of our engagement to enhance the app's user experience, we helped to strategically position our client as the top choice for eco-conscious consumers, showcasing the company's genuine commitment to sustainability. Through market and user research we gained a deep understanding of customers' unique requirements. Meanwhile, collaborative stakeholder workshops ensured alignment and a shared vision across the key teams.

Ultimately, we helped our client to effectively communicate its positive environmental impact, transforming this into a compelling narrative that resonated with its valued customers.





Sustainable ways of working

Decarbonising our operations

The world is undergoing a human-made climate emergency, and so reducing our carbon emissions is a top priority.

Zühlke endorses the goals of the Paris Agreement. We commit to reaching net-zero greenhouse gas (GHG) emissions across the value chain by 2040. This is in line with a 1.5°C pathway according to the strict requirements of the science-based target initiative (SBTi) net-zero standard. Our commitment forms part of our voluntary engagement with the UN Global Compact and Tech Zero's 'Business Ambition for 1.5°C' initiative.

Specifically, we commit to the following reduction targets from a 2021 base year:

- **By 2030:** reduce absolute Scope 1+2 GHG emissions by 90%
- **By 2030:** reduce absolute Scope 3 GHG emissions by 42%
- **By 2040:** reduce absolute Scope 3 GHG emissions by 90%

These targets have been submitted to SBTi and we are awaiting validation. We annually disclose our decarbonisation results through CDP.

Improving data quality and consistency

When comparing our group-wide 2022 carbon footprint data against our 2021 baseline, we realised some calculation inconsistencies. As a result, we standardised our data collection and analytics approach and adjusted the 2021 data in line with our recalculation policy. The main updates were as follows:

- All leases of vehicles and equipment are now classified as operational leases and included in Scope 1 and 2 rather than in Scope 3.8.
- We standardised all emission factors, using ecoinvent for activity-based data and EXIOBASE for spend-based inputs.
- We included detailed information on electricity, heating, and cooling relating to our offices and labs, which was not previously available from the building operators.
- We automated the data extraction of our ERP data for procured goods and services (Scope 3.1 and 3.2).

This resulted in a reduction of our total baseline emissions in 2021 from 6,886 t to 6,011 t CO₂e (minus 13%).

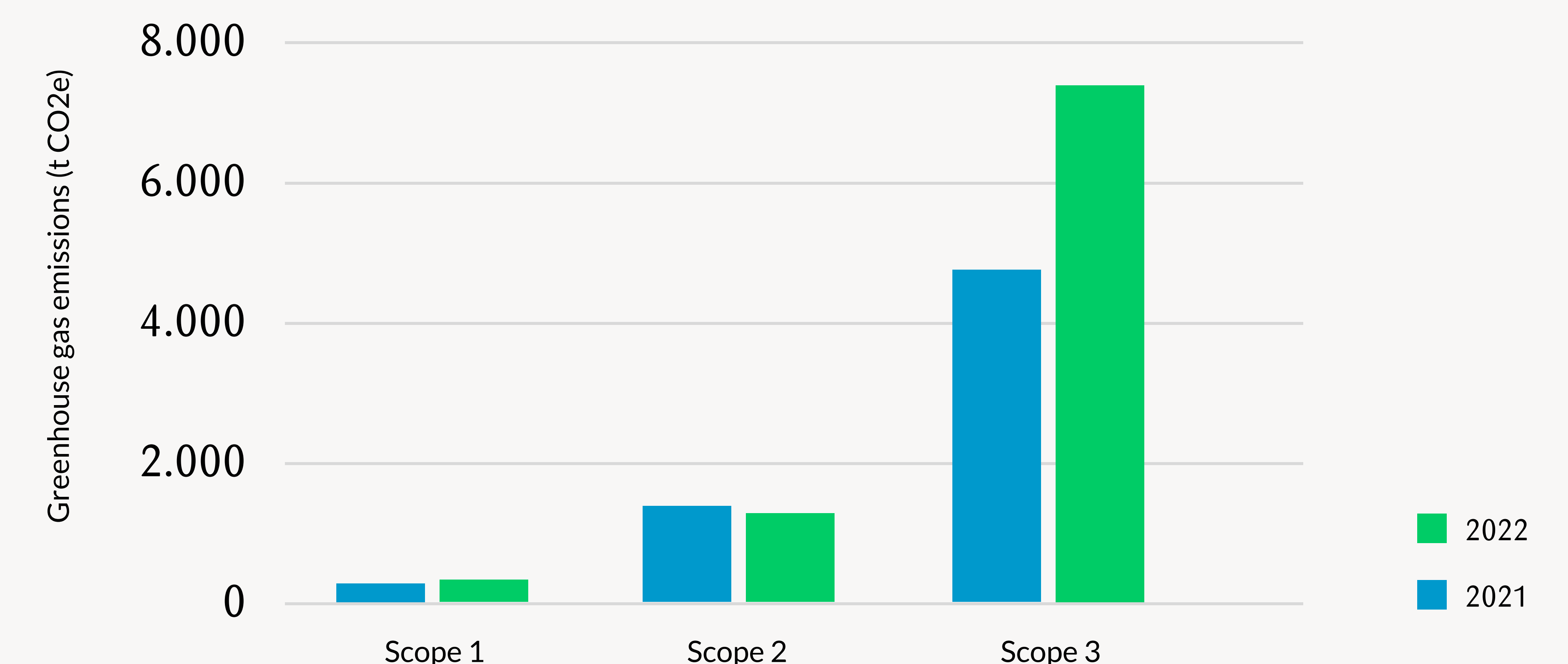
To ensure high data quality in the future, we strive to increase the use of primary data and reduce the amount of estimated and spend-based data in calculating our emissions.

Reviewing the data for 2021 and 2022

Compared to our targets, our overall results for 2022 are sobering. Total emissions rose by 41%, to 8,489 t CO₂e, which has three main drivers:

- **Team growth:** our global team grew by 20% in 2022, leading to additional spending on infrastructure and recruitment services.
- **Post-pandemic travel & office use:** activities in 2021 were still restricted by COVID-19. In 2022, we were able to reconnect in person with business partners and colleagues, which led to increased office usage and more business travel.
- **Long lead times:** most of our reduction activities take effect gradually, for example our move towards greener office buildings and sustainable procurement.

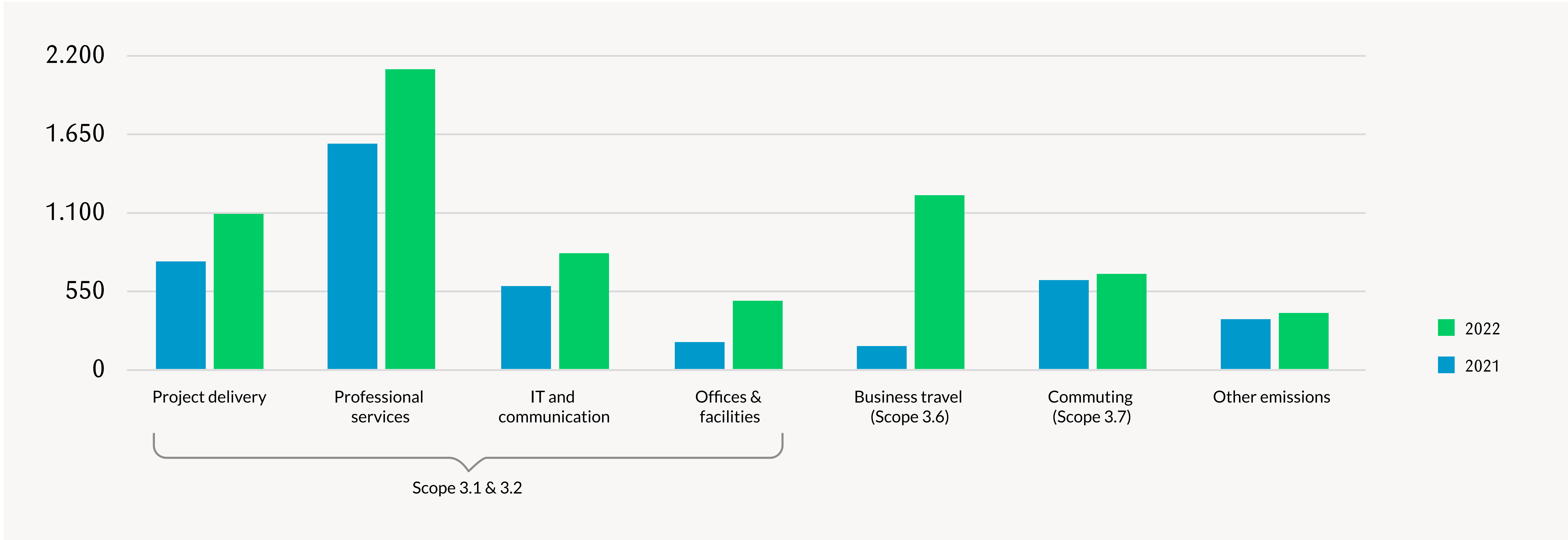
The positive news is that, despite these challenges, we were able to lower our operational emissions (Scope 1+2) by 5% compared to 2021. We reduced Scope 2 against overall growth, mainly through switches to renewable electricity.



For Scope 3, the following areas were the major contributors, as illustrated in the diagram:

- **Project delivery:** services from the partners we collaborate with on client projects, and material for models, prototypes, and test stands.
- **Professional services:** consulting, marketing, recruiting, and training services for our internal operations.
- **IT and communication:** our hardware, software, and telecommunication infrastructure.
- **Offices and facilities:** cleaning and other facility services, catering, furniture, and fixtures.
- **Business travel:** flights, trains, and other modes of transport.
- **Commuting:** employee travel to get to work and back.

The first four categories cover procured goods and services and have increased slightly more than our growth rate. The highest increase was in business travel, because after the pandemic there was a widespread need to reconnect in person. Despite our growth, emissions from commuting have only slightly increased by 6%, because more employees chose walking, cycling, or public transport.



Reducing our emissions

We are consolidating our reduction efforts group-wide and are working on a comprehensive carbon reduction plan. While this is ongoing, several reduction initiatives are already under way.

We are continuing our energy transition measures. In 2022, we sourced about one quarter of our electricity from renewables. Going forward, our main challenge is that green energy is not available in all our locations, for example in Serbia.

We started analysing our building emissions and taking action accordingly. In 2022, this included moving to a more sustainable office in Manchester.

Offsetting existing and remaining emissions

We compensate our emissions by financing high-quality carbon avoidance and removal projects equivalent to our annual footprint. This follows the SBTi’s assessment that such compensations are essential alongside effective reduction.

For our carbon footprint 2021, we contributed to projects for water wells in Zimbabwe, wind generation in Turkey, and carbon removal through biochar in Germany, Sweden, and the US. The projects are Gold Standard certified and have been vetted through an independent partner. We plan to stay carbon neutral through compensation measures for our carbon footprint in 2022 and beyond, gradually increasing the percentage of carbon removal in our neutralisation measures.

Promoting employee health and wellbeing

Health and wellbeing are essential to sustainable development. We're committed to supporting the physical and mental health of everyone at Zühlke through a shared culture of care and an ever-evolving programme of initiatives.

Coming out of the pandemic in 2022, we continued our engagement in health and wellbeing programmes across the group. These programmes were driven by our local teams, with international alignment to identify and follow best practices.

Continuing our commitment to occupational health

Working with our minds – doing 'knowledge work' – can place strain on our bodies. While much of our time at Zühlke is spent at desks and in meeting rooms, we have intentionally chosen not to impose a uniform workplace concept. Instead, we have facility guidelines that allow for varied, flexible working situations, responsive to the diverse needs of specific teams, projects, and locations. These guidelines include height-adjustable desks, multiple monitor setups, specially equipped meeting rooms for in-person and remote conversations, and dedicated spaces for physical activities and relaxation.

Our offices meet and exceed occupational health and safety standards. Approaches vary by location, though typically these include trained first aiders, ergonomic workplaces, and health and safety training. Our lab facilities for mechanical and electronic engineering adhere to specific mandatory standards and best practices for safety, helping ensure a safe, healthy working environment.

Our continued commitment to safety means our frequency of injury is low. Across all our locations in 2022, we recorded just one work-related injury per 1,000,000 hours worked – down from five in 2021.

Encouraging physical health

Alongside the core health benefits we provided in 2022, we enhanced the health and wellbeing information we provide through our knowledge repositories and channels. This made it easier for Zühlke colleagues to find and discover information, tools, and upcoming initiatives and events.





‘Cycle To Work’ schemes are now available across various Zühlke locations. In 2022, we again participated in the successful ‘Bike to Work’ team challenge, with prizes to incentivise people in all our locations to swap cars for healthier, more sustainable pedal power.

Across the group, teams are also rallying together to join 10k running races and other sporting events, often in support of charitable causes.

Supporting flexibility and work-life balance

At Zühlke, we believe our responsibility encompasses far more than providing ergonomic workspaces for our people. We want to ensure wellbeing in our workplaces and beyond.

That’s why we’re always exploring and implementing new initiatives, including company doctors, local health programmes, and innovative health insurance models. We also recently introduced financial education webinars to give individuals the knowledge to manage their finances in an increasingly challenging global economic environment.

We know work-life balance is vital to health and happiness. We support this through flexible working hour models that can be tailored to unique, individual needs. For example, in the UK our people can buy up to five additional days of annual leave. Meanwhile, in Serbia we offer options that allow team members to customise and adjust their ratio of working time to personal time.

We also support sabbaticals and believe taking a longer break can be a powerful way to find new perspective and refresh passion and energy levels.

Building networks for mental health

Mental health includes our emotional, psychological, and social wellbeing. At Zühlke, we foster an open, honest culture to encourage important, supportive conversations around mental health. We want everyone to feel comfortable sharing their struggles with others.

As part of this commitment, we continued our investment in a globally recognised Mental Health First Aid training programme, equipping our people with the knowledge and skills to recognise the signs that someone may be struggling with their mental health. We’re building a network of Zühlke people ready and willing to help others find the support they need.

In Switzerland, we recently introduced leadership training on burnout signs and prevention, as well as sessions on workplace mental health for all team members. We also launched a stress survey, enabling us to measure levels of stress across the organisation and take supportive action where necessary.



SUSTAINABLE WAYS OF WORKING · SHOW CASE

Prioritising health and daily movement



Supported by the Chamber of Commerce, Austria's 'Firmenchallenge' is a workplace health scheme that encourages colleagues to adopt healthier lifestyles and drive positive environmental outcomes in the process.

With less than one third of the Austrian population meeting the WHO's recommended amount of exercise, the 50-day programme gives participating organisations a fun way to incentivise co-workers to integrate more sports and movement into their daily routine.

Zühlke Austria joined the challenge in 2022, logging their activities and accumulating a total of 96,000 'movement minutes' across seven weeks. With dedicated themes for each week of the challenge, our health and wellbeing team organised complementary activities, including a group garbage clean-up and forum for swapping sustainability tips.

This group effort fostered collaboration, reminded us to prioritise our health and environment, and also resulted in nine trees being planted in our name.

Furthering diversity, equity, and inclusion

At Zühlke, we believe that inclusive culture and diverse partnerships enable better problem solving, new innovation opportunities, and long-term success. It's an approach that enriches our company, community, people, and partnerships.

On any project, it's vital that our teams bring together people from diverse backgrounds, outlooks, and experiences. It's essential that we create an environment in which every team member is treated equally and feels seen, included, valued, and celebrated.

Diversity, equity, and inclusion (DEI) is a journey. In many areas, we've made great progress. In other areas, we have some way to go. We're committed to putting this work at the core of our global strategy, working and learning together to evolve our culture and business.

INSTILLING OUR SHARED VALUES

We're continually taking steps to ensure our shared values are powering our DEI goals.

Empowering the DEI Board

Our DEI Board – a taskforce of the Group Executive Committee – is responsible for developing our DEI strategy. It makes recommendations for creating and evolving our group policies, practices, and processes that promote diversity, equity, and inclusion. The DEI board relies on key metrics across everything from recruitment, to rewards and development to regularly measure our progress and conduct annual reports, including gender pay gap reports.

Ensuring equal pay for equal work

We're taking steps to ensure we provide equal pay for all positions, regardless of gender. Our new initiative models the group pay averages to identify outliers in pay equality between men and women. Currently focussed on a local level, our aim is to establish a group-wide framework for ensuring pay equality.



ADVANCING RECRUITMENT, ONBOARDING, AND TRAINING

Recruiting inclusively will enhance our power to co-create with diverse partners.

Rolling out unconscious bias training

When recruiting, it's important we take an inclusive approach from the start. That's why we check our job adverts to ensure they're written in gender-inclusive language. Our interviewers also receive unconscious bias training before conducting any interviews.

Evolving existing policies and processes

We've revised our employee policies to re-emphasise the fact that harassment or discrimination on the grounds of sexual or gender identity will not be tolerated. We also ensure our maternity and shared parental leave policy is inclusive of transgender parents.

Introducing cultural empathy training

Cultural empathy is vital to successful collaboration, and to helping all Zühlke colleagues feel comfortable in the workplace. This is particularly important as our decentralised teams increasingly work on global projects, collaborating across borders. With this in mind, we developed a cultural guide – conceived by our team in Bulgaria – to provide essential cultural empathy training.

Celebrating what makes us unique

We run an internal initiative and blog post series – 'Culture & Beyond' – aimed at celebrating our diversity. We surface and share stories to increase awareness and appreciation of our people's diverse backgrounds and points of view.

FOSTERING POSITIVE PARTNERSHIPS

Nurturing diverse, progressive partnerships is also fundamental to our diversity, equity, and inclusion journey.

Strengthening connections

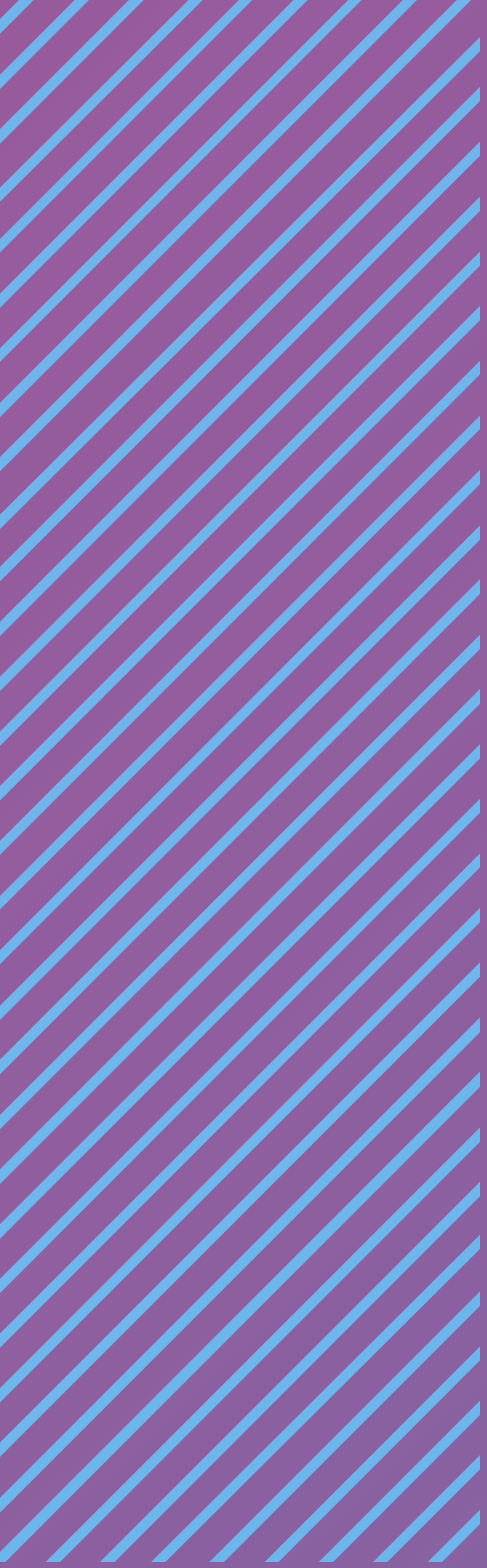
Zühlke partners with Global Digital Women and Code First Girls. We also participate in Stonewall UK's 'Diversity Champions Programme', with the goal of championing LGBTQ+ rights throughout our organisation.

Welcoming people back to work

We are part of the UK-based Tech Returners programme, which aims to help tech professionals – especially from underrepresented groups – return to work following career breaks.

Encouraging self-celebration

We're part of Google's #IAmRemarkable initiative, focussed on encouraging women and other underrepresented groups to celebrate their achievements in the workplace and beyond. Through regular workshops, talks, and networking, the initiative aims to develop and nurture self-confidence, self-promotion, and motivation, mitigating the impact of issues such as imposter syndrome.



‘When people come together with different perspectives, amazing things are possible. We support an inclusive and open environment where everyone can have a voice and feel valued’.

Anabel Fall
Chief People Officer, Zühlke Group



Investing in learning and development

At Zühlke, we're passionate about learning through doing. Intentional learning has a unique power to embed new knowledge and skills, growing individual's confidence while enhancing our organisation's expertise.

We aim to deliver exceptional solutions for our clients in every engagement. Investing in our teams is fundamental to that aspiration.

Strengthening the Zühlke Growth Mindset

In 2022, we evolved our efforts to strengthen and anchor a growth mindset deeply in our culture – the Zühlke Growth Mindset (ZGM). Established in 2021, the initiative is driven by the principles of intentional learning, meaningful growth conversations, and an authentic, honest feedback culture. It instils

the importance of learning 'on the job', encouraging people to see and seize learning opportunities in every situation.

In the past year, we've introduced a wide range of training and upskilling opportunities, including Practical Learning Labs, leadership programmes, practice exchanges, and mentoring. Our goal is to build a strong and substantial global community of personal growth coaches, empowered with tools and resources to run impactful development, feedback, and performance conversations.





‘Seeing our Asia colleagues in person after two years apart was a surreal and special experience. A highly anticipated, uniquely Zühlke opportunity to share learnings and create new memories together’.

IRYANI KAMAL

Senior Talent Relations & Recruiting Specialist, Zühlke Singapore

To encourage continuous development and help make self-directed learning part of our people’s everyday working life, we’ve also introduced new digital resources, including a virtual learning library and access to the UN Global Compact Academy.

Introducing our Innovation Incubator

In the last year, we ran our first Global Innovation Leadership Programme with the intention to boost an intrapreneurial mindset and strengthen our position as a talent and innovation incubator.

This 12-month development programme gave 20 colleagues the opportunity to explore ways to advance Zühlke as a leading innovation partner, a responsible corporate citizen, and an employer of choice.

The programme offered training opportunities, workshops, networking, individual growth coaching, innovation design, and mentoring, as well as the chance to participate in a six-month collaborative innovation mission. As part of the mission, five teams of four people developed and prototyped new ideas to supercharge innovation for Zühlke.

Investing in our people

Every year, we make a substantial investment in learning and development – paving the way for both individual and collaborative training. Our level of investment is significantly above the industry average. In 2022, this investment amounted to an average of 100.1 hours of training per person – approximately 12.5 working days.



Community engagement

Demonstrating corporate citizenship

What does corporate citizenship mean to Zühlke? For us, it's about taking an active role in society, beyond our immediate business. By enriching the world around us, we'll benefit local and global communities, while strengthening our teams.

Our corporate citizenship activities include donations and sponsorship measures, pro bono work, and charitable support like team events and volunteering.

At Zühlke, these activities are usually initiated and coordinated at the local level, reflecting the causes close to our people's hearts.

ENCOURAGING WOMEN IN TECH

Diversity, equity, and inclusion are part of our corporate responsibility, which we also support through community engagement.

#IAmRemarkable

Three years ago, we joined #IAmRemarkable – a Google initiative that encourages women and other underrepresented groups to celebrate their achievements in the workplace and beyond. In 2022, participants again held and attended talks and workshops on topics including self-confidence and self-promotion, cheering one another on.

Global Digital Women (GDW)

In Germany, we collaborate with Global Digital Women (GDW) to help give female team members a platform – for example, by identifying opportunities for placing speakers for panels and talks.

REIMAGINING OUR MARKETING MATERIALS

A global team came together to make our marketing giveaways more sustainable, because we realised that branded products like ballpens and electronic gadgets can easily waste resources.

We determined that all materials should: be genuinely and meaningfully usable; be crafted from ecologically sustainable materials; be of long-lasting, high quality; make an ecologically sustainable impression; be recycled and/or recyclable; and be locally sourced. This resulted in a new set of giveaways, including a more sustainable ballpen and plantable paper flowers, which we are now testing in the local markets.

GIVING TO CHARITABLE ORGANISATIONS

In 2022, we've continued our fundraising activities and also came up with new formats. Most donations went to organisations working towards health improvements and climate protection, our sustainability focus areas.

Swapping birthday gifts for charitable donations

In Switzerland, our teams chose to donate money to charities to mark team members' birthdays, instead of buying and giving presents. Everyone had the option to nominate a charity and vote to help decide which organisations should receive the donations. Donations were made to three chosen charities: Doctors Without Borders, Clean Air Task Force, and SPOG.

Supporting children's organisations

In Germany, teams donated to Bärenherz Stiftung (a children's hospice) and Münchner Kindertafel (who help disadvantaged children).

Continuing payroll giving

In the UK, we continued our payroll giving and matching initiative, which enables people to make payroll donations to non-sectarian, non-religious, non-denominational, non-discriminatory, non-political charities through a salary sacrifice scheme.

Benefiting UNICEF

Our colleagues in Bulgaria, Portugal and Serbia organised a quiz night to support a good cause. The entry fees for this popular and fun event were doubled by Zühlke and donated to a charity chosen by the winners: UNICEF.

SUPPORTING THE NEXT GENERATION OF INNOVATORS

We work within our communities to identify, inspire and develop the next generation of innovators.

Girls in Tech

As in previous years, we took part in Girls' Day in Germany and Wiener Töchertag in Austria, welcoming young girls to our office locations to meet our people, take part in organised activities, and see what life for women in tech is like.

Robotics labs for young engineers

We organised two robotics days at schools in Zurich and Bern. Children could playfully learn to assemble and program their own robots with LEGO Mindstorms. In Bulgaria, Zühlke supported the Robotics Club at the Technical University in Sofia with Raspberry Pi kits and co-financed awards for a national 3D design and modeling competition.

Aiducation scholarships

We continued our collaboration with Aiducation International – a for-impact organisation supporting the education and entrepreneurship of bright and motivated young people in developing countries. We supported 14 students in Kenya and the Philippines, three of whom graduated in 2022.



Building communities

Collaboration and community are vital for co-creating a sustainable future.

The following programmes and initiatives show the value of bringing together diverse experiences, expertise, and resources to unlock positive change...

Sharing know-how and experience

As participants of the UN Global Compact, we support international and local initiatives. In 2022, we worked closely with the Global Compact Network Switzerland & Liechtenstein on several events. For example, we hosted virtual talks on sustainability transformation.

In Frankfurt, we continued our 'Boozt your Business' mentoring programme for early-stage startups – established in 2020 with our local partners Wirtschaftinitiative FrankfurtRheinMain, STATION, and FPS. Participants are matched with a range of Zühlke mentors from different practices, who offer dedicated coaching over a three-month period to address challenges and roadblocks, and bring a business idea to life.

Zühlke is an active member of the 'Tech for Sustainability' community founded by Microsoft, EY, and Global Compact Network Switzerland & Liechtenstein.

We also advocate for climate action through our engagements in associations and movements such as ASUT Sustainable ICT, BIOVOX Connect, CEO4Climate, CEOs for Future, Swiss Cleantech, Swiss Triple Impact, and Tech Zero.





COMMUNITY ENGAGEMENT · SHOW CASE

Growing our Sustainability Circle

As a global community, we must transition to more sustainable products, services, and business models. It's a complex process – one that demands interdisciplinary collaboration within and across sectors.

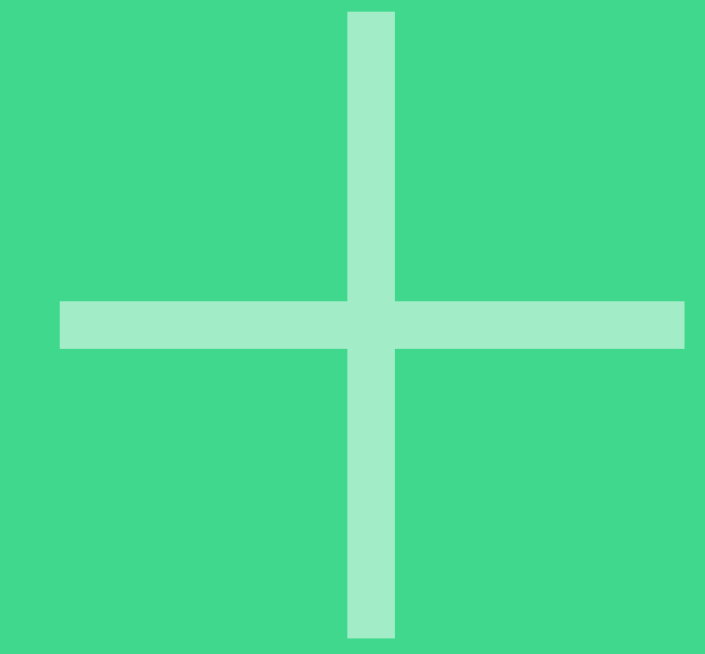
As a global community, we must transition to more sustainable products, services, and business models. It's a complex process – one that demands interdisciplinary collaboration within and across sectors.

We founded the Sustainability Circle in 2021 to accelerate this transformation, together with our partners carbotech, econcept, BMI Lab, and ibp. With a focus on sustainability transformation, the network brings together key stakeholders across consumer, industrial, and medical products manufacturing. Together, we're co-innovating solutions and best practices that foster sustainable growth, with the goal of speeding up sustainability innovation in manufacturing.

Entering its second year in 2022, the network expanded to 150+ members from 40+ companies. We held 16 events, offering a total of 100+ presentations and videos. The Circle also hosted a full-day event at Wetropa and Zühlke, visiting R&D labs and running circular economy workshops for manufacturers of industrial and consumer goods. What's more, we welcomed 20 'Impact-Startup Pitches' covering circular plastics, e-fuels, fusion energy, circular packaging, the sharing economy, and more.

The Circle has become a trusted source of knowledge and expertise, and a platform for initiating joint projects.

[Learn more](#)





Integrity

Exceeding customer expectations

INTEGRITY

Strengthening our business ethics

Integrity must be demonstrated in daily actions and strong commitments.

Ever since our company began its life in 1968, our actions have been guided by a clear set of values, first established by our founder Gerry Zühlke.

We continue to conduct ourselves in a way that's fair and correct, uniting to support each other in remaining true to our integrity – even when we face challenging situations.

Our ethics are built on strong foundations. In 2022, we have further strengthened our Code of Conduct and our compliance organisation.

Expanding our Code of Conduct

Taking strides towards greater accessibility and transparency, we've now made the code available publicly through our website.

This single, group-wide policy defines our values and shapes our behaviours. It includes clear guidelines on how we aim to conduct ourselves as individuals, teams, and a community, ensuring our behaviour is exemplary and ethically sound.

Strengthening 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 will never offer or give a benefit to influence a business partner's decision or action, or persuade them to misuse their position to provide an inappropriate advantage.

In the past year, we've launched a dedicated whistleblowing system – our Integrity Line. This is accessible both internally at Zühlke and publicly. Any suspected violation of our Code of Conduct can be reported safely and anonymously.

Enhancing compliance

To further strengthen governance and coordination, we've established a Compliance & Integrity Committee that brings together top leadership from the business, people and culture, finance, compliance, risk management, and sustainability functions.

We believe in installing compliance at every level, ensuring our teams are informed and empowered to do the right thing. Looking ahead, we're preparing to introduce cross-organisational compliance training, with key modules including anti-corruption.



‘As more business is conducted globally and with diverse partners, rigorous business ethics are more important than ever’.

ADRIAN DUDLE

General Counsel & Chief Compliance Officer, Zühlke Group

Upholding product quality and safety

We're passionate about delivering products that create positive change. So it's vital we ensure the quality and safety of the products we create, maximising the benefit to our clients, collaborators, and society, while avoiding unintended bad consequences.

We're continually collaborating across Zühlke and beyond to enhance our robust product quality and safety procedures, always investing in people and processes.

Every team member is carefully trained on our approach to quality and has access to our latest guidelines and processes. In regulated environments, it's mandatory to meet additional requirements. To support this, we invest in specialist training

and, together, we perform regular project reviews to share and evolve our experience and expertise.

Our group-wide quality policy is the foundation of our ISO 9001 certified quality management system. It's founded on five key principles: responsibility (in terms of safety, security, and sustainability), leadership, diversity, fitness for purpose, and continuous improvement.

Managing our processes

Our process management system is called The Zühlke Way (TZW). All employees receive training for TZW and the information is accessible through a digital interface. Our ISO 9001 certification covers all our locations.

TZW is also the basis for our group-wide compliance with ISO 27001:2013 Information Security Management System. Awarded by the Swiss Association for Quality and Management Systems (SQS), this standard defines how we manage information security within our organisation.

Safeguarding medical products

Patient safety is our first priority when we co-innovate medical products, including software-as-a-medical-device.

We're certified according to ISO 13485 and follow a documented medical device development process (MDDP). On relevant projects, every team member is given dedicated MDDP training. We also work with external specialist training providers to enhance teams' knowledge and skills in deeper, project-specific domains.

The MDDP means we must always take important steps including clarifying product requirements, identifying applicable directives, standards, and norms, setting up a compliance

strategy, and analysing and mitigating safety risks. At the end of each development phase, we hold gate reviews to make sure our safety and quality goals are upheld at all milestones.

Instilling quality – at every step

Quality assurance doesn't simply hinge on testing the final product. It must be instilled at every stage, with a continuous stream of assurance activities including planning, verification, validation, and assessing and reassessing ongoing risks and priorities.

We ensure quality from start to finish, integrating our processes from the very beginning to understand and address any potential issues at an early stage. This enables us to troubleshoot quickly and cost effectively, paving the way for the highest quality end product.

With new technology evolving at pace, we take a holistic view of quality. Today, it encompasses everything from reliability and safety to ease of use and accessibility. We're in constant conversation with our clients and collaborators, ensuring that – together – we strive for and achieve the highest standards.

Safeguarding data and privacy

Zühlke is a partner and collaborator. We're part of a community. This means that we process a large amount of data on both our clients and our people.

This data is fundamental to how we operate. It enables us to lead the way in co-innovation. To innovate beyond borders with diverse partners, we must share complementary data – as well as combining resources and efforts to achieve a shared goal.

The data we process is wide and varied, and includes partially sensitive information. Protection and privacy are our priorities. Personal data is protected by data protection laws, and these laws differ across the countries in which we operate. We work towards high standards and ensure we follow the letter as well as the intention of the regulations. Assets like intellectual property and confidential client information, meanwhile, are not subject to data protection law but are guarded by important contracts, such as confidentiality agreements or other customer contracts.





‘Across the world, data protection laws are tightening. We welcome this effort to protect us as individuals from information theft and misuse. Our data protection and InfoSec teams work together to keep client, supplier, and employee data safe’.

ALEXANDRE ZEHNDER
Senior Legal Counsel and Data Protection Officer, Zühlke Group

ENHANCING OUR DATA PROTECTION APPROACH

In 2022, we took the following additional steps to ensure we always handle data in a way that’s compliant and ethical:

Equipping our people

We entirely redesigned our data protection team’s intranet site to make sure all colleagues have access to the information they need, including policies, training, and templates.

Enhancing our expertise

We welcomed a lawyer to the data protection team to help create and implement policies and templates.

Updating our policies

Going beyond GDPR law, we updated all our other privacy policies to take into account specific data protection laws across the many countries in which we operate.

Assessing our impact

We introduced in-house Transfer Impact Assessments (TIA), allowing us to gain clarity on whether we’re permitted to transfer specific personal data to third countries. Bringing this capability in-house means we can now find answers quickly and efficiently.

Continuous improvement

Data protection is an ongoing process. We’re constantly evolving and enhancing our approach in step with the latest regulations and best practice to ensure we’re at the forefront of privacy.

By handling data with care, we’re protecting our people, partners, and clients. We’re also paving the way for smarter, faster, data-driven collaboration.

Bolstering cyber resilience

Cybersecurity and resilience is top of mind for forward-thinking organisations, with consumers and citizens calling on businesses to become more responsible and sustainable.

At Zühlke, we're committed to helping our clients navigate this complex terrain. We have a portfolio of four offerings, including: cybersecurity assessments, cybersecurity consulting, cybersecurity engineering, and cybersecurity awareness and training.

We use these capabilities to address direct client security consulting asks, ensure the secure running of client software engineer projects, safeguard the security of our own operations, and conduct voluntary work in the security space.

The following examples show some of the ways we're developing our approach to cybersecurity to drive a greater positive impact for people and planet...

Enhancing our security offering

We enhanced our cybersecurity offerings to help organisations protect their critical assets and data, improving their resilience as threats evolve rapidly.

We believe cybersecurity should be addressed holistically. That's why our multidisciplinary teams deliver support spanning everything from security engineering, consulting, and assessment, to governance, risk management and compliance, awareness training, and technical training.

Improving our own information security

We're also committed to continually improving our own security strategy at Zühlke. Across all locations, we are certified to ISO 27001 – an international standard that defines the framework for how we manage information security internally.

The standard specifies requirements for establishing, implementing, maintaining, and improving our approach. Our certification reflects that we're in a strong position to mitigate the risk of data breaches, protect ourselves and our clients from threat, and ensure compliance with data protection regulations throughout our entire supply chain.

We're continuing to enhance our approach to cybersecurity, making many frequent incremental improvements to further uplift our ISO 27001 certification.



Establishing a security operations centre

With an earlier focus on prevention, we're now building out our detection and response capabilities.

Establishing a security operations centre is fundamental to this, and it's a project that's now well underway. The centre unites an external provider with a small internal Zühlke team, enhancing our security through co-innovation and collaboration.

Protecting human rights and safety

Integrity and responsibility are at the core of our values at Zühlke. We believe society and business relationships should be based on a foundation of respect for all human beings and their fundamental rights. We fully endorse the Universal Declaration of Human Rights and the UN Guiding Principles on Business and Human Rights.



In our own operations, we support basic human rights by providing a safe and healthy working environment, and by ensuring mutual respect and non-discrimination. We emphasised this commitment in 2022 by updating our code of conduct to more explicitly emphasise that we do not tolerate any form of child labour or forced labour.

The onset of the war in Ukraine underscored the vital importance of protecting our fundamental human rights. Many of our colleagues took individual and collective action to support victims of the war. The company donated to UNICEF and Save the Children who provide medical and psychological help, and support formal and informal educational programmes.

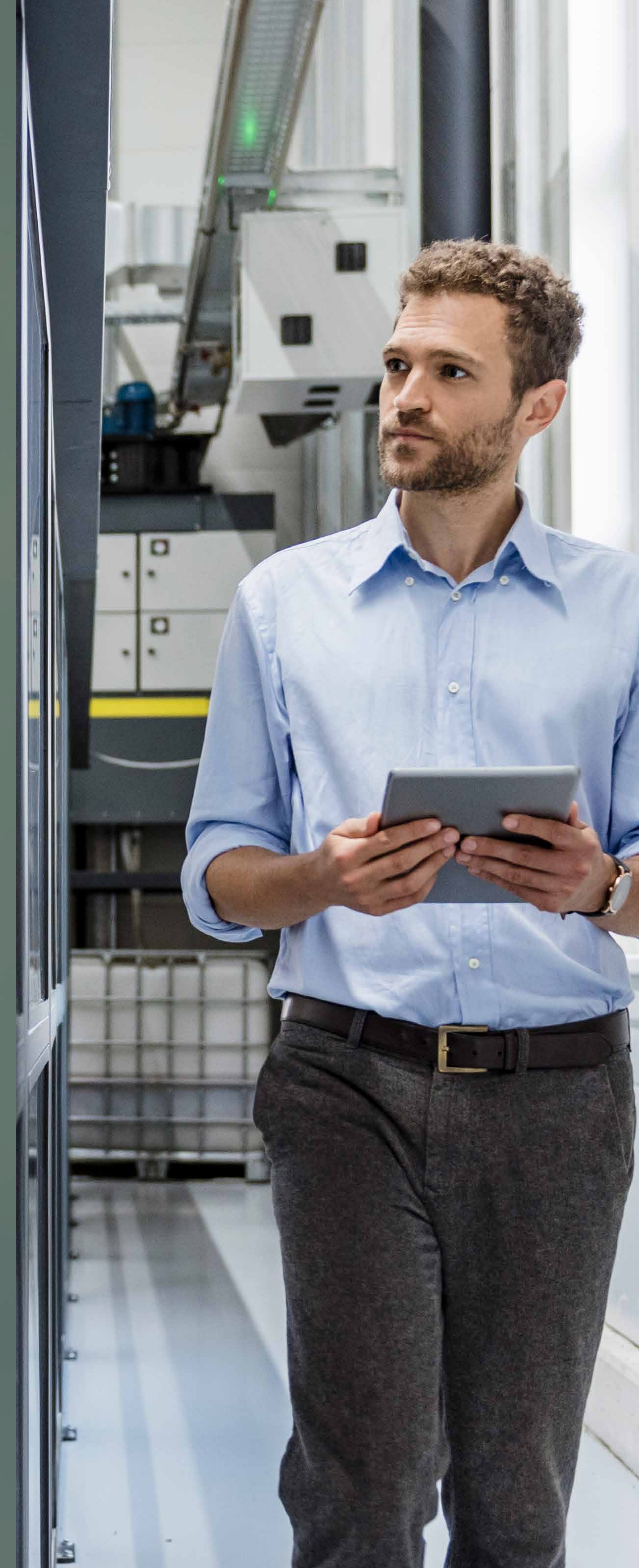
Human rights are also intricately linked to climate change. Rising global temperatures, extreme weather events, rising sea levels, and environmental degradation disproportionately impact vulnerable populations, exacerbating inequalities and social injustices. What's more, climate change induced displacement leads to challenges to the rights of migrants.

Sustainable and equitable climate action is therefore essential for safeguarding the wellbeing and dignity of all individuals and communities. As such, we view our collaborative efforts around climate action and global health as a shared contribution towards the protection of human rights.



References

Looking at the data and compliance



Supporting the UN Global Compact

Zühlke is a participant of the United Nations Global Compact, a voluntary initiative based on CEO commitments towards sustainability and social responsibility. Over 17,000 organisations from 160+ countries are aligning strategies and operations with the Ten Principles on human rights, labour, environment, and anti-corruption.

As a participant, we annually reconfirm our support of the Ten Principles and publish communications on progress, which showcase our policies and metrics. These are available in digital format via our UN Global Compact organisation profile.

In this report, we provide further information on each of the four focus areas of the Global Compact:

- **Human rights:** our commitments are outlined in the report section on human rights and fair collaboration, one of our material topics. The Global Compact includes digital security and privacy in this area.
- **Labour:** we provide information on employee health and well-being, as well as employee learning and development.
- **Environment:** in our client projects, we support the environment through our offerings for circular solutions and green infrastructure. We also report on the status of our own decarbonisation.
- **Anti-corruption:** our approach and activities are described in the section on business ethics.

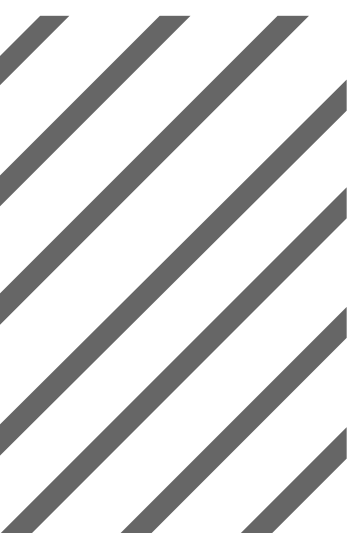
In the introduction of this report we outline our focus on the UN Sustainable Development Goals 3 (Global health and well-being) and 13 (Climate action).

In 2022, we intensified our collaboration with the Global Compact Network Switzerland and Liechtenstein. For example, we participated in the Swiss Triple Impact programme to measure our contributions to the UN Sustainable Development Goals, and we shared our perspectives and learning in several joint events including Tech for Sustainability.



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 2022.
	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.
		17 locations in 10 countries
		Facts and figures
2-2	Entities included in the organisation's sustainability reporting	Zühlke Engineering AG Zühlke Engineering GmbH Zuhlke Engineering Ltd Zühlke Engineering (Austria) GmbH Zuhlke Engineering d.o.o. Zuhlke Engineering EOOD Zühlke Engineering, Unipessoal, Lda. Zuhlke Engineering Hong Kong Ltd Zuhlke Engineering Pte Ltd Singapore Zuehlke Engineering Vietnam LLC. Zühlke Ventures AG
2-3	Reporting period, frequency and contact point	This report published in August 2023 covers the period from 1 January to 31 December 2022, 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	We standardised our carbon accounting approach and adjusted the 2021 emissions data (GRI 305) in line with our recalculation policy, decreasing these by 13%
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 1900 employees at the end of 2022, of which 25% were women.
		We offer flexible employment models and 22% of our employees work part-time.
2-8	Workers who are not employees	Our workers who are not employees include freelancers, interns, working students, apprentices, and self employed experts. In 2022 these totalled 135 people.
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 and Supplier Code of Conduct
2-16	Communication of critical concerns	Critical concerns may be filed anonymously via our Integrity Line, as well as via email. The number of incidents reported for the reporting year via the Integrity Line was 0, and via email, 5.

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 2022 was 3.01 - down 12.8% from the previous year. 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 has rolled out a new process to provide a formal anonymous whistleblower and grievance mechanism which is detailed in our Code of Conduct.
2-26	Mechanism for seeking advice and raising concern	Zühlke has rolled out a new process to provide a formal anonymous whistleblower and grievance mechanism which is detailed in our Code of Conduct.
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 materiality matrix
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.
Diversity, equity & inclusion		
3-3	Management of material topics	Diversity, equity & inclusion
GRI 405	Diversity and equal opportunities 2016	
405-1	Diversity of governance bodies and employees	25% of our employees are women. We do not yet collect international data regarding age distribution.
		In the reporting period, 2 of 8 group executive members were women, and no women were on the board of directors.
405-2	Ratio of basic salary and remuneration of women to men	Work to accurately calculate a salary ratio for equal pay for equal work continues and we can not yet report figures until the methodology has been finalised.
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)	260 t CO ₂ e (up from 228 t in 2021)
305-2	Energy indirect GHG emissions (Scope 2, market-based)	1188 t CO ₂ e (down from 1291 t in 2021)
305-3	Other indirect GHG emissions (Scope 3)	7041 t CO ₂ e (up from 4493 t in 2021)
305-4	GHG emissions intensity	4.4 t CO ₂ e per employee (including all scopes)

ID	Description	Disclosure
305-5	Reduction of GHG emissions	Total emissions have risen by 41% against our 2021 baseline, due to business growth, increased activities after the pandemic, and long lead times for reduction measures. Scope 1+2 emissions have decreased by 5%.
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 & wellbeing		
3-3	Management of material topics	Employee health & wellbeing
Employee learning & development		
3-3	Management of material topics	Employee learning & development
GRI 404	Training and education 2016	
404-1	Average hours of training per year per employee	100.1 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 infrastructure		
3-3	Management of material topics	Green infrastructure
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

Zühlke is a global innovation and transformation partner. We turn big opportunities into working solutions that deliver on-going value. For people, planet, and profit.

A holistic growth partner to our clients, we close the gaps between strategic ambition, tech implementation, and operational excellence, helping organisations thrive in a business environment that's fluid, data-led, and collaborative.

Together with clients and partners, our multidisciplinary teams deliver innovation and transformation initiatives in complex and regulated industries and ecosystems.

Zühlke was founded in Switzerland and is a global team of 1,900 colleagues, with 17 locations in Europe and Asia.

Contact us

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

Media enquiries:
corporateresponsibility@zuehlke.com

© 2023 Zühlke, all rights reserved

This report was a collaborative effort. Many thanks to all the Zühlke colleagues, clients, and partners who played a part in its creation.

Image sources: Getty image: cover page, p.7, p.9, p.10, p.12, p.14, p.15, p.16, p.20, p.22, p.23, p.24, p.25, p.26, p.32, p.38, p.40, p.41, p.43, p.46, p.48, p.49, p.50 | Zühlke/private: p.2, p.3, p.4, p.13, p.18, p.19, p.27, p.30, p.31, p.33, p.35, p.36, p.37, p.42, p.44, p.47, p.50 | Sensirion: p.17 | Siima Solutions: p.21 | Graphics & logos: Zühlke: p.5, p.8, p.9, p.27, p.28, p.29 | United Nations: p.6 | UN global compact: p.51