

kemira

ANNUAL REVIEW

Everything We Do Starts with
Chemistry with a Purpose

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Annual Review 2023



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Chemistry is everywhere, intertwined with our daily lives. It's the science behind countless essential products and processes, from the water we drink to the packaging we use for food. With over 100 years of experience, we collaborate with municipal water utilities, pulp, paper, board and tissue producers, and companies in the energy sector to deliver visible results through our invisible enabler – the chemistry expertise of our 5,000 employees.

Kemira has a long and proud heritage. Our unique expertise in chemistry - accumulated throughout our history, combined with digital services - is helping to answer some of the world's biggest challenges, particularly related to water scarcity, and the use of natural resources.

Together with our partners and customers, we aim to enhance the well-being of individuals, support thriving businesses, and safeguard the environment and our most precious natural resources. We believe that chemistry, when responsibly applied, holds the key to achieving these goals. Kemira exists to make this belief a reality.

Welcome to Kemira's 2023 Annual Review, where you can find out exactly how we are applying Chemistry with Purpose to make our world better every day.

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Interim CEO Review

Petri Castrén:

How do you look back on the year 2023?

As I reflect on 2023, our journey has been one of resilience and agility in a dynamic global market. Our financial results speak volumes about Kemira's robust business model and our excellent team. Both our employee engagement and our customer satisfaction reached all time highs. It was also a year of profound loss with the passing of our long-serving President & CEO, Jari Rosendal. His vision and leadership were instrumental in shaping Kemira into what it is today. We honor his legacy and continue to execute our sustainable profitable growth strategy.

What were the highlights of 2023?

Our strong performance continued in 2023. Our operative EBITDA reached an all-time-high EUR 667 million and relative profitability was also at a record high of 19.7%. This is truly a remarkable achievement amidst difficult market conditions and declining demand, especially in the Pulp & Paper markets. The Industry & Water segment performed very well and proved resilient throughout 2023.

In 2023, we truly shifted our focus to sustainable, profitable growth. We updated and simplified our strategic priorities which are: 1) Expand in water; 2) build a leading renewables portfolio and 3) create a significant digital services business.

We already had several proof points for these initiatives during 2023, such as the growth of our biomass-balanced polymers, the new PHA barrier solutions, Kemira and

IFF's partnership expansion in renewable materials and new collaborations on phosphorus removal technology to mention a few. The strategic review that led to the announcement of the divestment of our Oil & Gas business was a major effort in 2023. The deal closed in the beginning of February 2024. It clarifies our focus on sustainability and our strategic priorities. It also strengthens our ability to look for growth within our strategic priority areas and to explore new growth opportunities.

We also continued to focus on our sustainability efforts and are pleased to be recognized with The Ecovadis platinum level rating. Being within the top 1% of the companies rated worldwide is a major recognition which we work very hard to uphold going forward.

Personally, it has been an interesting learning year, as I took over the Interim CEO position in July and continued my CFO role at the same time. I'm grateful for the trust that the Board has placed in me and for all the support from the global Kemira team.

What are the expectations for 2024 and beyond?

Starting on February 12th, Kemira's new President and CEO Antti Salminen has taken over to steer the Kemira team forward on our growth journey. Looking ahead, our focus is clear: we will continue to accelerate Kemira's sustainability transformation and profitable growth to the next level together.

Jari Rosendal In Memoriam

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Kemira's long-standing President and CEO Jari Rosendal passed away unexpectedly on July 31, 2023 after a short illness. He joined Kemira in 2014 with an assignment from the Board of Directors to improve Kemira's profitability and operations, a task he took forward with his leadership team and the whole Kemira organization with vigour and expertise. After years of strategic process improvement, a much stronger foundation was built in Kemira. He didn't want to take the credit for this, but rather liked to emphasize that all of these operational and financial achievements were thanks to great Kemira team work and the ability to overcome any challenges that the markets and the world presented. He was able to build a trusting relationship with the organization, and employee engagement improved significantly during his time as the CEO.

Jari Rosendal was also well known for his active role in the chemical industry beyond his role in Kemira. He was a Member of the Board of Directors of Neste Oyj, the Finnish Chemical Association, and the

European Chemical Industry Council Cefic. In Finland, he served as a member of the Confederation of Finnish Industries Executive Committee in 2017–18. Additionally, he was a board member of Vuorimiesyhdistys, dedicated to the mining industry, for eight years, including three years as chairman. In 2020 he was granted an honorary title of "Vuorineuvos" by the President of Finland.

As important as the financial performance of the company was to him, closest to his heart was the health, safety and wellbeing of every Kemira employee, contractor and partner, every day. His relentless safety focus helped improve Kemira's overall safety performance during his time as the President & CEO, and this carries forward to the future as a key focus area for Kemira.

He is greatly missed by all of us at Kemira and by our other stakeholders around the world.



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EUROPE, MIDDLE EAST AND AFRICA



Kemira HQ
Helsinki, Finland
R&D
Espoo, Finland

Revenue
1,620.0
million EUR

48%

Employees
2,499

AMERICAS



Regional HQ
R&D
Atlanta, USA

Revenue
1,458.8
million EUR

43%

Employees
1,484

ASIA PACIFIC



Regional HQ
R&D
Shanghai, China

Revenue
304.9
million EUR

9%

Employees
932

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KEY INPUTS

Our people

- Competence and skills of 4,915 employees representing 62 nationalities

Natural resources

- Out of the total 2.52 million tons of used raw materials, 44% consists of recycled materials, while 3% is derived from renewable sources
- 4,082 GWh purchased energy of which 71% is emission-free
- Water consumption 5.2 million m³

Collaboration with stakeholders

- Key relationships with customers, suppliers, contractors, distributors and agents, and industrial partners for secondary raw materials

Financials

- Equity: 1,684.2 MEUR
- Interest bearing liabilities 937.8 MEUR
- Cash: 402.5 MEUR

Intellectual property

- 2,041 granted patents
- Brand and reputation



PULP & PAPER



A purpose-driven inclusive culture

- Our principles: Focus on Growth, Collaborate to Succeed, Deliver Value



Responsible operations and supply chain

- Safety of people, products, processes and environment
- Science-based climate targets and carbon neutrality by 2045
- Sustainable supply chain and sourcing
- Sustainability integrated into company processes



Innovation

- Dedicated forward-looking R&D
- 22 new product and concept launches
- 31% of our research is in renewable solutions



Global operations

- 60 manufacturing sites
- 118 ship-to countries

INDUSTRY & WATER

KEY OUTPUTS & OUTCOMES

Our value-creating solutions

- Functional and safe products
- Efficient and compliant production processes
- Advanced digital technologies

Serving clients particularly in

- Pulp
- Packaging, board, and tissue
- Printing and writing

Products and solutions

- Revenue from renewable solutions about 226 MEUR
- 59% of our products improve customers' resource efficiency

Our value-creating solutions

- Clean, safe, and affordable drinking water
- Efficient water processing, wastewater treatment and reuse
- Advanced digital technologies

Serving clients particularly in

- Municipalities
- Water-intensive industries

Stakeholders, society

- Customer satisfaction: NPS 57
- Collaboration with key business development and innovation partners
- Recognition for our contribution to better societies and environment by external parties, such as CDP, EcoVadis and MSCI
- Job opportunities, and partnerships for local communities
- Employee engagement, competencies, and strong leadership for future growth
- Collaboration with universities and research institutions

Environment

- Emissions reductions from our own operations and our purchased energy: 33% compared to 2018.
- 20B m³ of water treated with the help of Kemira chemistry, which is comparable to the annual water consumption of approximately 370 million people

Sustainable growth

- Revenue from customers 3,383.7 MEUR
- EBIT 336.4 MEUR
- Wages and benefits paid 433 MEUR
- Income taxes paid 91 MEUR
- 103.5 MEUR dividends paid to shareholders

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In 2023, Kemira redefined its strategic priorities, reaffirming our goal of achieving sustainability transformation to drive profitable growth. Explore more through 3 key questions posed to Linus Hildebrandt, Kemira's EVP of Strategy.

Q1: Kemira launched its redefined strategic priorities in August 2023. What are these, and why were they chosen?

We focus on three priorities: expanding in the water sector, building a leading portfolio of renewable solutions, and establishing a significant digital services business. These priorities stem from our commitment to both sustainability and our growth mindset, aligning with our long-term strategy of "sustainability transformation driving profitable growth".

Through this, we can better serve our customers with the sustainable solutions they need, create value for our investors, provide opportunities to our employees, and develop innovative solutions that benefit society.

Q2: How will Kemira lead this transformation in sustainability, driving profitable growth?

To lead this transformation, we must efficiently execute these three growth priorities, capitalizing on our solid foundations and robust existing business. Our focus includes identifying growth opportunities within our current business, developing new prospects, and exploring mergers and acquisitions. Additionally, a reliable supply chain and an adherence to high quality are important.

Our Growth Accelerator unit — alongside business segments — will continue to drive Kemira's long-term growth. We will accelerate the commercialization of new and unique renewable materials in our current markets and create opportunities in new adjacent markets.

Q3: How do Kemira's sustainability and purpose-driven initiatives contribute to achieving growth?

Our dedication to sustainability and purpose is a key driver of our growth. We have integrated sustainability into our strategy and actively leverage our expertise to identify renewable solutions, contributing meaningfully to addressing global challenges such as water scarcity and climate change.

Today, we see a growing number of companies demonstrating that achieving financial success can align with having a positive impact on the world. This intersection is destined to gain even greater significance. Our purpose, 'Chemistry with a purpose. Better every day', clearly defines our reason for existing. With our science-based solutions and talented people, we have generated a robust momentum for growth, creating value for our stakeholders.



"We are in good shape with a lot of opportunities. Kemira's growth mindset, combined with our clear vision and strong execution plan, makes us change-makers in leading the sustainability transformation"

Linus Hildebrandt

EVP, Strategy

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Kemira appoints Antti Salminen President and CEO as of February 12, 2024

Antti Salminen has had several prior leadership positions at Kemira, latest as President, Pulp & Paper segment and before that President, Industry & Water segment. He has been a member of Kemira's Management Board since 2011.

Kemira at the 2023 UN Water Conference

In March, a Kemira delegation participated in the 2023 UN Water Conference in New York to discuss future water management with partners, contributing to global efforts to address water challenges.

Kemira announced the divestment of its oil & gas portfolio

The transaction enables us to focus on sustainability and our strategic priorities, including expanding in water, building a leading renewables portfolio, advancing digital services business, and accelerating our profitable growth strategy.

Breaking ground on the EriCa Chemistry Park in Finland

The groundbreaking ceremony for EriCa Green Chemistry Park in Finnoo, Finland took place in October, marking the future home of Kemira's R&D center.

Kemira announced a significant capacity extension in Goole, UK

The additional 70 000 tons capacity investment helps meet the growing demand for coagulants due to new and stricter regulations. The new capacity is planned to be in operation in Q3 2025.

Developing new PHA barrier solutions for sustainable packaging

In 2023, we continued to be partnered with Danimer Scientific to co-create a 100% renewable PHA dispersion barrier coating for food packaging.

Speeding up the renewable shift with biomass-balanced polymers

Kemira incorporates the biomass balance approach into its production system. In 2023, our customers such as the city of Barcelona were already using it in their water treatment operations.

Kemira joins UN Global Compact Forward Faster Initiative

Kemira is committed to building water resilience through its participation. This aligns with its earlier involvement in the Open Call on Business Leaders to Accelerate Water Action, initiated during the UN Water Conference in March 2023.

Kemira and IFF partnership expands to production of renewable materials

This is a major step in our growth strategy implementation and our journey building the leading renewable materials portfolio for our customers.

Kemira achieves EcoVadis Platinum level for the third consecutive year

Kemira remains among the top 1% of companies rated worldwide, with a score increase of 2 points to 80/100.

Kemira and Metsä Group to accelerate sustainability cooperation

We have a joint mission to develop a new sustainable product or raw material related to the forest industry by 2027. This strengthens collaboration with key industry players to support our strategic goals and enhance the overall sustainability of the value chain.

Collaborating in award-winning phosphorus recovery technology

Kemira and Royal HaskoningDHV have agreed to further develop Kemira's VivMag® phosphorus recovery technology by conducting further research, including a pilot and demonstration project in the Netherlands.

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Climate change, water scarcity, and the responsible use of limited resources to meet the needs of a growing global population are some of the defining challenges of our times.

At Kemira, employees across our business segments work daily to develop and deliver innovative solutions and products to answer these questions, together with our partners and customers.

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PULP AND PAPER

Cellulosic fiber, the renewable and abundant raw material, plays a key role in the circular economy. With our chemistry know-how, we enable a wide range of traditional and new end products, from recyclable paper and board packaging and tissue products to textiles. We help our customers achieve resource-efficient and compliant production processes and functional and safe end products.

REVENUE BY PULP & PAPER CUSTOMER TYPE

Printing and writing

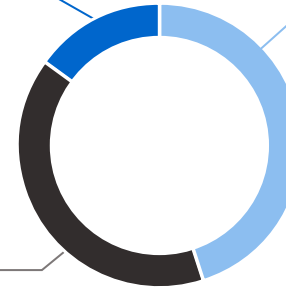
15%
(2022: 15%)

Packaging, board and tissue

45%
(2022: 40%)

Pulp

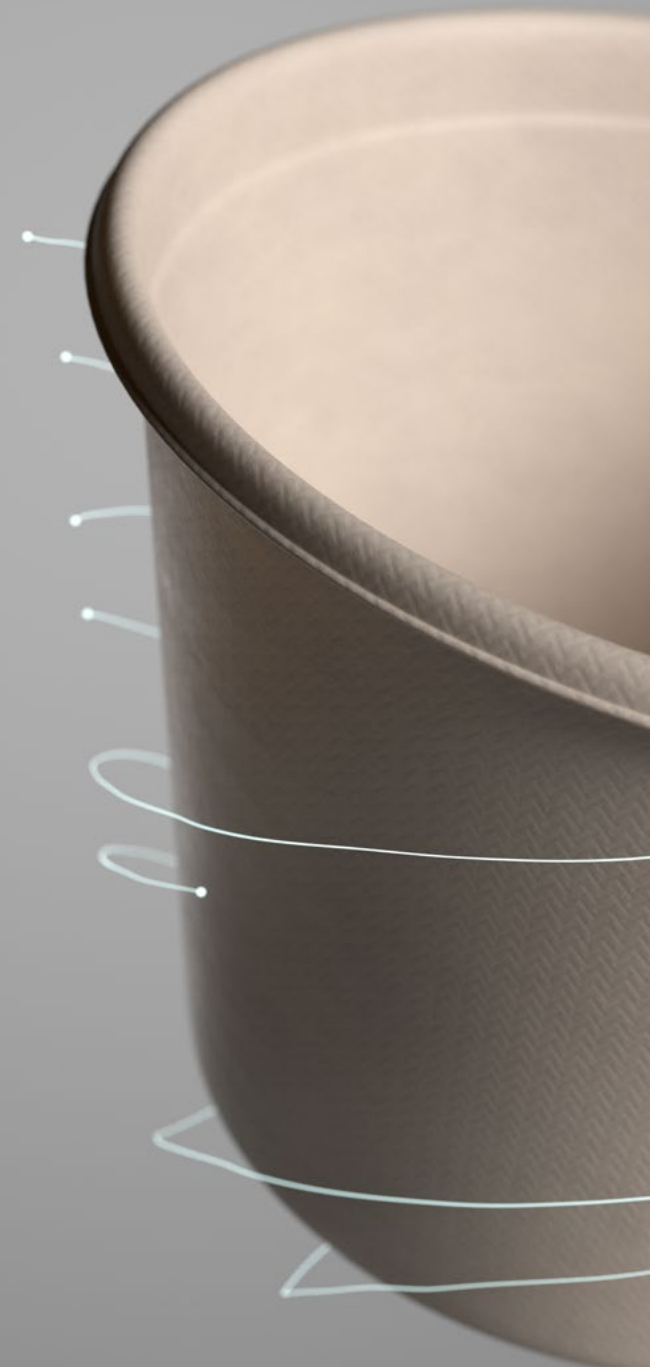
40%
(2022: 45%)



“Kemira brings essential expertise to enable industry value chains to fully harness the potential of renewable cellulose fibers. We are co-developing novel solutions to answer the growing demand for a circular, fiber-based economy, working together with our customers.”

Antti Salminen

President, Pulp & Paper segment



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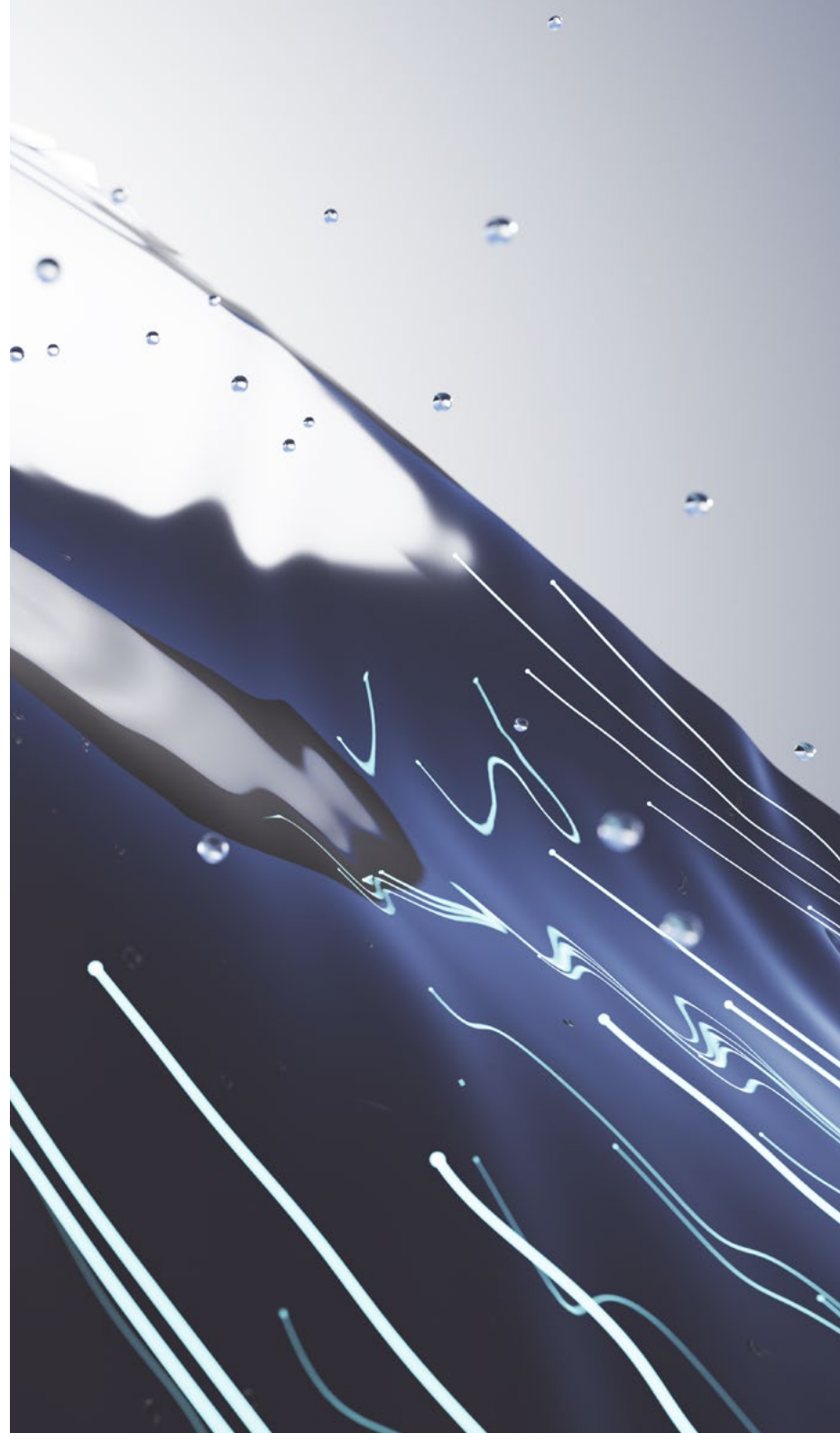
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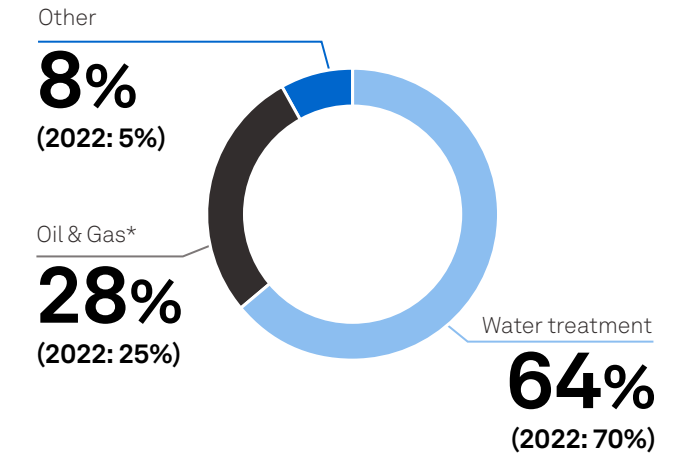
Sustainability at Kemira



INDUSTRY AND WATER

While addressing global megatrends like climate change, population growth, resource scarcity, and grappling with escalating costs and supply-chain insecurities, municipal water and wastewater treatment plants must also adhere to increasingly stringent regulatory requirements. Kemira offers a range of innovative solutions to optimize all stages of the water treatment process and reduce expenses for energy, labor and chemicals, while safely achieving water quality targets.

INDUSTRY & WATER APPLICATION SPLIT



* Kemira announced the divestments of its Oil & Gas portfolio in December 2023 and completed the divestment on February 2, 2024.



“We consistently deliver value to our customers in water treatment through reliable and sustainable solutions. We actively explore and develop technologies and applications to ensure our customers are also meeting future requirements with their water treatment.”

Tuija Pohjolainen-Hiltunen

President, Industry & Water segment

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CASE

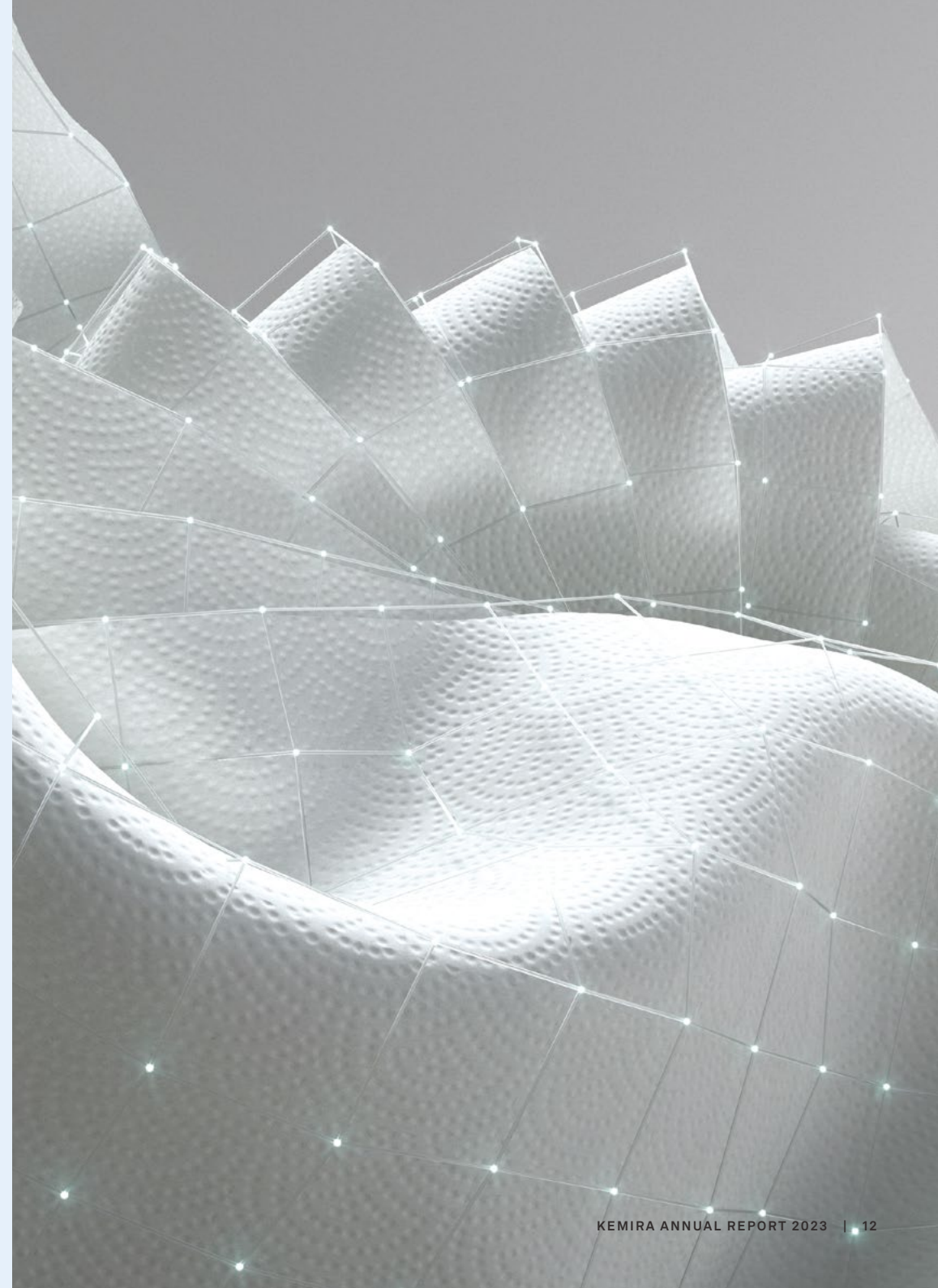
Papermaking in the Digital Age

In paper production, our customers face a critical challenge: how to make the production process more efficient and compliant. The papermaking process typically requires substantial water usage and energy resources.

As the global population continues to grow, so does the demand for packaging and tissue. To meet this demand while preserving our environment, Kemira's digital offering empowers customers across the industry to optimize production efficiency, quality and profitability.

In 2023, through the acquisition of SimAnalytics, with whom we have been collaborating since 2019, we offer a commercialized digital service, KemConnect™ Harmonizer. This service assists paper and board mills in running their production more efficiently, minimizing disruptions, and conserving raw materials, energy, and water.

It's not just about chemistry; it's about using data, predictive analytics, machine learning, and AI to take our expertise to the next level, and empower pulp, paper, board, and tissue producers to run more efficient processes. Together with customers, Kemira is setting the stage for a more efficient, sustainable, and successful papermaking process through digitalization.



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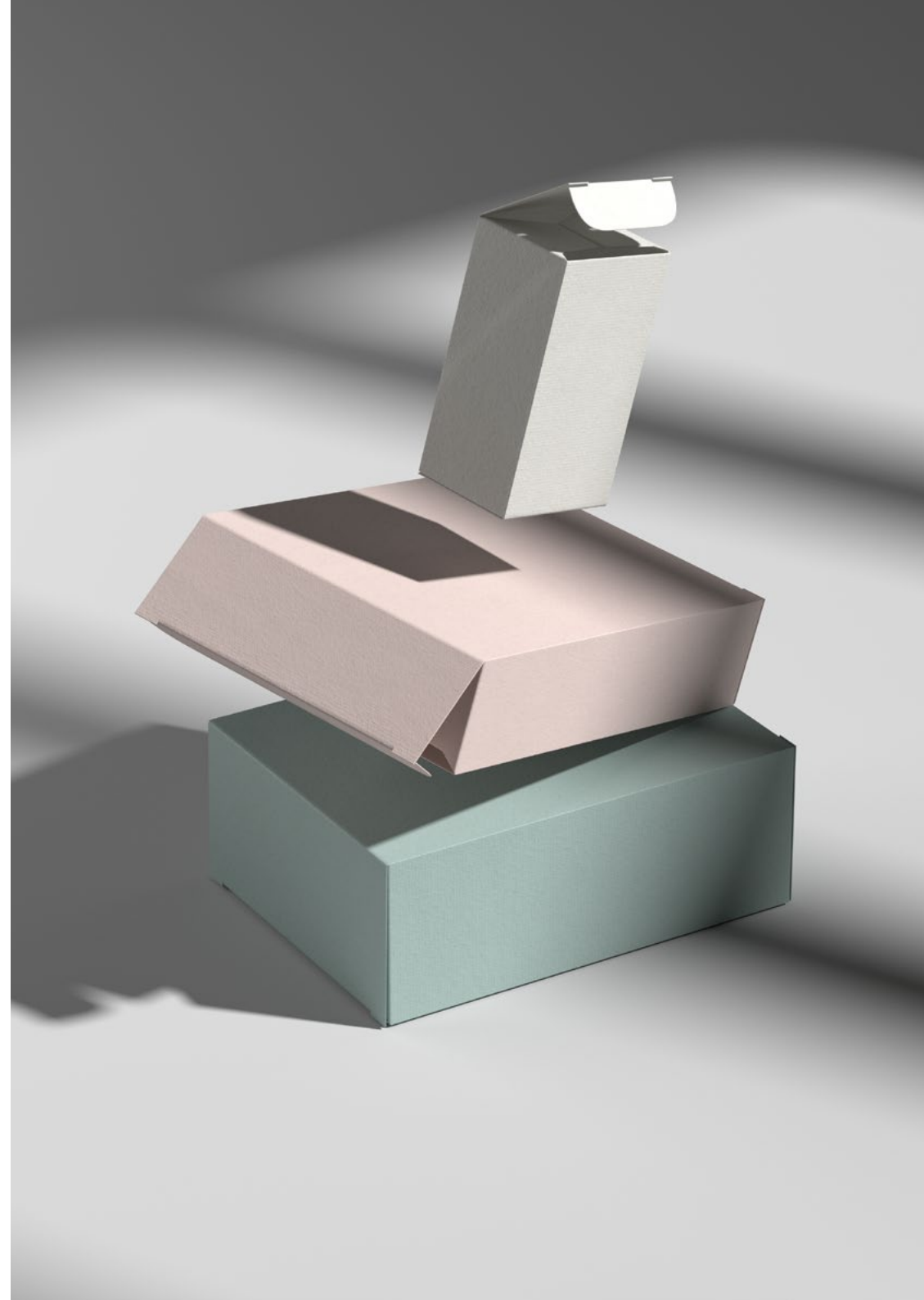
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A New Game Changer in Packaging

In today's more impact-conscious consumer landscape, brands need to find ways to align their packaging solutions with their sustainability commitments. As a result, the spotlight has turned to renewable, fully recyclable, and biodegradable fiber-based packaging. In this shift, renewable chemistry can provide innovative solutions that allow paper and board to achieve the properties they need to replace traditional plastic in packaging.

This is where chemistry steps in to bridge the gap. Kemira is pioneering the future of sustainable packaging with its groundbreaking renewable barrier technology. Teaming up with Danimer Scientific, we're developing a 100% renewable barrier for paper and board packaging. By harnessing advanced biotechnology to derive PHA - an innovative alternative to traditional, non-renewable plastics from vegetable oils, we've created a fully biodegradable, compostable, and food-safe solution.

This is a game changer, because it offers a sustainable alternative to conventional, petroleum-based plastic lining in packaging, or other harmful compounds often used to create properties against water and grease. These attributes further enhance the sustainability of the material and enable brands to provide products that contribute to a circular economy and reduce the impact of plastic waste on the environment.

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CASE

Going Circular: Turning Wastewater to Fertilizer

Wastewater is not waste; it is a source of energy, clean water, fertilizers, and essential nutrients. Harnessing these valuable elements from wastewater can play a pivotal role in advancing the Sustainable Development Goals (SDGs), supporting global sustainability efforts, and promoting a more environmentally responsible and resource-efficient future.

Only 11 percent of treated wastewater is reused, while around half of the world's untreated wastewater still enters rivers, lakes, and seas, according to the latest report by UNEP in 2023. This poses a significant environmental challenge, including eutrophication and overfertilization of water bodies, the latter of which can occur when phosphorus is not properly removed. On the other hand, as a nutrient, phosphorus is a critical resource, required for agricultural fertilization as well as in various industrial process applications.

Kemira and Veolia have joined forces to test the Kemira-owned patented technology ViviMag®, to remove phosphorus from wastewater and turn it into fertilizer, thus contributing to a circular economy.

Our pilot trial in Schönebeck, Germany, launched in 2022, marked a pivotal moment in our and Veolia's commitment to providing sustainable and circular solutions. With ViviMag®, we aim to support Europe's ambition for raw material independence, while mitigating the environmental impact of phosphorus in wastewater. This innovative partnership underlines our shared dedication to advancing sustainable water treatment solutions.



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CASE

Partnering for Sustainable Wastewater Transformation in Copenhagen

In wastewater management, BIOFOS stands as Denmark's largest wastewater treatment company, serving 1.2 million people across three treatment plants. Their commitment to sustainability and carbon neutrality led them to seek innovative solutions in partnership with Kemira. The challenge was clear – to reduce their carbon footprint, they had to tackle nitrous oxide emissions, a potent greenhouse gas.

Working closely with Kemira, BIOFOS implemented changes such as adjusting their aeration levels and varying bacterial action to reduce nitrous oxide emissions. These efforts, along with an advanced chemical solution for grease management, have not only reduced emissions but also optimized biogas production, turning wastewater sludge into a valuable source of energy.

BIOFOS is also working with Kemira's KemConnect™ to improve real-time data collection and measurement for stable operations, reducing energy costs, and ultimately offering residents of Copenhagen the treated water they need at a lower cost to themselves and to the planet.

"Our relationship with Kemira is not a supplier-consumer relationship, but rather a partnership built on trust and a shared desire to do better," says Rasmus Spange, Head of Production, BIOFOS. This collaboration showcases how partnerships built on trust, transparency, and a shared commitment to environmental sustainability can drive meaningful change in wastewater management, making it more efficient and greener for the community.

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CASE

The Future of Fashion: Paving the Way for Sustainable Textiles

The textile industry faces major sustainability challenges that it needs to tackle without delay. The first of these concerns waste: an estimated 92 million tonnes of textile waste are created each year globally. Second, new alternatives are urgently needed to replace fossil-based synthetic fibers like polyester, as well as resource-intensive materials like virgin cotton. With a focus on renewable cellulosic fibers and textile recycling, we're leveraging our chemistry expertise to help the industry's transition, achieving the circularity it needs to see.

Developing renewable chemicals plays a crucial role in fostering textile sustainability. With our deep knowledge of cellulose modification, stemming from our background in pulp and paper, we help our customers develop sustainable and scalable textile fibers for the fashion industry. The use of chemicals in the textile industry requires a deep understanding of safety and sustainability, as insufficient regulation and oversight could lead to pollution. Our experience in chemical safety and compliance allows us to help companies entering the field to operate sustainably.

Textile recycling is gaining significant momentum, with chemistry playing a central role: it helps to break down the materials, ensures purity, and allows us to create properties that are needed for the fibers to be reused in various applications. As regulations push for enhanced textile waste collection, chemistry offers a feasible path to circularity.

Our impact also extends to nonwoven fabrics, providing renewable alternatives for wipes, towels, and filters made with cellulose fibers. For these essential everyday items, chemistry can ensure durability and biodegradability.



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CASE

Driving a Needed Shift to Renewable Polymers

Climate action can't wait – we need to reduce our reliance on fossil carbon, starting today. Kemira is using the biomass balance approach as a concrete step to increase the use of renewable raw materials in the production of polymers.

These polymers have applications in municipal and industrial wastewater treatment, drinking water treatment, papermaking processes, and mining. Kemira became the first company in the world to start full-scale production of water-soluble biomass balanced polyacrylamides (PAMs) back in 2021.

In 2023, we progressed further. Our customers—such as the city of Barcelona—are already pivoting from fossil-based raw materials and reducing their impact on the environment in their own water treatment operations. The biomass balance approach facilitates a reduction in fossil carbon utilization throughout the value chain, all while offering an identical chemical profile to conventional polymers. This ensures high performance without necessitating process adjustments, enabling a more seamless transition.

Our biomass-balanced products and sites are certified by the International Sustainability & Carbon Certification (ISCC), a widely acknowledged, global sustainability certification system. With expansion plans in-place and a diverse range of biomass balanced products already available, combined with significantly lower carbon footprints, we are committed to putting our chemistry innovation into action to empower a more sustainable chemicals industry.

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Sustainability at Kemira

Sustainability matters. It is the common thread that runs through everything we do at Kemira, for our people and planet.

At Kemira, our strategy is aligned with building a better future. Purposeful chemistry can be harnessed, together with digitalization to help solve the most pressing challenges of our time, including climate change, building water resilience in our societies, developing circular solutions, and utilizing our ever-scarcer natural resources in the most efficient way. Besides pushing for new opportunities, we will continue to be the responsible partner for our stakeholders. By collaborating, we can make our world better, every day.

KEMIRA'S SUSTAINABILITY PERFORMANCE KEY FIGURES 2023

71%

of global energy use is emission-free

59%

of our products improve customer resource efficiency

47%

of used raw materials are renewable or recycled

20Bm³

20Bm³ of water treated with the help of Kemira chemistry, which is comparable to the annual water consumption of approximately 370 million people



A Closer Look at Sustainability

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Our shared global ambition to build a sustainable world is articulated in the UN Sustainable Development Goals (SDGs), and we focus on the four SDGs where Kemira can make the most significant impact: 6, 8, 12, and 13.

We prioritize five key sustainability themes — safety, people, water, circularity, and climate — that are most material to us, where we can make the biggest positive contributions across economic, social, and environmental dimensions.

Discover more about our impact in building a sustainable world, reflecting our purpose - Chemistry with a Purpose. Better Every Day.

OUR TARGETS AND PROGRESS:



Improving safety

Reduce our Total Recordable Injury Frequency (TRIF) rate across our sites to 1.5 by the end of 2025, and 1.1 by the end of 2030.



Fostering inclusivity

Reach top 10% cross industry norm for Diversity & Inclusion by the end of 2025



Leading water management

Achieve a Climate Disclosure Project (CDP) water security score for leadership of A or A- by the end of 2025.



Enhancing waste impacts

Reduce disposed production waste intensity by 15% by the end of 2030, from a 2019 baseline.



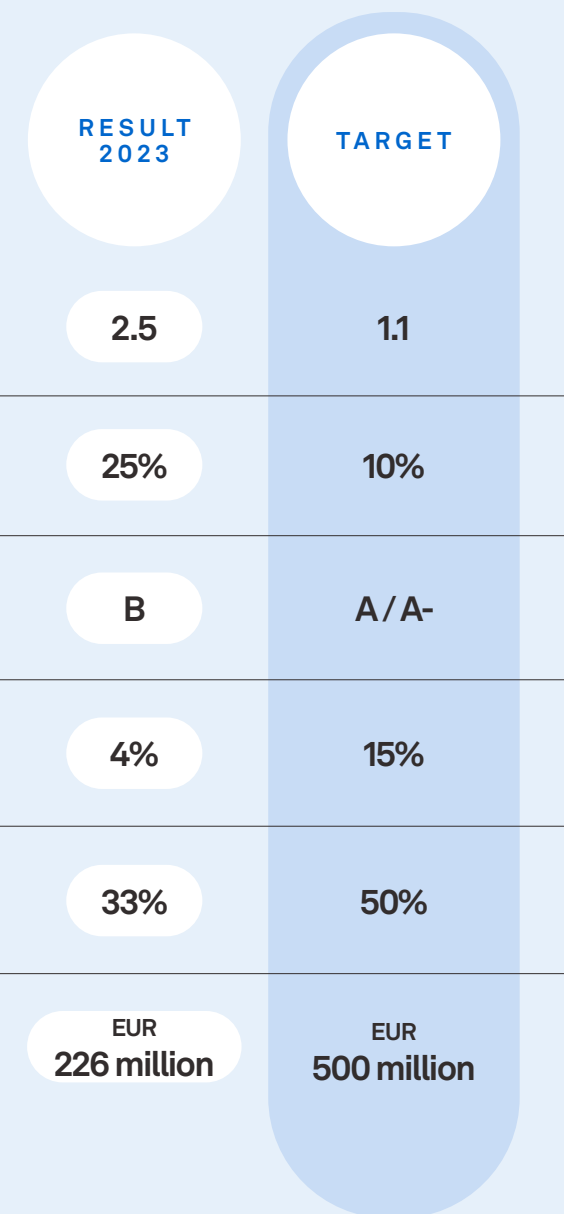
Reducing emissions

Reduce GHG emissions from Scope 1 and 2 by 50% by the end of 2030, from a 2018 baseline.



Expanding our sustainable offering

Derive more than EUR 500 million from renewable solutions by the end of 2030.



Safety Drives Everything We Do

At Kemira, safety is our highest priority. We ensure safe, responsible operations as well as the safe production and use of our products throughout their lifecycle. Our vision is to achieve zero harm to our employees, communities and the environment, deliver customer satisfaction, and meet ambitious sustainability and profitability targets.

We understand that the responsible management of our operations and products, from inception to utilization, is critical for the wellbeing of people and the environment. Our dedication to safety extends across our entire organization.

Every individual, at all levels of Kemira, plays a pivotal role in ensuring a safe environment. The strict application of our Life Saving Rules, with ongoing enhancements to our safety culture, ensure that every employee returns home safe and unharmed each day. In addition to People safety, our comprehensive initiatives extend to components such as Process, Transportation, Chemical, and Environmental safety. We proactively foster a shared safety culture, monitor metrics, and launch new initiatives to enhance overall safety performance.

In 2023, the total number of TRIs was 37, and TRIF was 2.5, covering both our own employees' and contractors' incidents, which

was above our annual target of 1.9. However, we are actively working to continually improve our TRIF to 1.5 by the end of 2025 and to 1.1 by the end of 2030. In the MySafety Pulse 2023, our employees' response to the statement 'I feel safe at my workplace' scored 88, showing an improvement of +2 compared to the same period 2020 and +7 compared to the manufacturing industry benchmark. We aim for zero incidents and are succeeding: in 2023 70% of our sites had zero incidents.

The ILO Safety Day 2023 marked a moment for us to celebrate safety as our priority and reflect on our success. This year's theme was "A safe and healthy working environment as a fundamental principle and right at work." By sharing our successes and experiences, we aim to foster a culture of behavioral safety: when each individual keeps safety in mind throughout their daily actions, we can better care for each other and instill safety into our organizational DNA.

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"We want to prevent incidents and accidents from happening, and good safety performance is tied to our metrics at all employment levels. It's not just a 'safety department' task; it's everyone's responsibility. We do this together, and by being vigilant, we can correct and continuously learn and improve our safety behaviors towards zero incidents."

Anne Helenius-Heir

VP, EHSQ, Kemira

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Fostering a Safety Culture at San Giorgio

At Kemira's San Giorgio site, management and employees collaboratively foster a safety culture based on awareness, shared responsibility, and trust.

The approach emphasizes individual engagement, with regular, tailored meetings for all site workers to reinforce their own role in keeping everyone safe, from robust

reporting to the proactive monitoring of risks. At the core of our safety culture is the belief that personal well-being and safety are inseparable. Through those efforts, we have achieved over 800 consecutive days without injuries.

Our safety approach also extends to the community around our plant, with stringent

processes ensuring we emit fewer than 90 kg of chemical pollutants per year out of the 120,000 tons we produce. At San Giorgio, our safety culture demonstrates that a safer workplace and community go hand in hand, and that we all have a role to play.

“Safe behavior is in the common interest of everyone, everywhere. When a site is safe, everything else runs more smoothly.”

Stefano Tapparelli

Site Manager, San Giorgio

Making Zero Incidents a Reality in Brazil

Kemira's Brazilian sites are making zero incidents a reality. Our Ortigueira plant has recently celebrated a full year without any safety incidents, and our site at Telêmaco Borba is on-track to reach 3 years incident-free. These milestones follow years-long declines in incident rates, driven by sustained campaigns to maintain awareness, enhance vigilance, and immerse external contractors in Kemira's safety culture.

These plants - which manufacture sodium chlorate and sizing agents - face safety

challenges stemming from a high prevalence of hazardous materials on-site.

Central to our approach is always keeping safety at the top of the minds of all personnel. Every workday begins with a safety meeting, and the Basic Behavior Safety (BBS) program engages employees through behavior observation and positive reinforcement, promoting a shared sense of responsibility for safety. Meanwhile, enhanced requirements for employees to report hazardous conditions and activities,

near misses, and incidents, as well as greater supervision and collaboration, empowers everyone on-site to adopt a zero-tolerance safety mindset.

Environmental safety efforts have also achieved results, with recent evaluations in 2023 showing zero ground contamination around our sites in Telêmaco Borba, even after 22 years of continuous operations.

“We don't tolerate even the tiniest injury and we know that zero incidents are always possible, and that it is our responsibility to aim for exactly that.”

Jose Luis Bezerra

Site Manager, Brazil

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A Decade of Safety Excellence at Nanjing

Opened in 2013, Kemira's plant in Nanjing, China employs over 100 people in the manufacture of chemicals for a wide range of special processes. In over a decade of operations, the site has only logged one single Total Recordable Incident (TRI), thanks to a comprehensive safety strategy that embodies the Kemira approach.

At the core of this strategy is people. Every day begins with a plant-wide safety briefing, while fortnightly inspections from the site management team keep everyone aware. External partners also play a key role, with agencies such as the Red Cross delivering first-aid training and updates every year.

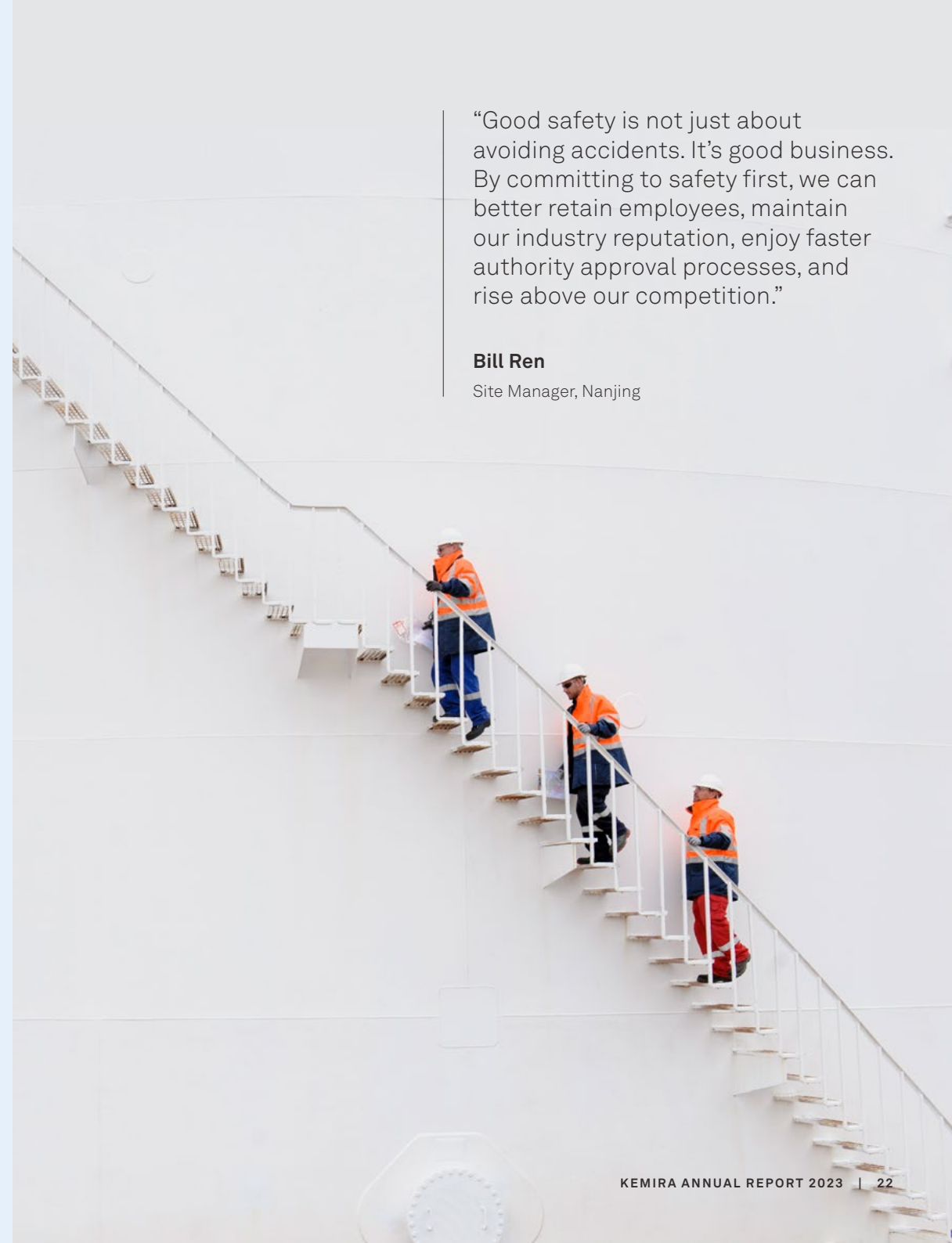
In 2023, a major target has been safe maintenance and maintaining safety during our ASA sizing agent expansion project. The Nanjing site rolled out a new e-permitting system during the year to ensure that all maintenance work on-site – no matter how minor – conforms to the highest process safety standards.

These efforts have not gone unnoticed. The site has received a number of external certificates and awards for its commitment to safety excellence in 2023, including accolades for leadership in fire safety, environmental safety, and safety management. For those at the Nanjing site, 2023 represents a decade of commitment to safety excellence, which is truly something to celebrate.

“Good safety is not just about avoiding accidents. It’s good business. By committing to safety first, we can better retain employees, maintain our industry reputation, enjoy faster authority approval processes, and rise above our competition.”

Bill Ren

Site Manager, Nanjing



Success Starts from our Workplace

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To make the world better every day, we start with our workplace. Our dedicated employees are the pillars of our success, and three fundamental principles guide everything we do: Focus on Growth, Collaborate to Succeed, and Deliver Value. These help us set the stage for our sustainability transformation and nurture a workplace where every individual can thrive.

Embracing diversity and fostering an inclusive environment not only drives innovation, but also enhances employee engagement, wellbeing, and satisfaction, contributing to our shared success and growth. In 2023, we continued to foster an environment where every individual feels valued, respected, and empowered, with equal opportunities for learning and development.

We have established a comprehensive framework to advance our commitment to diversity, equity, and inclusion (DEI). Our employee engagement has been consistently strong over the years, and 2023 is another year showing continued progress. In November 2023, the Kemira engagement score was 80, 6 points above the external manufacturing benchmark of 74.

Ensuring pay equity is one of our actions towards developing our diverse and inclusive workplace: our target is to reach the top 10%

of the cross-industry norm for diversity and inclusion by the end of 2025. In fact, we have reached the point where we have no unjustified pay differences due to gender. The remediation followed a pay gap analysis, where the baseline situation was already found to be good.

At Kemira, DEI has strong leadership support through the DEI program's executive ambassadors and champions, sponsored by the Management Board and Sustainability Steering Team. Our Employee Resource Group (ERG) is also actively helping to foster an inclusive workplace through various initiatives, such as hosting a webinar on psychological safety for all employees and engaging with external partners such as Workplace Pride for LGBTQIA+ employees. In 2023, we also launched the Inclusive Leaders project to enhance understanding of inclusive leadership and to build a training program providing employees and people managers with tools to foster inclusion in their leadership.

THIS YEAR

- Our Inclusion Index improved, reaching 78 vs Top 10% cross industry benchmark 80.
- In May, our Women's Network held a forum that drew 250 participants.
- In June, we also held the first face-to-face meeting for our Employee Resource groups - KemPride and Women's Network
- In November, Kemira was recognised by Workplace Pride with an Impact Allyship award 2023 for executive sponsorship for our LGBTQIA+ network.

- In 2023, we trained over 400 managers across 30 countries globally and conducted face-to-face diversity workshops for employees in 31 manufacturing sites.

Our employees are more than just colleagues; they are a community of individuals, united by a common purpose.



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The Kemira Women's Network

At Kemira, we are committed to gender equality and diverse and inclusive workplace. Our Women's Network - which took its first steps in 2022 and has since grown to include more than 130 women from across the organization - is specifically designed to provide a space for networking and self-development.

This network aims to connect women and provide them with the support and knowledge-sharing platform they need, all while creating a structured framework that facilitates balance between their professional and personal lives.

In 2024, we will introduce the WeMentor program, which offers women of all seniority levels opportunities for mentorship, personal growth, and career advancement. Enlisted male ambassadors will promote the Network and the WeMentor Program within our community, and we also work in close collaboration with KemPride – our LGBTQIA+ network – to ensure our joint efforts complement and enhance each other.

These initiatives form part of our Women's Network roadmap, and are a key part of our overarching purpose, creating a sense of inclusion, satisfaction, and empowerment among our employees.



“An inclusive, empowering environment is a competitive advantage. Our women-led initiatives are focused on building a stronger and more inclusive organization with a greater range of perspectives in a male-dominated industry, and on attracting and retaining our exceptional female talent”.

Maja Paradecka

Senior Manager,
Talent Development & Human Resources,
Lead of Kemira's Women's Network

Leveling Up Water Recycling

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At Kemira, we recognize the importance of clean water as a fundamental cornerstone of life. In a world facing the challenges of climate change and a growing population, ensuring access to this invaluable resource is integral to our Purpose. Over the past year, our solutions have helped to clean more than 20 billion m³ of water, while efforts within our own operations have ensured more water has been recycled or kept as unused freshwater than ever before.

We offer solutions to water-intensive industries that enable them to minimize and improve their water impacts. Through our products, they are empowered to both use less water and usher in processes to increase reuse and recycling. Recycling water, rather than drawing from freshwater sources, is part of our goal of enhancing water resilience wherever we operate. Kemira is committed to turning the tide for cleaner, more sustainable water management.

ENHANCING WATER RECYCLING IN OUR OWN OPERATIONS

Our dedication to water management extends beyond the water-intensive industries we serve. We uphold the same high standards for our own operations.

We collect re-use and recycling data from all our manufacturing sites around the globe. Our efforts include using closed

cooling water systems at most of our sites, optimizing process water recycling, and recycling water between neighboring operators at the industrial parks where most of our operations are located.

In 2023, Kemira contributed to water recycling in the industrial park in Shandong province China, where our Yanzhou and Tao sites are located. The Kemira wastewater treatment plant there has provided services to all companies in the park. The total water received was 103,839 m³, with 35,104 m³ recycled water to be reused in the park. We will continue helping the industrial park to achieve the goal for 2024 of reaching a 40% recycling rate.

We also implement site-specific measures such as recovering steam condensate as process water, recycling wastewater back to process, and recycling washing and flushing



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water. Through these efforts, we aim to reduce our freshwater withdrawal across our operations and drive a decline in impact on local water ecosystems.

DATA MAKES US BETTER

In 2023, we have stepped up our efforts to improve water balance accuracy, track water usage and recycling data, and map our water impacts across all sites, so that we can take informed, targeted actions to conserve and preserve.

We assess water related risks and opportunities at each Kemira plant and at a corporate level using scenario analysis. Our mapping and conservation efforts have been particularly targeted to sites located in water-stressed and water-scarce areas such as Shandong province in China and Catalonia in Spain, where the need to reduce our impact is at its most acute. By targeting these sites first and foremost, we have been able to direct our expertise to ensure possible impacts through continuous improvement.



"Water recycling is at the heart of Kemira's commitment to sustainable water management. It's not just about using less water; it's about mitigating risks, ensuring sufficient water for communities and our operations, and minimizing our environmental footprint."

Teemu Mattila

Manager, Environmental Safety, EHSQ

Empowering the Circular Economy through Sourcing

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The circular economy aims to change how we view things. How we make them, use them and ultimately dispose of them. It goes far beyond recycling. It requires fundamental changes to the way materials are sourced and products are designed, produced, sold, used and disposed of throughout the value chain.

At Kemira, we have unique opportunities to help shape a more circular world through the adoption of circular business practices across our own operations and value chain, empowering our customers to become more energy, resource, and water efficient.

In 2023, we continue our high focus on our own operations and value chain, to increase the share of renewable and recycled raw materials used across our production units. In 2023, 47% of used raw materials are renewable and recycled. 70-80% of the raw materials in our coagulants are already sourced from recycled materials, including other industries' sidestreams and by-products.

The sourcing of materials is essential to ensuring a circular economy, and this is where we are uniquely positioned to empower our customers. By increasing

the use of recycled, and renewable raw materials, co-developing new products with circular properties, and innovating in new ways to reduce waste, we drive circularity across the industries we work with. For instance, Kemira and IFF are working on developing more sustainable alternatives and in this instance, are collaborating to make renewable polymers from sugar. In December 2023, the two companies announced the next step towards the commercialization of the Designed Enzymatic Biomaterial ("DEB") platform, a cutting-edge biotechnology process that enables production of new renewable polymers with enzymatic polymerization. These renewable materials will become available at entry level industrial scale to drive market development and to provide supply to first-mover customers across markets.



"The circular economy is our toolbox to transform the raw materials base throughout our value chains to provide the renewable solutions industries need."

Jonas Ekelund

Sr Sourcing Manager,
Sustainability and Bio Raw Materials.

Central to these efforts is our renewable solutions portfolio, which offers concrete ways for our customers to incorporate a greater share of circular materials into their own processes. This portfolio is on-track to reach EUR 500 million in sales by 2030. In 2023, we have reached EUR 226 million, in collaboration with our business segments and supported by our Growth Accelerator unit. We will continue our efforts in 2024.

Meanwhile, our digital solutions – such as KemConnect™ – can optimize resource efficiency for customers to keep waste and

water use to an absolute minimum, offering significant cost and emissions savings while increasing water resilience.

By working with our customers and focusing our circular efforts on the sourcing of the materials we all need, Kemira is dedicated to securing the future availability of natural resources and unlocking more value from the limited resources we have.

Progressing Towards our Science-Based Targets

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We are actively addressing climate change not only within our own operations but also across our entire value chain, involving suppliers and customers. Our collaborative efforts have already reduced emissions by 33% from our base year, putting us ahead of schedule towards our target year.

We are committed to reducing emissions from our own operations by 50% (scope 1 and 2) by 2030 from a 2018 baseline, in line with the Science-Based Targets initiative (SBTi). Kemira is also committed to developing a quantified, near-term scope 3 target within the timeframe set by the Science-Based Targets initiative

framework. What do we mean and how do we make it possible?

POWERED BY EMISSION-FREE ENERGY

The sources of the energy (electricity, heat and steam) we use plays a major role in the



“We’ve been taking climate actions at Kemira and acknowledge the importance of aligning our climate agenda with the best science.”

Mark Wenclawiak
Manager, Environmental Safety, EHSQ



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climate impacts of our own operations, which is why Kemira is making concerted efforts to transition its production sites to emission-free energy. In 2023, approximately 71% of our energy in our own operations 2023 was emission-free. Our largest manufacturing site, located in Sweden, sources approximately 50% of its purchased electricity consumption from wind power. In Finland, our electricity supply continues to become more emission-free through the additional nuclear energy generation in the grid and the increasing integration of renewable electricity (wind and hydro) through sourcing agreements. Kemira is also currently evaluating 10 plants worldwide for potential solar power projects and in 2024, one target is to establish a 100% renewable electricity site in California.

MAKING ZERO-EMISSION COMMUTES MORE ACCESSIBLE

Although the transportation-related carbon footprint of Kemira's employees is a relatively minor component of our overall emissions, we want to make sure we can help our people make more sustainable choices in their own lives. This can be seen in the US, where in 2023 the State of California awarded Kemira a grant to lease and operate two battery electric trucks and charging infrastructure to better serve our customers. In addition, Kemira has been installing EV charging stations at its manufacturing sites, making it easier for our employees to switch to EVs. Currently, they are available in 10 of our sites in Canada, USA, Netherlands, China, Finland, and

Germany. We are actively exploring additional opportunities, including hydrogen and other alternative energy sources for our fleet vehicles in the upcoming years.

IMPROVING TRANSPARENCY FOR INFORMED CLIMATE ACTION

In 2023, Kemira's climate action journey has involved mitigating site-specific climate impacts and preparing for climate disclosure requirements, particularly in response to EU regulations like the European Sustainability Reporting Standards (ESRS).

Kemira has embarked on a significant project to model climate risk scenarios, which started with a limited number of manufacturing sites in 2022 and has expanded to encompass a broader range of locations in 2023. This project addresses both physical risks related to the impacts of climate change and transitional risks, including financial ones. Kemira engages in voluntary reporting through platforms such as Ecovadis and the Climate Disclosure Project (CDP), emphasizing transparency throughout the value chain.

IMPACTING SCOPE 3 THROUGH OUR SUPPLIER ENGAGEMENT PROGRAM

As scope 3 emissions account for 82% of our total emissions, in 2023 Kemira initiated an engagement program to enhance data collection and data quality from its suppliers. This project involves our Sourcing team

collaborating with suppliers to collect and review product carbon footprint data for the raw materials used in our manufacturing processes. This supplier-provided data ("primary data") will be used to improve the quality of our emissions estimates by reducing our reliance on published emission factors ("secondary data"), which include assumptions and characteristics that may not be as representative as the data obtained directly from our suppliers. We also actively collaborate with suppliers to develop solutions together, including developing new products made from recycled or renewable materials.

In the face of a disjointed approach from a diverse chemicals industry and inconsistent legislative approaches across different regions, Kemira sees a need for unified efforts and collaboration to collectively address climate

challenges. We aim to continue working with our industry and all relevant stakeholders to ensure effective, collective climate actions.

INCENTIVIZING BETTER INVESTMENT THROUGH OUR CARBON PRICE PROGRAM

Meeting our climate targets requires us to drive investment away from projects with a high carbon footprint and towards solutions with a positive climate impact. To encourage investments in low-carbon and carbon-free technologies, we use an internal carbon price (ICP) in valuations of key investment projects. Since June 2022, Kemira has increased its internal carbon price to 100€ per metric ton of CO₂ equivalent, in economic models underpinning investment cases valued at above 500k € to align with EU ETS pricing.



Kemira

KEMIRA is a global leader in sustainable chemical solutions for water-intensive industries. Our customers include industrial and municipal water treatment, and pulp & paper industry among others. We provide the best-suited products and services to improve our customers' product quality, process, and resource efficiency. Our focus is on water treatment, renewable solutions, and digital services. In 2023, Kemira had annual revenue of around EUR 3.4 billion and around 5,000 employees. Kemira shares are listed on the Nasdaq Helsinki Ltd.

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