



# Kemira's Capital Markets Day

LONDON STOCK EXCHANGE  
SEPTEMBER 13, 2022

kemira

# KEMIRA'S CAPITAL MARKETS DAY

LONDON STOCK EXCHANGE SEPTEMBER 13, 2022

## INDICATIVE AGENDA UK TIME:

<b>09.00</b>	Opening remarks: Mikko Pohjala, Head of Investor Relations	<b>10.35</b>	Coffee break
<b>09.05</b>	Strategy review by the President and CEO: Jari Rosendal	<b>10.50</b>	Industry & Water: Sergej Toews
<b>09.25</b>	Q&A*	<b>11.10</b>	Q&A*
<b>09.35</b>	R&D: Matthew Pixton	<b>11.20</b>	Petri Castrén, CFO
<b>09.55</b>	Q&A*	<b>11.40</b>	Q&A*
<b>10.05</b>	Pulp & Paper: Antti Salminen	<b>11.50</b>	CEO's conclusion
<b>10.25</b>	Q&A*	<b>11.55</b>	Final Q&A
		<b>~12.00</b>	End of the event

\*) Questions from webcast via chat tool



**Jari Rosendal**  
President and CEO



**Antti Salminen**  
President Pulp & Paper



**Matthew Pixton**  
CTO



**Sergej Toews**  
VP, Strategy Industry  
& Water



**Petri Castrén**  
CFO



A woman with curly hair is shown in profile, drinking from a white cup. She is wearing a striped shirt and has a brown bag slung over her shoulder. The background is a city skyline across a body of water, with a white geometric line running diagonally across the right side of the image.

JARI ROSENDAL  
PRESIDENT AND CEO

# Ready for the next steps in sustainable profitable growth

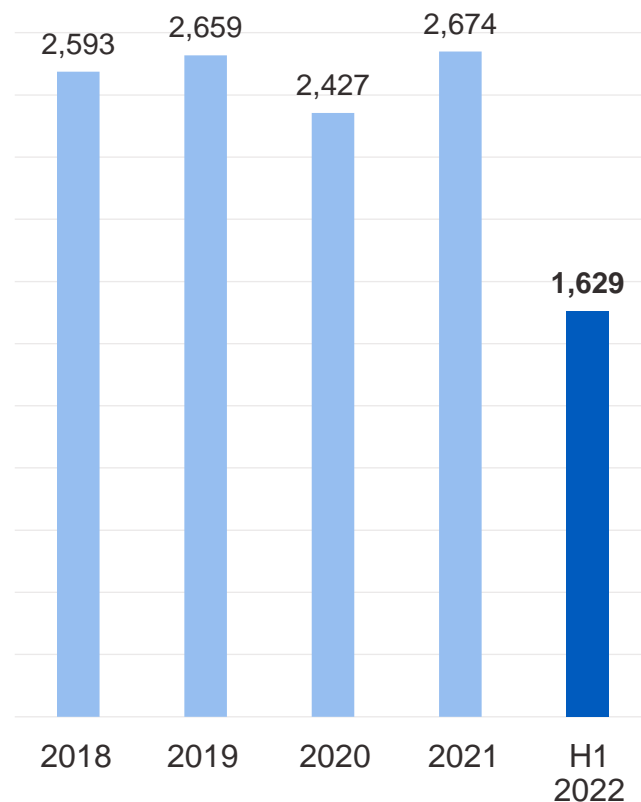
CAPITAL MARKETS DAY  
SEPTEMBER 13, 2022

kemira

# We have proved our agility in a challenging environment

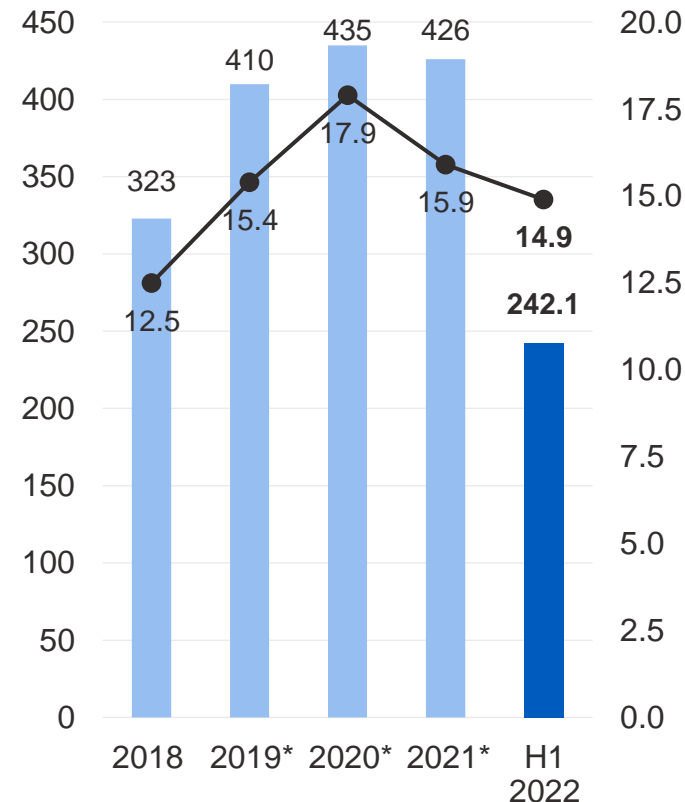
## REVENUE

EUR million



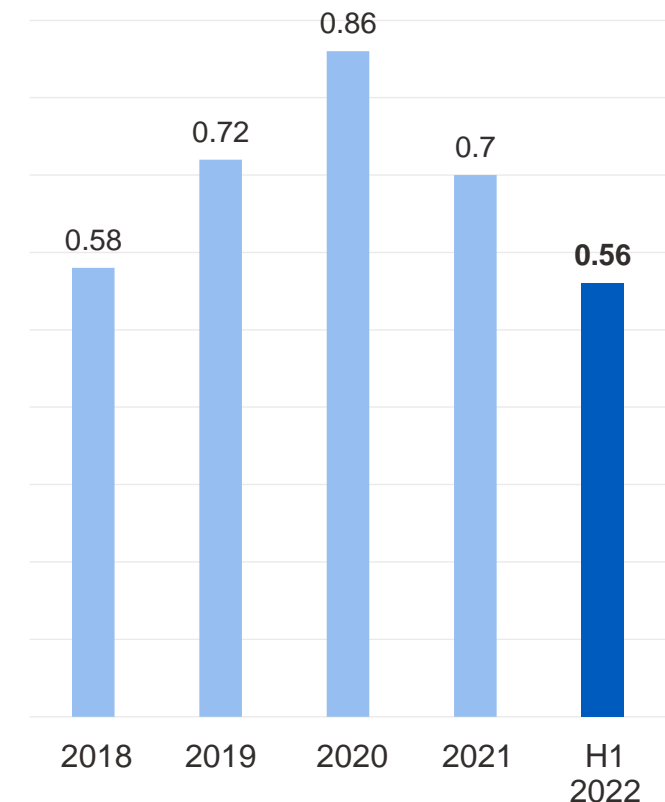
## OPERATIVE EBITDA

EUR million



## EARNINGS PER SHARE\*\*

EUR million



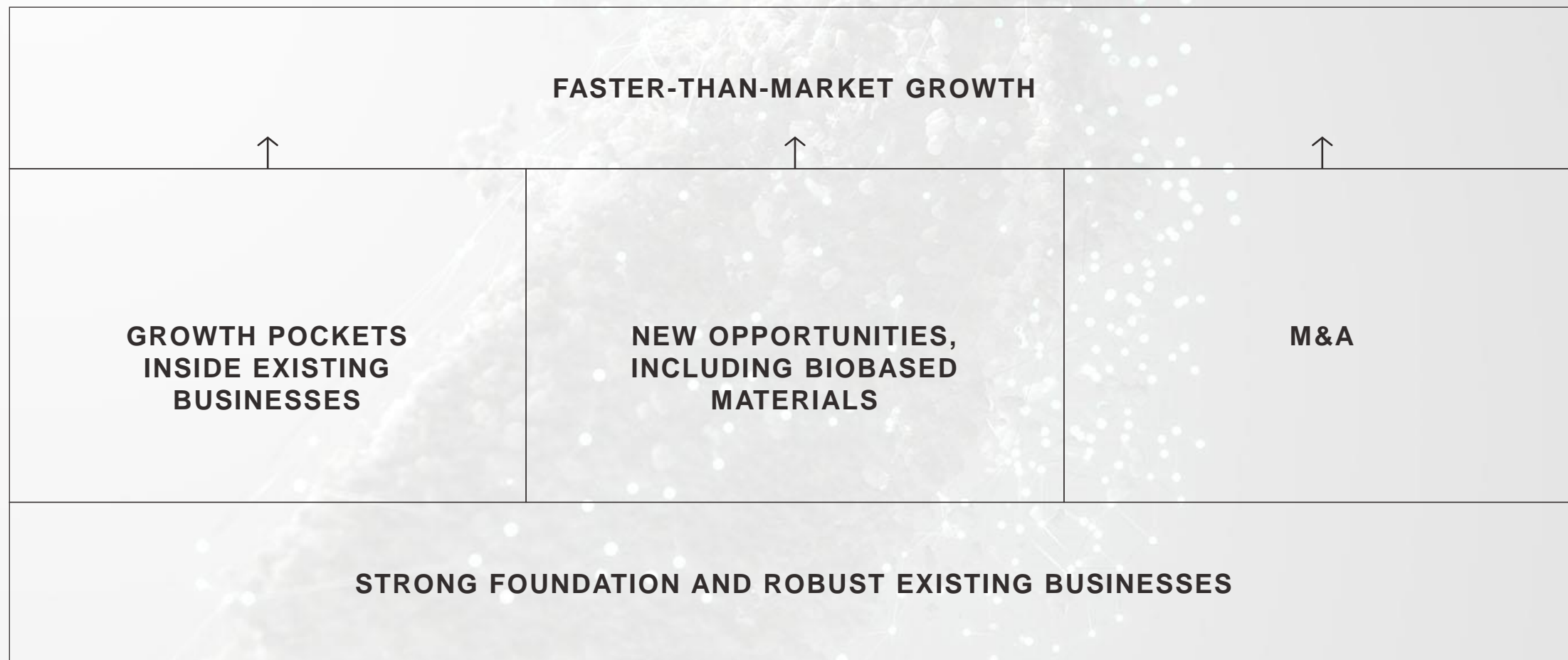
Outlook for 2022 operative EBITDA  
upgraded June 8, 2022



# Looking ahead



# Our next steps for profitable growth













# We have made good progress towards our profitable growth targets

- Organic growth / expansion of site
- Acquisition / partnership
- Operational efficiencies
- Closure of site / divestment

2020	→ 2021	→ H1 2022
<ul style="list-style-type: none"> <li>● Ramp-up of of new AKD wax site (CN)</li> <li>● Ramp-up of of Botlek polymer facility (NL)</li> <li>● Eastover Bleaching extension start-up (US)</li> <li>● Chlorate and peroxide expansion on-going in Fray Bentos (UY)</li> <li>● Goole coagulant expansion (UK)</li> <li>● Partnerships with Danimer Scientific and IFF announced</li> </ul>	<ul style="list-style-type: none"> <li>● Completion of coagulant expansion in Goole, UK</li> <li>● Completion of dry-polymer capacity in South Korea in Q2</li> <li>● Completion of emulsion polymer and BIO-AMD expansion in the U.S. in Q2</li> <li>● Closure of Pierre Bénite coagulant site in France</li> </ul>	<ul style="list-style-type: none"> <li>● Expansion of partnership with Danimer Scientific</li> <li>● A new Growth Accelerator unit launched</li> <li>● Exit from Russian market</li> <li>● Renewal of operating tools, e.g. SAP</li> </ul>
Organic growth %  -7% Operative EBITDA margin  17.9%	Organic growth %  11% Operative EBITDA margin  15.9%	Organic growth %  24% Operative EBITDA margin  14.9%

# Our two businesses provide a healthy balance of growth opportunities

SEGMENT	PULP & PAPER			INDUSTRY & WATER	
Customer segment	Pulp	Board & Tissue	Printing & Writing	Water treatment	Oil & Gas
% of total sales*	 ~25%	 ~25%	 ~10%	 ~30%	 ~10%
Sustainability relevance					
Capex relevance	+++	++	+	++	+
M&A relevance	+	++	+	+++	+
Role in the Kemira portfolio	Growth	Growth	Cash flow	Growth	Cash flow
Growth profile	++	++	Negative	++	++



# We have established a Growth Accelerator unit to speed up selected strategic initiatives

## Objective of the new unit:

provide focus, dedication and speed for selected strategic initiatives

## Primary focus:

Accelerate commercialization of new and unique biomaterials into existing markets. Current strategic initiatives include e.g. PHA, Alfa Glucan and textile fibers.

Create business opportunities in new adjacent markets for both new and existing products



## GROWTH ACCELERATOR UNIT

Announced in mid-June and will be led by **Sampo Lahtinen** (PhD, Food Chemistry), former VP, EMEA R&D

Organization build-up during 2022, operational in 2023

Estimated to employ around 20 people when fully up and running

Supporting both segments (and R&D) – not a separate reporting unit



# We have committed to the Science Based Targets Initiative (SBTi)

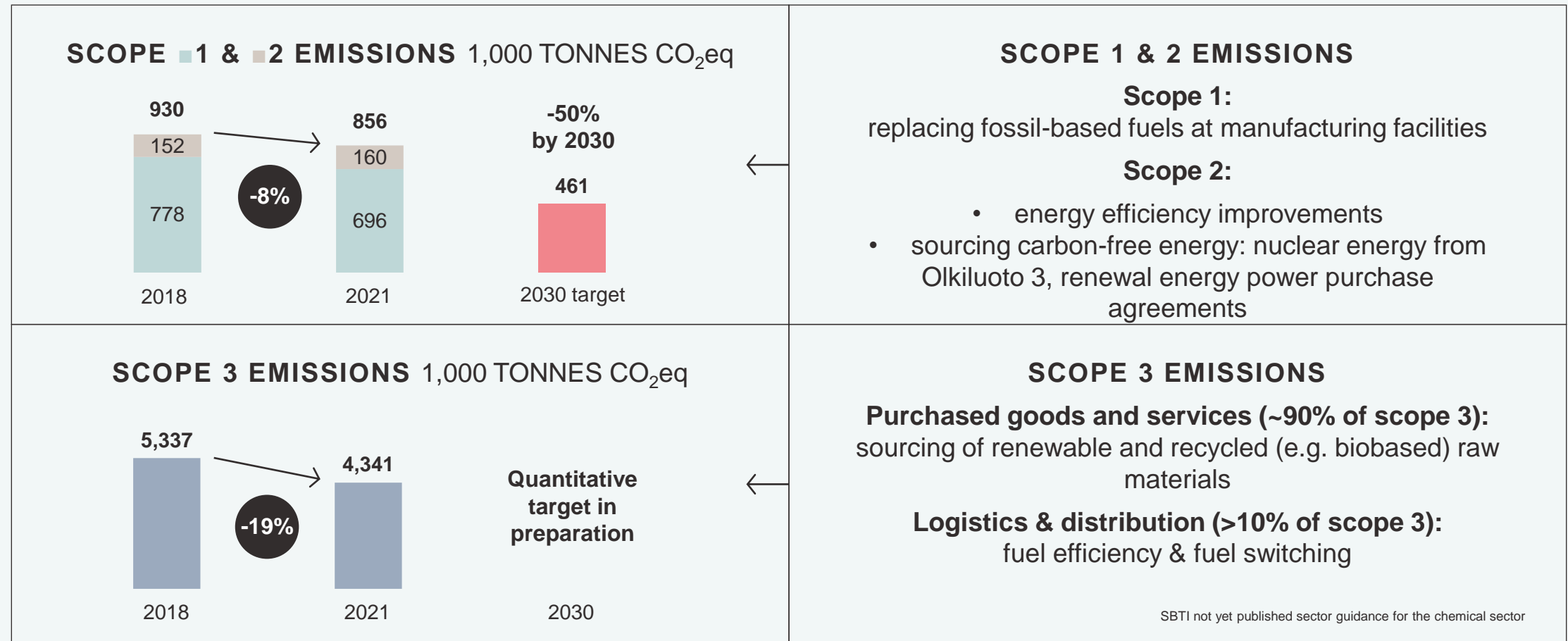
- Kemira committed to the Science Based Target initiative (SBTi)\* in June 2022
- Commitment to cut 50% of emissions from our own operations and energy use (scope 1 and 2 emissions\*\*) by 2030, compared to a 2018 baseline. This target is in line with limiting global warming to 1.5°C and will be validated by the SBTi.
- Commitment to develop a quantified near-term scope 3 target within the timeframe set by the Science Based Target initiative framework. Kemira will submit these updated targets to be validated by the SBTi.
- Ambition to be carbon neutral by 2045 remains intact

\*) Science Based Targets initiative (SBTi), a partnership between CDP, the United Nations Global Compact (UNGC), the World Resources Institute (WRI) and the World Wide Fund for Nature (WWF), drives ambitious climate action by enabling companies to set science-based emissions reduction targets

\*\*) Scope 1, 2 and 3 emissions as defined by the [Greenhouse Gas Protocol](#). Scope 1 and 2 cover the emissions related to our own production. Scope 3 includes all other relevant emissions throughout the value chain.



# How we are reducing our emissions





# Next steps on our profitable growth journey

## GROWTH POCKETS INSIDE EXISTING BUSINESSES

- Pulp → look at selected pulp opportunities
- Water treatment → step up efforts to accelerate growth
- Packaging → Capitalize on growing packaging market and adjacent biobased opportunities

## NEW OPPORTUNITIES

- Build-up of Growth Accelerator
- Look at new entries in adjacent markets, such as textiles and biobased materials

## M&A

- Better positioned for M&A opportunities, particularly in water treatment



### **OPERATIVE PRIORITIES**

Mitigating impacts from the war  
in Ukraine and inflationary pressures

Complete ongoing investments  
in Uruguay and China

Retain organizational and operational agility in  
a rapidly changing operating environment

### **STRATEGIC PRIORITIES**

Maintain the good operational performance  
and capitalize on growth opportunities  
from existing markets

Progress biobased strategy and  
explore new growth markets

M&A focus on water treatment

# Chemistry with a purpose. Better every day.

Our purpose shows the difference we make.  
Every day since 1920

Chemistry has made an enormous impact on the progress and quality of human life. Since our foundation in 1920, we have recognized and honored the fact that with this kind of ability comes great responsibility.

We develop and apply chemistry to optimize water management and the ways natural resources are used and recycled. We advance people's everyday health and safety and constantly improve our customers' processes – enabling their sustainable business.

All this we call **chemistry with a purpose**. We make sure it is always applied in a reliable, responsible and a safe way for our employees, our customers, and the society.

Through chemistry with a purpose, we are creating a **better every day** for us all, while becoming better at what we do, every day.



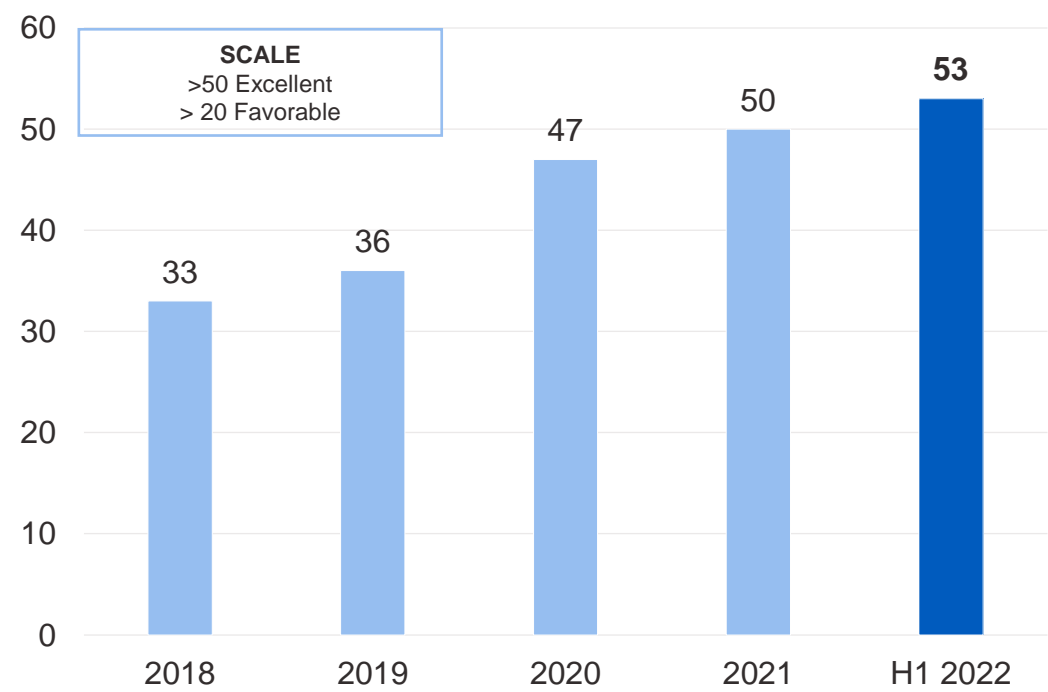
# Appendix



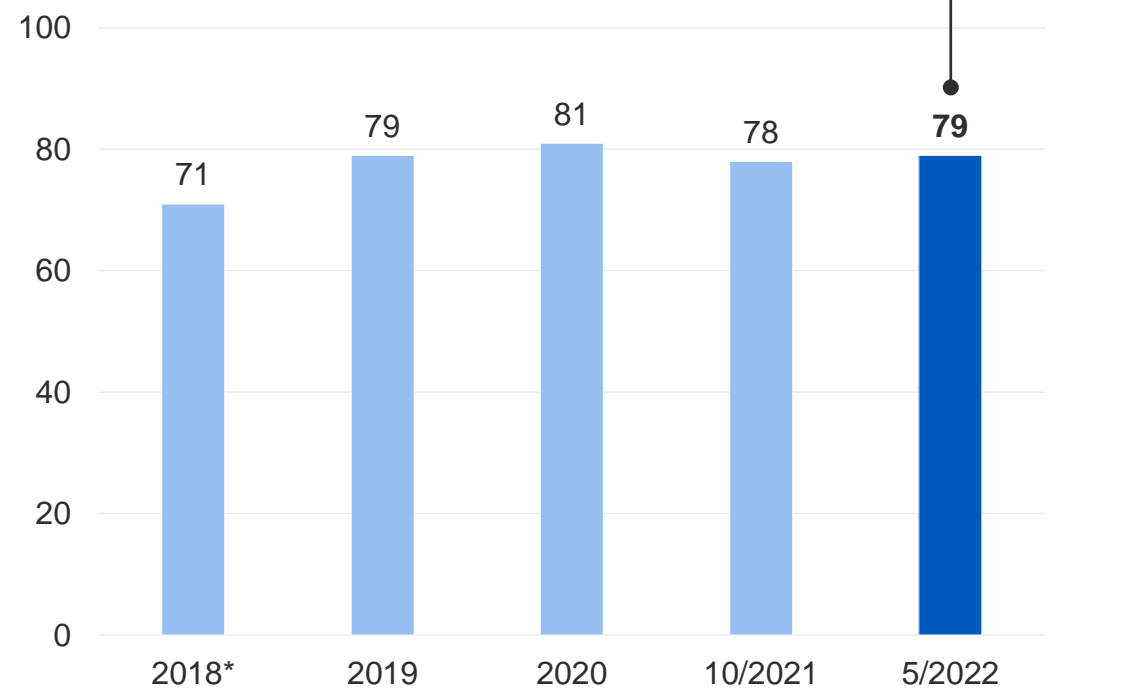
CUSTOMER SATISFACTION HAS IMPROVED

# Employee engagement continues to be strong

NET PROMOTER SCORE DEVELOPMENT



EMPLOYEE ENGAGEMENT



# We have a strong commitment to sustainability



## Five sustainability KPIS

**SAFETY** TRIF\* 1.5 by 2025 and 1.1 by 2030

**PEOPLE** Reach top 10% cross industry norm for Diversity & Inclusion by 2025

**WATER** Reach Leadership level in water management by 2025 measured by CDP Water Security scoring methodology.

**CIRCULARITY** Reduce waste intensity\*\* by 15% by 2030 from a 2019 baseline of 4.6. Biobased products > EUR 500 million revenue by 2030

**CLIMATE** Reduce scope 1 and scope 2 emissions by 50% by 2030, compared to a 2018 baseline.

\* TRIF = total recordable injury frequency per million hours, Kemira + contractors

\*\* metric tonnes of routine disposed production waste per thousand metric tonnes of production

\*\*\* Scope 1: Direct greenhouse gas emissions from Kemira's manufacturing sites, e.g. generation of energy and emissions from manufacturing processes Scope 2: Indirect greenhouse gas emissions from external generation and purchase of electricity, heating, cooling and steam.



# Kemira

Chemistry with a purpose.  
Better every day.

MATTHEW PIXTON  
CTO

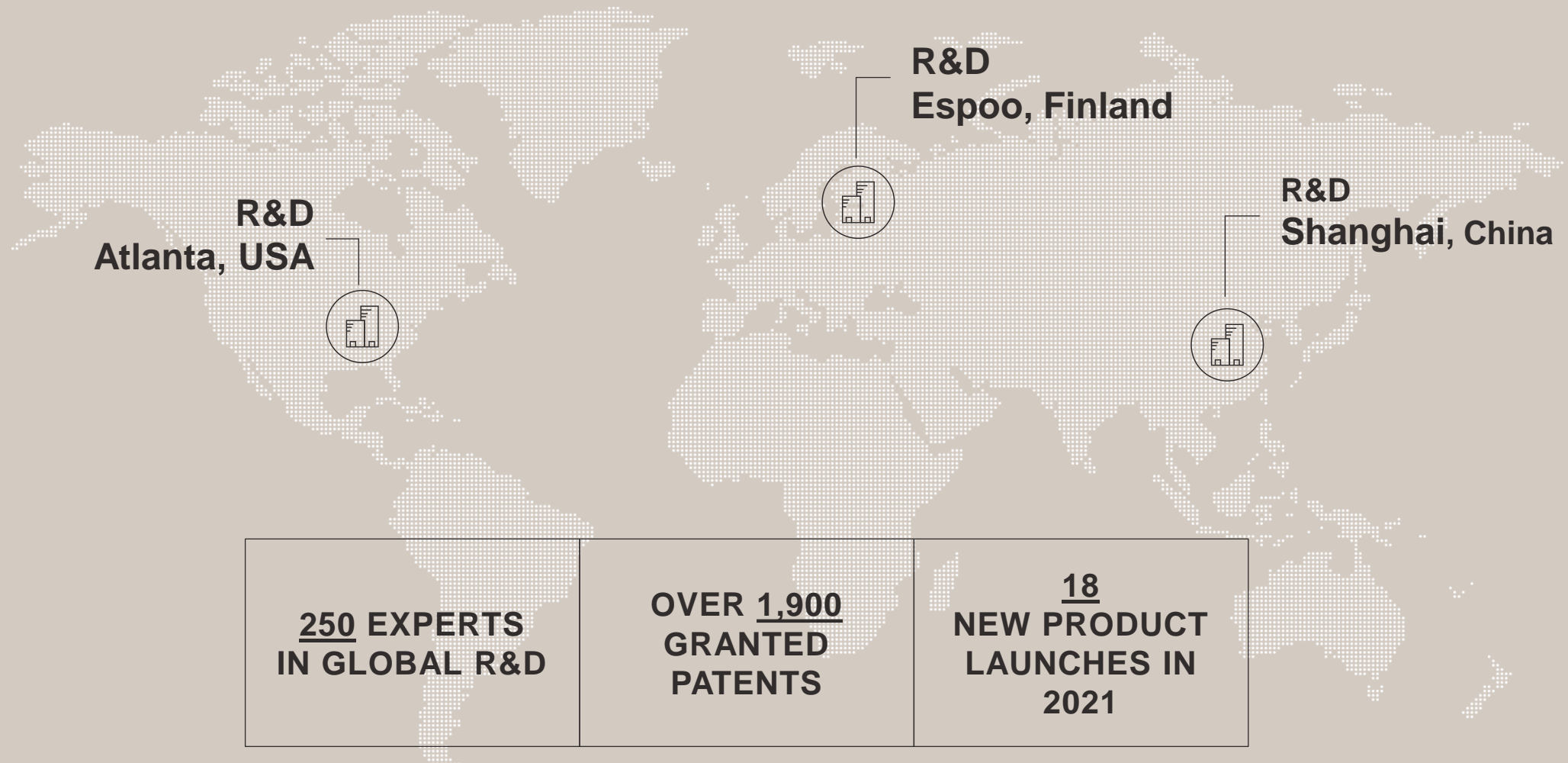
# R&D: A critical driver for strengthening competitiveness

CAPITAL MARKETS DAY  
SEPTEMBER 13, 2022

kemira



# We have a global R&D network close to our customers



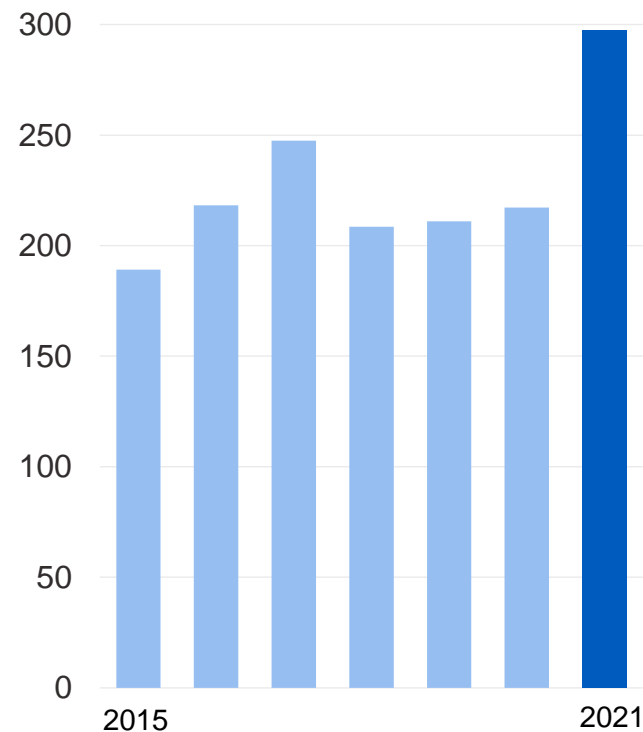


# Continuous investment in R&D

## WE INVEST IN R&D

- Kemira's R&D spend has been around EUR 30 million or ~1.1% of revenue annually
- R&D focus is on polymers, barriers, sizing and strength product groups
- Strong safety culture and commitment:
  - No lab safety incidents in 2021/22

## NEW PRODUCT SALES REVENUE EUR million



## KEY FOCUS IN R&D CURRENTLY:

- Lab evaluation and piloting of biobased products:
  - Multiple biobased raw-materials tested for a range of applications
  - Committed partnerships with Danimer Scientific and International Flavors and Fragrances (IFF)
  - ~ 50% of R&D projects in collaboration with partners

# New application through partnering

An innovative solution based on fundamental science with partners: Wetsus, Technical University Delft, Kemira, several other private companies and municipal water companies

Kemira owns the ViviMag® patent and will commercialize the technology directly or through partners

Demonstration of longer-term industrial pilot scale starting in 2022 at European wastewater treatment plants



## ViviMag®

Magnetic recovery of phosphorus  
from sewage sludge

## FIBER-BASED FOOD PACKAGING

# Novel surface sizing portfolio

- › Broad product safety and regulatory profile, complying with the strictest food contact approvals
- › Fully recyclable to ensure the reuse of valuable wood fibers
- › High sizing performance in demanding conditions

Ongoing work to develop 100% biobased sizing agents, enabling the replacement of fossil-based chemistries and the creation of fully renewable packaging.





# Sustainable textiles – emerging growth opportunity

- Kemira has extensive knowledge and application expertise in cellulose-based products. This allows us an entry point to global sustainable textiles markets.
- Regulations (EU 2025 & Finland 2023) will open-up new business opportunities in textile recycling
- Man-made cellulosic fibers will complement the textile fiber market as a sustainable alternative to polyester. Kemira's portfolio of biobased chemistries supports new manufacturing processes utilizing micro fibrillated cellulose (MFC).





# We want to ensure profitable growth

BY BECOMING THE LEADING PROVIDER  
OF SUSTAINABLE CHEMICAL SOLUTIONS  
FOR WATER-INTENSIVE INDUSTRIES

FROM BASELINE  
REVENUE IN 2019

**~100  
MEUR**

FROM BIOBASED  
PRODUCTS

TARGET REVENUE  
IN 2030

**>500  
MEUR**

FROM BIOBASED  
PRODUCTS

FROM BASELINE  
SHARE IN 2019

**13%\***

OF RENEWABLE  
CARBON OF ALL  
CARBON CONTAINING  
RAW MATERIALS

TARGET SHARE  
IN 2030

**40%**

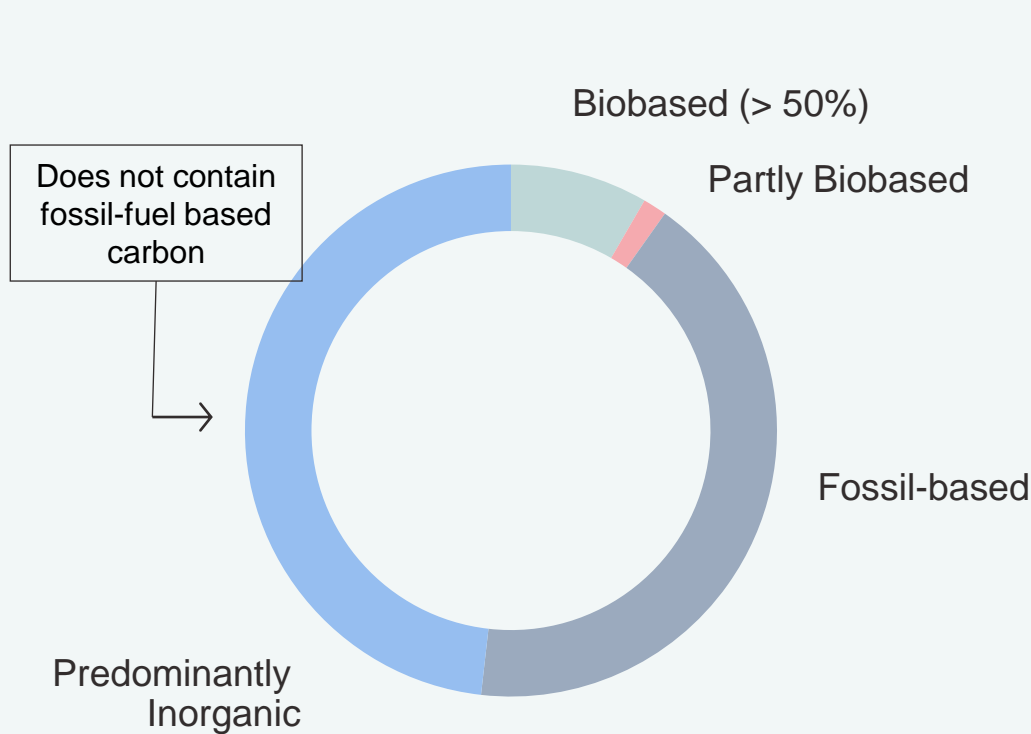
OF RENEWABLE  
CARBON OF ALL  
CARBON CONTAINING  
RAW MATERIALS

\*) baseline year figure has been revised slightly upwards due to change in methodology.

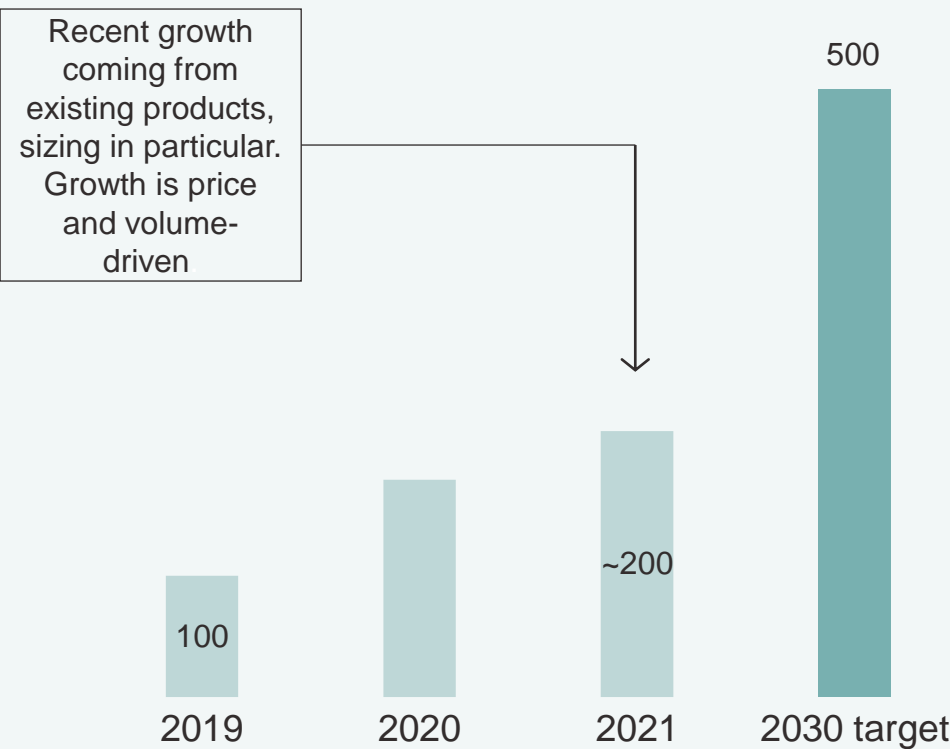


# We already have a significant number of biobased products in our portfolio

REVENUE SPLIT BY TYPE IN 2021

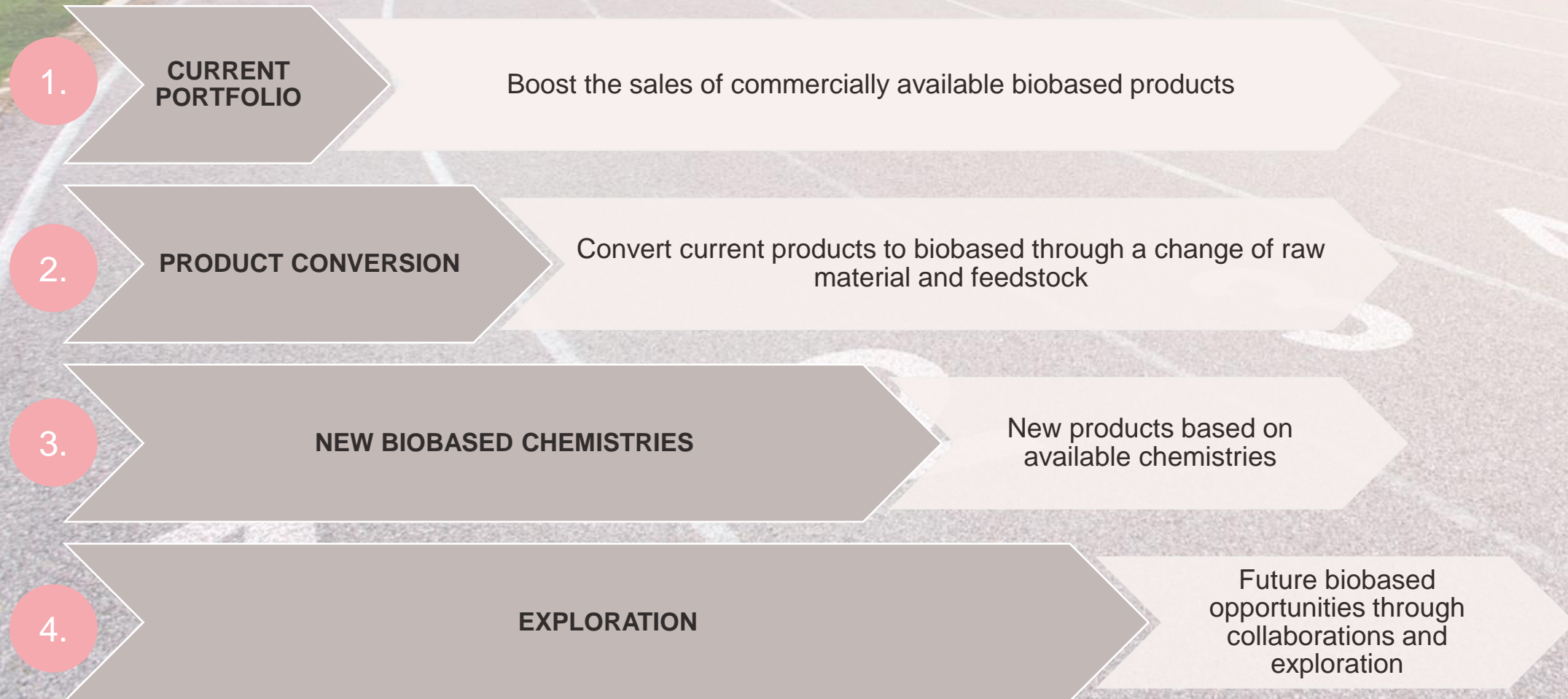


BIOBASED REVENUE DEVELOPMENT



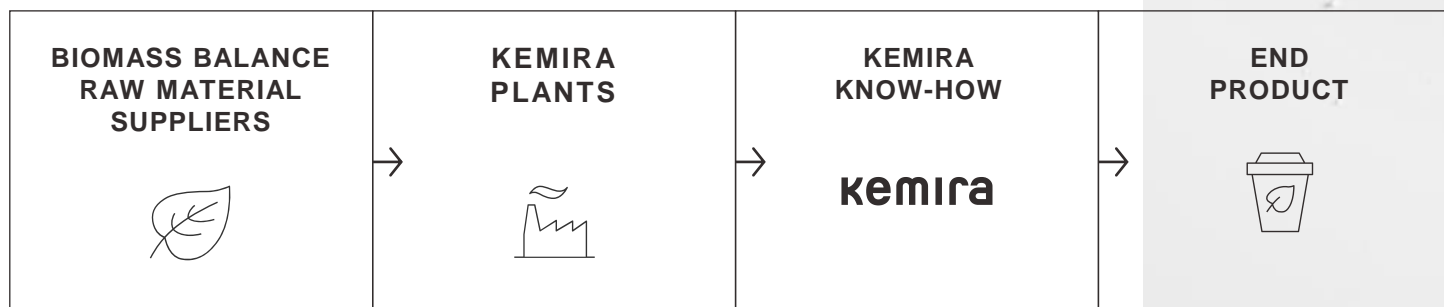


# Our path towards 500 MEUR biobased revenue target advances via 4 tracks



# Biomass Balanced products

- Product based on biobased feedstock. Kemira was first to start full-scale production with first commercial volumes shipped in 2022 to HSY (Helsinki Region Environmental Services)
- The novel polymers are manufactured according to the principles of biomass-balance (majority of fossil-based raw materials are replaced by ISCC Plus certified biobased and renewable mass-balanced feedstocks)
- Further customer discussions ongoing. The polymer can be used in water, paper and energy industries.





# Key Initiative: PHA\*

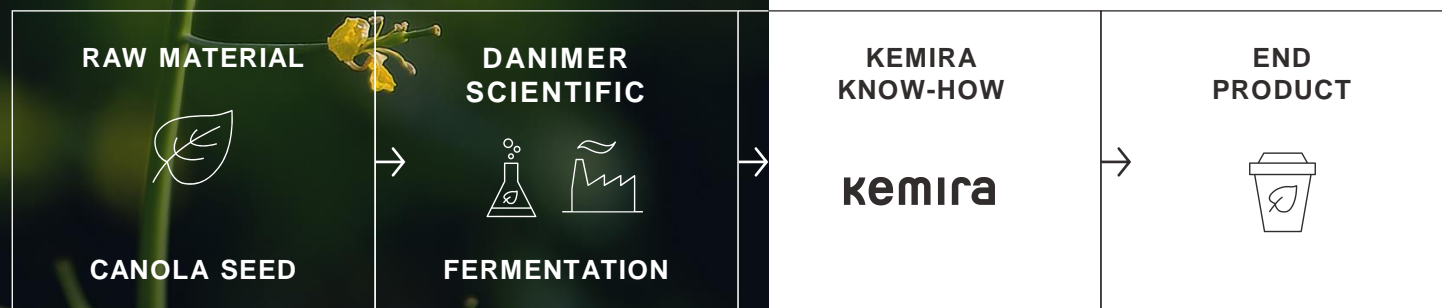
R&D collaboration with Danimer Scientific started in 2019. Multi-year commercial partnership announced in May 2022:

- Exclusivity for paper and molded fiber applications in Americas and EMEA
- Next generation product development, enabling broader market utility

Kemira "value add": - Unique formulations, application expertise and faster market adoption

Good progress in technical Proof-of-Concept since 2021, with multiple coating and converting trials

Strong pull from brand-owners continues



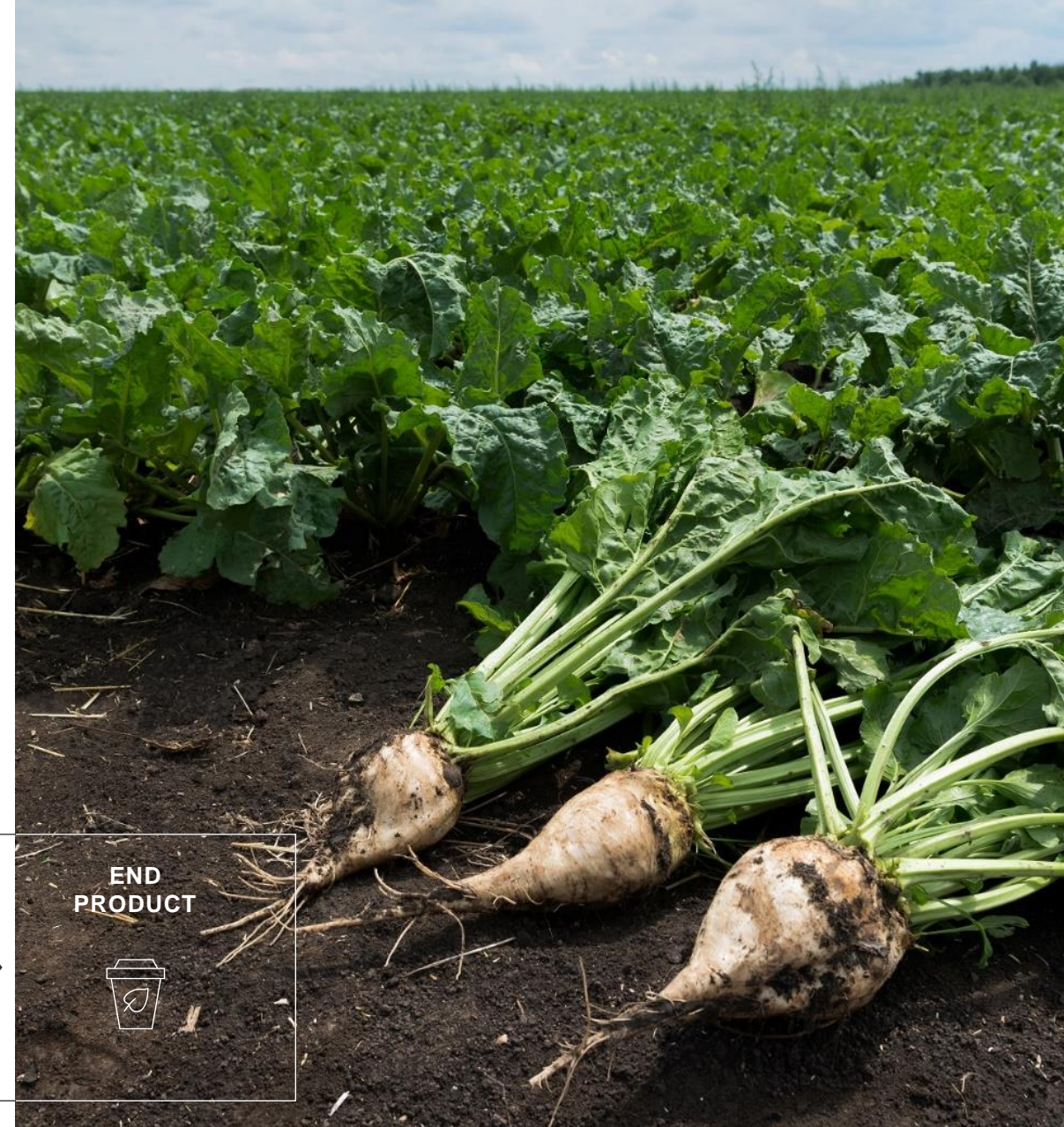
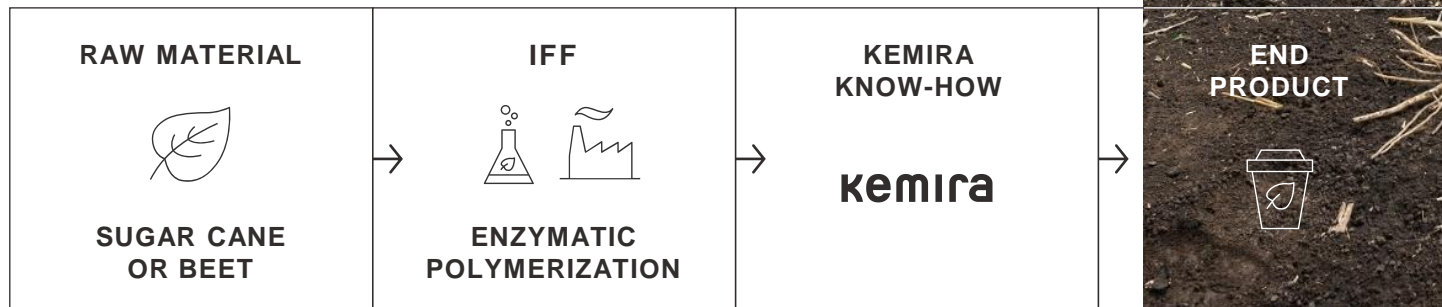
\*) PHA= polyhydroxyalkanoate, a family of biopolymers

# Key Initiative: Alfa-Glucan\*

Collaboration with International Flavors and Fragrances (IFF) started in 2020. Our aim is to commercialize a range of new biobased and biodegradable products across Kemira's key product lines.

Partnership to leverage IFF's platform; Kemira brings market, application/development expertise

Piloting done with customers in both segments during 2022



\*) Alfa Glucan = family of engineered polysaccharides



ONGOING ACTIVITIES  
WITH MORE THAN

**50**

EXTERNAL  
PARTNERS

JOINT  
DEVELOPMENT IN

**38**

INNOVATIVE  
PARTNERSHIP  
PROJECTS

# R&D network and collaboration

- Complements Kemira's internal competence, know how and resources
- Enables public funding and risk sharing in innovation
- Broadens our cooperation in existing and future value chains
- Significant shortening lead time to commercialization
- Growth Accelerator set up in June to speed up commercialization





# R&D is a critical driver for strengthening competitiveness

<div data-bbox="231 748 461 788"><b>CORE R&amp;D</b></div> <ul style="list-style-type: none"><li>• Strong pipeline of projects from concept to commercialization phases, on track for record new product sales in 2022</li></ul>	<div data-bbox="1225 481 1554 521"><b>BIOBASED R&amp;D</b></div> <ul style="list-style-type: none"><li>• Biobased strategy progressing well towards EUR 500 million revenue target. Partnerships, supplier and customer, are key.</li><li>• 2021 biobased revenue at ~EUR 200 million, meaningful revenue growth from new products from 2024 onwards</li><li>• New Growth Accelerator Unit established to speed up the commercialization of biobased products</li></ul>
<b>PROFITABILITY &amp; CASH FLOW</b>	<b>GROWTH</b>

# Kemira

Chemistry with a purpose.  
Better every day.



ANTTI SALMINEN  
PRESIDENT, PULP & PAPER

# Pulp & Paper: Consumer-driven sustainability trends driving growth

CAPITAL MARKETS DAY  
SEPTEMBER 13, 2022

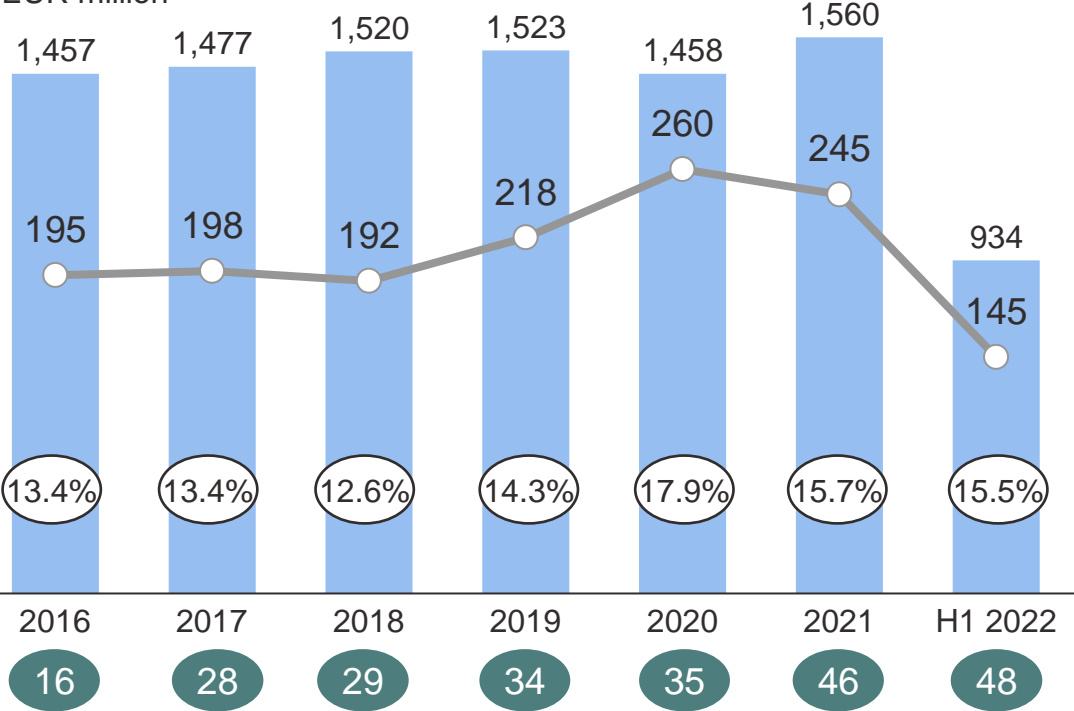
kemira



# We have delivered strong revenue growth since CMD 2020

## REVENUE, OPERATIVE EBITDA AND OPERATIVE EBITDA MARGIN DEVELOPMENT

EUR million



X Net promoter score (NPS) development

### 1. BUSINESS FUNDAMENTALS:

Focus on mitigating impacts from higher input costs  
Strong focus on selected markets and product lines

### 2. GROWTH FOCUS:

New investments to support growth  
Progressing biobased strategy

### 3. CUSTOMER SATISFACTION:

On a continuously improving trend; clearly above industry benchmark  
Customers appreciate delivery reliability, Kemira's technical service and know-how

# Our completed and upcoming capacity expansions will support growth

<p><b>POLYMERS IN SOUTH KOREA</b></p> <p>Joint venture with Yongsan Chemicals, Kemira a minority shareholder</p> <p>Polymer investment in a growing market; efficiency improvement from backward-integration</p> <p>Premium dry polymer products, will strengthen competitive position in APAC and reduce Kemira's risk profile</p> <p>Completed 2021, ramp-up ongoing</p>	<p><b>BLEACHING EXPANSION IN URUGUAY</b></p> <p>Expansion of both sodium chlorate and hydrogen peroxide at Kemira's existing Fray Bentos chemical island site</p> <p>Multi-year agreement with UPM-Kymmene includes bleaching capacity to existing Fray Bentos mill as well as new mill in Paso de los Toros</p> <p>Financial contribution expected as of 2023</p>	<p><b>NEW PRODUCTION LINE OF ASA IN CHINA</b></p> <p>Production of ASA sizing agent in Nanjing</p> <p>Investment will expand Kemira's ASA production capacity substantially</p> <p>Kemira is already the leading producer and supplier of ASA globally</p> <p>To be completed in 2023</p>
EQUITY INVESTMENT EUR 5 MILLION	INVESTMENT AROUND EUR 30 MILLION	INVESTMENT AROUND EUR 10 MILLION

# H1 2022: Strong performance in a difficult environment

## REVENUE:

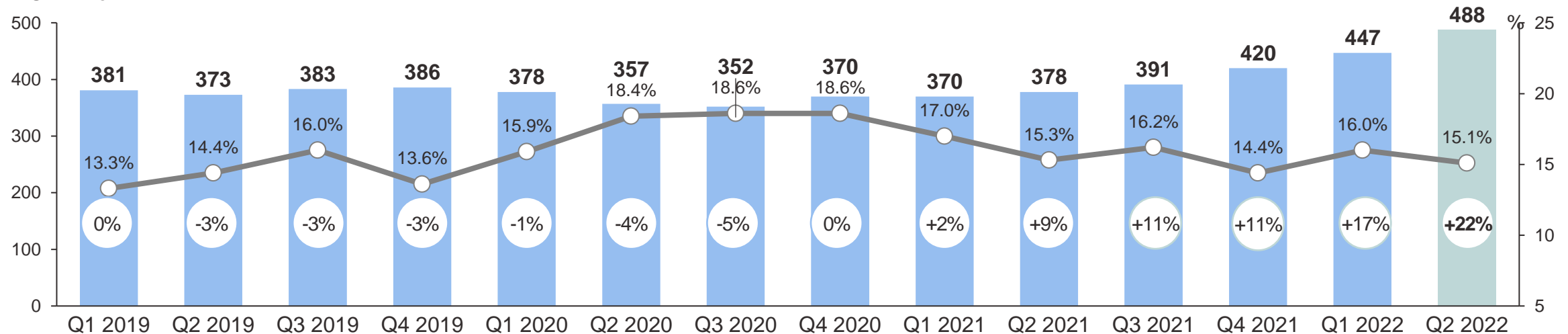
- Organic growth driven by higher sales prices across customer segments
- Underlying demand solid across products groups, some customers signal demand is expected to normalize from peak levels

## PROFITABILITY:

- Resilient profitability despite unprecedented inflationary pressures
- Pricing checkpoints in customer contracts shortened to mitigate impact from inflationary pressures

## REVENUE, ORGANIC REVENUE GROWTH (Y-ON-Y) AND OPERATIVE EBITDA MARGIN

EUR million







# Broader uses of wood fiber driving market growth



A photograph of a forest path with tall, slender trees and lush green ferns. Sunlight filters through the canopy, creating a warm, golden glow. The path is covered in fallen leaves and branches.

## WOOD FIBER IS THE RAW MATERIAL OF THE FUTURE

- Excellent sustainable raw material: renewable, reusable and recyclable
- Fiber use is growing due to existing applications as well as new applications
- Industry is innovating to find new uses for wood-based fiber, e.g. in textile fibers
- Kemira to benefit from growth in fiber use across the value chain



# Pulp and packaging markets are growing driven by sustainability trends

## PULP & BLEACHING MARKET

Demand for virgin fiber increasing due to decline in availability of recycled fiber and growing uses of fiber

New pulp capacity expected in Asia-Pacific, South America and Northern Europe

~1-2%  
expected  
market  
growth

#2  
Kemira  
market  
position

### KEMIRA FOCUS

**Focus** on selective pulp investments that support sustainable pulp production for packaging, tissue and future fiber applications

## BOARD AND TISSUE MARKET

Packaging market growth drivers: APAC, online retail and move away from plastic packaging

Tissue market growth drivers: population growth and rising income levels

~2-3%  
expected  
market  
growth

#2  
Kemira  
market  
position

### KEMIRA FOCUS

**Maintain** a synergistic portfolio with focus on operational excellence and cost competitiveness



# We are accelerating growth in new markets

**GROWTH  
FROM  
NEW  
MARKETS**

**Assess and  
deploy new  
growth avenues**

Biobased products

Barriers

Textiles

Services



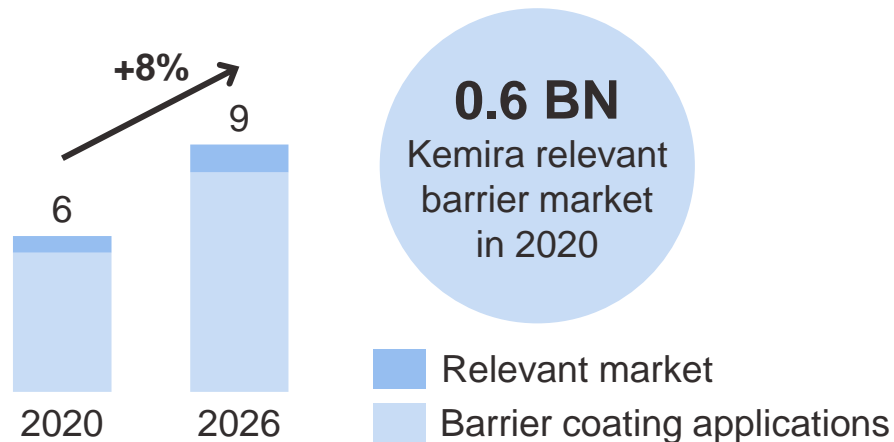
# Barrier market projected to grow by 8% to 2026

## MARKET DRIVERS

Consumer preference for sustainable solutions

Transition towards phasing out plastic for food and consumption packages

## BARRIER MARKET EXPECTED GROW IN COMING YEARS



## KEMIRA HAS A STRONG POSITION

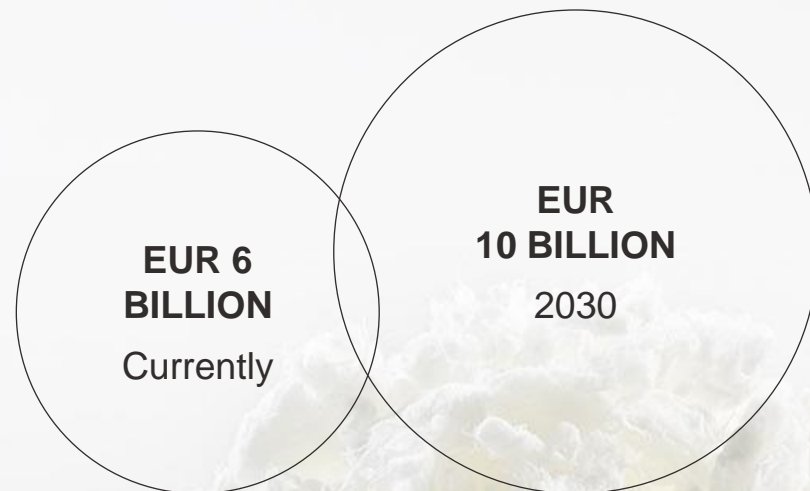
Kemira's first generation, partly biobased, barrier, commercialized; second generation biobased product being rolled out

Work ongoing with Danimer Scientific to introduce new fully biobased barrier coatings that are based on PHA\*





# The wood-fiber textile market projected to reach EUR 10 billion by 2030



**Estimated textile fiber market size**

## TEXTILE MARKET IN TRANSFORMATION

Demand for novel sustainable fiber solutions in textiles is high in order to replace cotton and synthetic fibers

More than 96% of global EUR 200 billion textile fiber market is considered non-sustainable

## KEMIRA IS A FIRST MOVER

A competitive chemical and service portfolio to help fiber producers to scale up their technologies and to transform the textile fiber market

Chemicals key to improve the durability of wood-based fibers

Initiatives ongoing with several fiber-based textile companies

# Services offering is a valuable differentiator

- Aim to reach EUR 50 million in revenue by 2025, 2022 revenue expected to be around EUR 5 million
- New dedicated service organization established to accelerate growth in services
- Commitment to invest in expanding and commercializing service offering further

KEMIRA'S SERVICE OFFERING		
Complementary services	Process optimization	Predictive services

## COLLABORATION WITH SIMANALYTICS

Kemira acquired a stake in SimAnalytics, a Finnish start-up, in summer 2021. Kemira's predictive services utilize SimAnalytics' Harmonizer tool.

## METSÄ BOARD KEMI

Customer benefits with Kemira's services:

- Improved quality
- Energy Efficiency
- Improved chemical Efficiency





**We are  
competitively  
positioned in the  
growing fiber-  
based  
applications**

**100 YEARS OF  
EXPERTISE IN FIBER  
WATER CHEMISTRY**

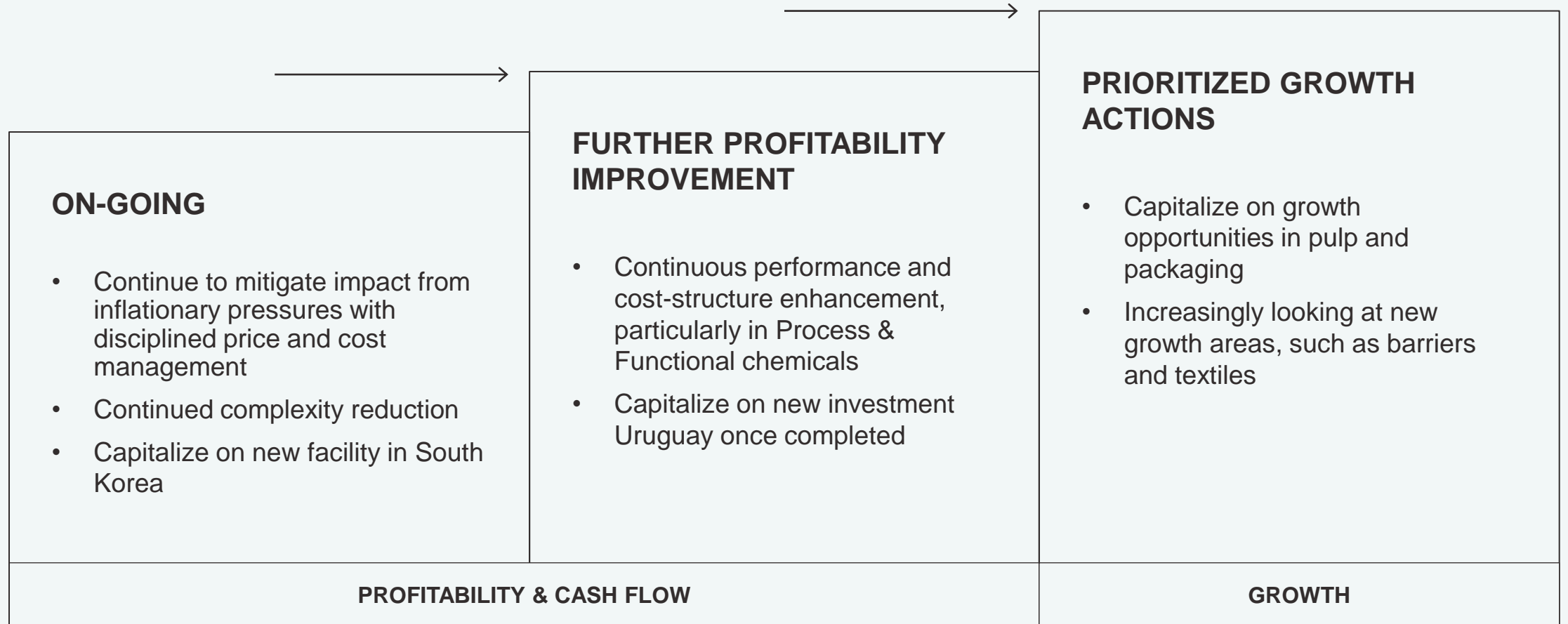
**BROADEST PULP &  
PAPER CHEMICAL  
PRODUCT PORTFOLIO  
IN THE WORLD**

**LONG ESTABLISHED  
CUSTOMER  
RELATIONSHIPS**

**BROAD CAPABILITIES  
TO SERVE CUSTOMERS  
ACROSS THE GLOBE**



# Maintaining profitability while increasing focus on new growth opportunities



# Kemira

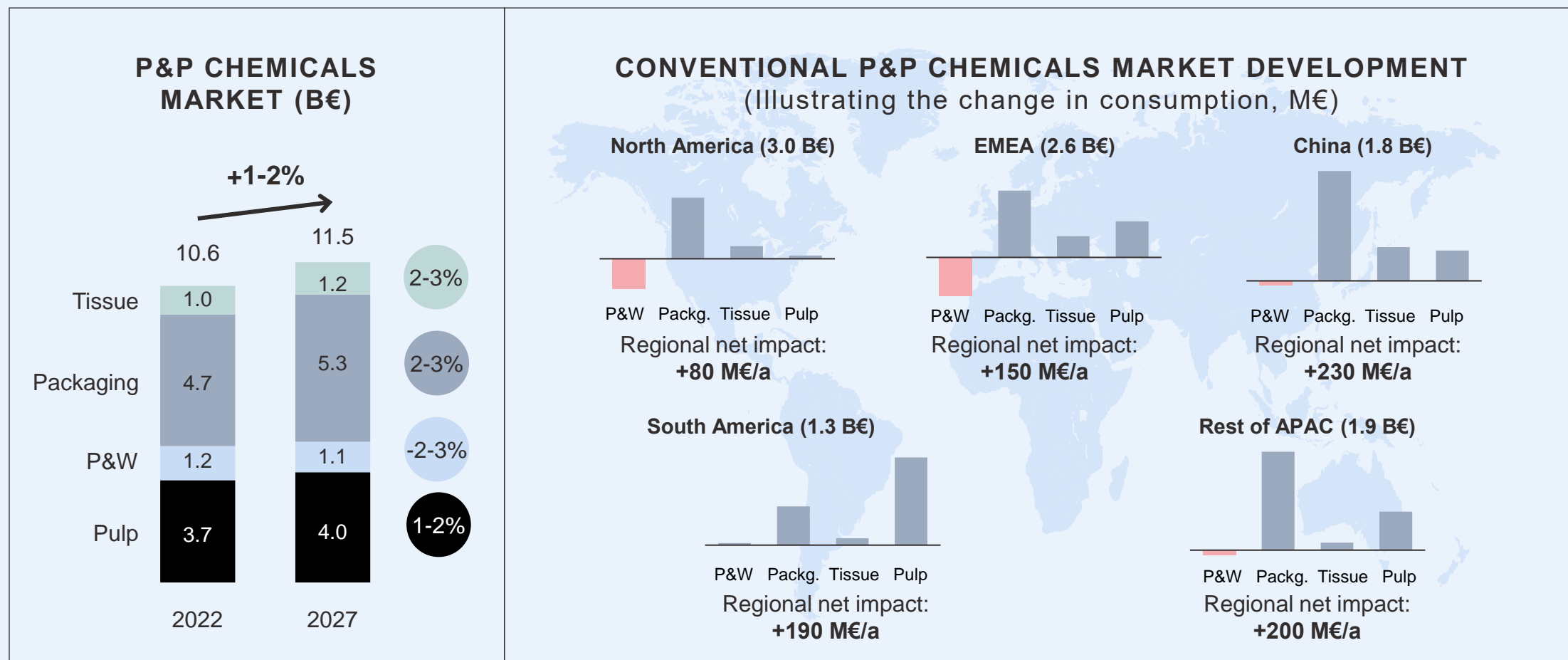
Chemistry with a purpose.  
Better every day.

# Appendix





# Pulp & Paper chemicals market expected to grow by 1-2%



# We have a strong position particularly in EMEA

	PULP	PACKAGING & TISSUE	PRINTING & WRITING
<b>EMEA</b> Market position	<b>#1/2</b>	<b>#1/2</b>	<b>#1/2</b>
<b>North America</b> Market position	<b>#3/4</b>	<b>#3</b>	<b>#2/3</b>
<b>APAC</b> Market position	<b>n.a.</b>	<b>#1/2</b>	<b>#1/2</b>
<b>South America</b> Market position	<b>#2</b>	<b>#2/3</b>	<b>#2/3</b>

# Kemira

Chemistry with a purpose.  
Better every day.



SERGEJ TOEWS  
VICE PRESIDENT STRATEGY, INDUSTRY & WATER

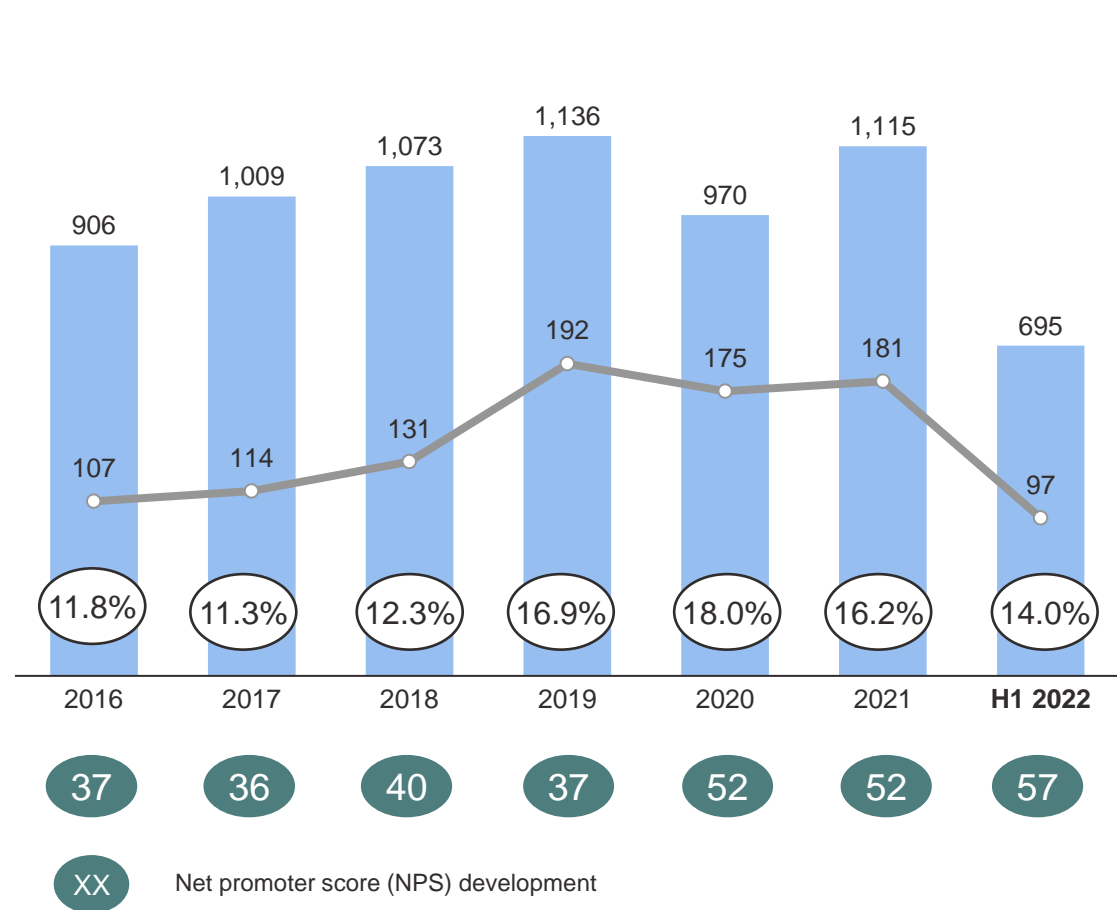
# Industry & Water: Accelerating sustainable growth in water

CAPITAL MARKETS DAY  
SEPTEMBER 13, 2022

**kemira**

# Steady progress supported by high customer satisfaction

REVENUE, OPERATIVE EBITDA AND OPERATIVE EBITDA MARGIN DEVELOPMENT



## 1. BUSINESS FUNDAMENTALS:

Strong demand for our products  
Increasing frequency of pricing checkpoints in contracts

## 2. RECENT GROWTH INVESTMENTS:

Accelerating sales from production capacity expansions  
Goole, UK  
Mobile, US

## 3. ENGAGEMENT SCORES:

Customers highly value our delivery reliability and application expertise ensuring:

- Safe drinking water and effluent treatment
- Reliable and efficient energy production

# Increased production capacity to support growth

## MOBILE, US

- State-of-the art facility for production of bio-AMD and emulsion polymers
- Supporting the US energy market in efficient shale Oil & Gas production to supply global energy needs
- Completed in Q2 2021

INVESTMENT AROUND EUR 70 MILLION

## GOOLE, UK

- Significant expansion of our existing iron coagulant production
- Ensuring sufficient supply and enabling new UK regulation implementation towards lower phosphorous limits
- A leading supplier for water treatment products in the UK and across Europe
- Completed in Q3 2021

INVESTMENT AROUND EUR 7 MILLION





# Solid water treatment performance in H1 2022

## WATER TREATMENT 1-6 2022

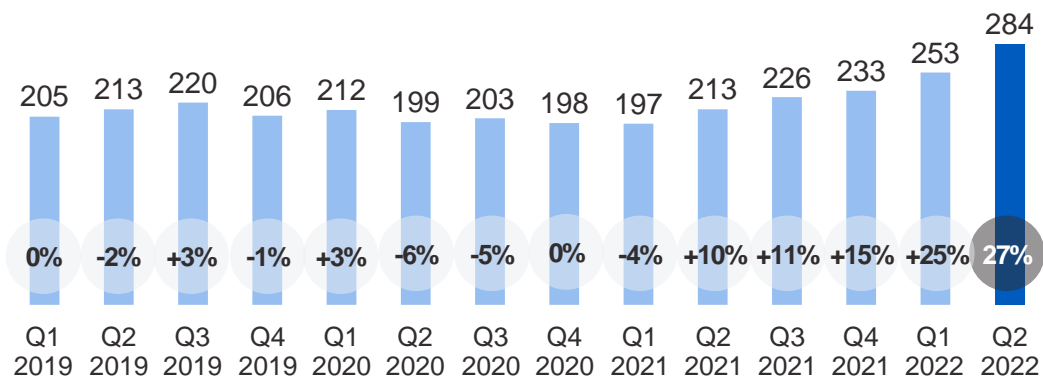
**Revenue:** continued solid demand in both municipal and industrial water treatment; revenue growth mostly driven by higher sales prices

**Profitability:** solid profitability; work under way to further shorten pricing checkpoints

### WATER TREATMENT REVENUE AND ORGANIC GROWTH

2019 - 1-6 2022

EUR million



## OIL & GAS 1-6 2022

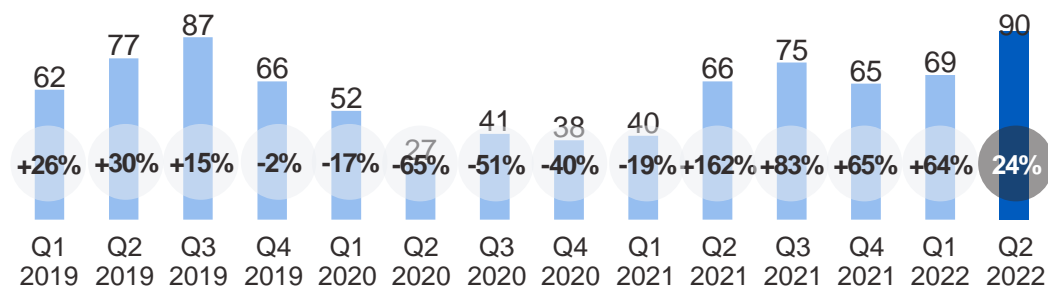
**Revenue:** CEOR and oil sands tailings remained solid. Shale has grown but slower than originally expected, particularly in Q2 2022.

**Profitability:** actions being implemented to further improve profitability

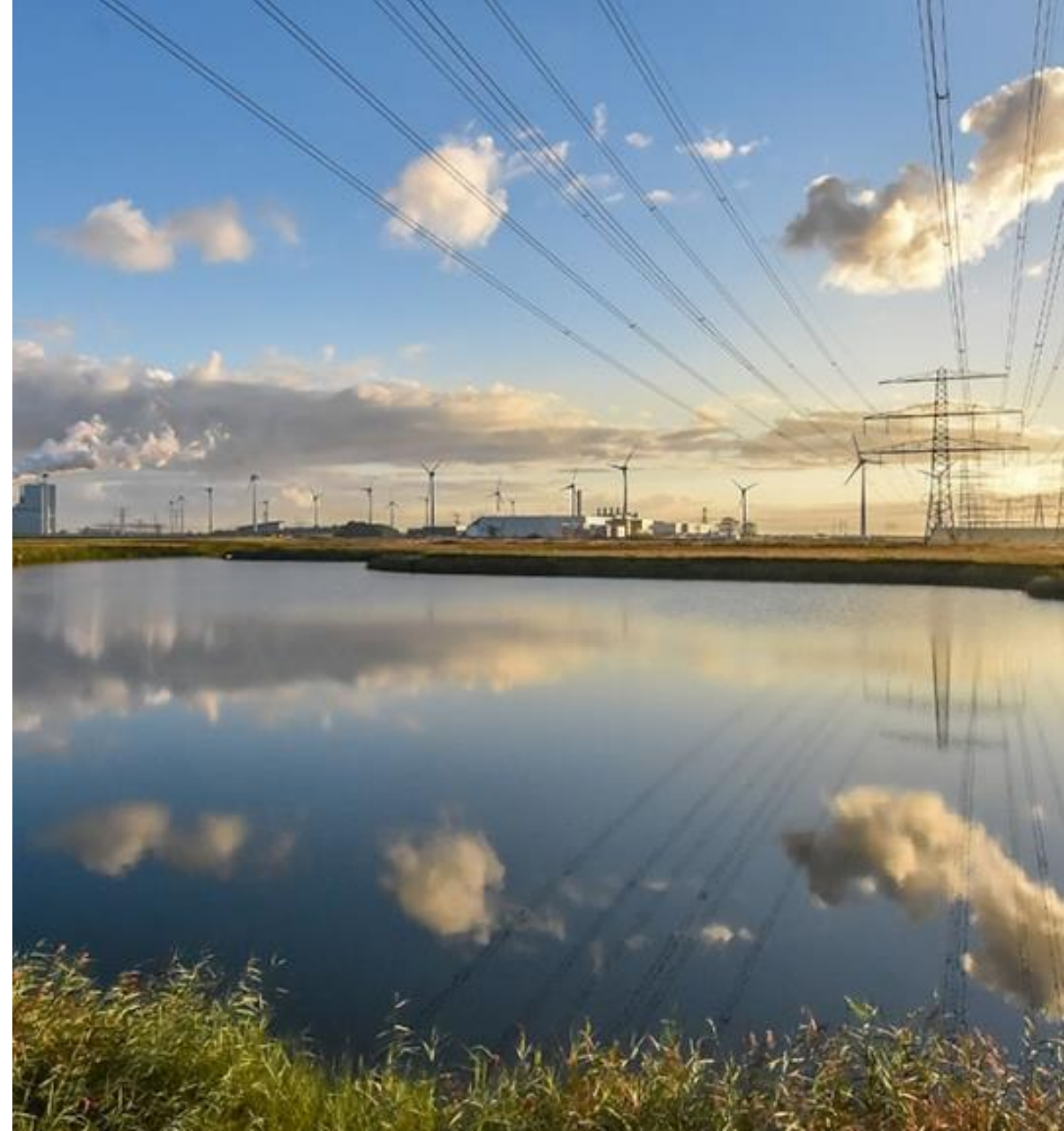
### OIL & GAS REVENUE AND ORGANIC GROWTH

2019 - 1-6 2022

EUR million



**Reliable and  
efficient Water  
and Energy  
supply are  
essential for  
the society**





# We are a key enabler for reliable and efficient water treatment & hydrocarbon production

## WATER TREATMENT

- Compliance with increasing regulations in wastewater and drinking water treatment quality
- Energy intensity reduction in water treatment processes
- Energy yield increase in biogas production

## OIL & GAS

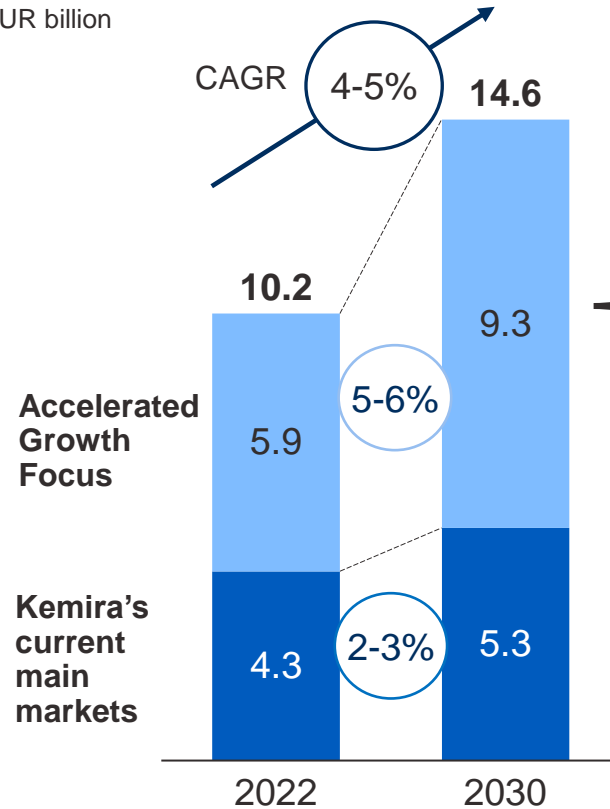
- CO<sub>2</sub> footprint reduction in hydrocarbon production
- Energy security and independence
- Fresh water consumption reduction in hydrocarbon production



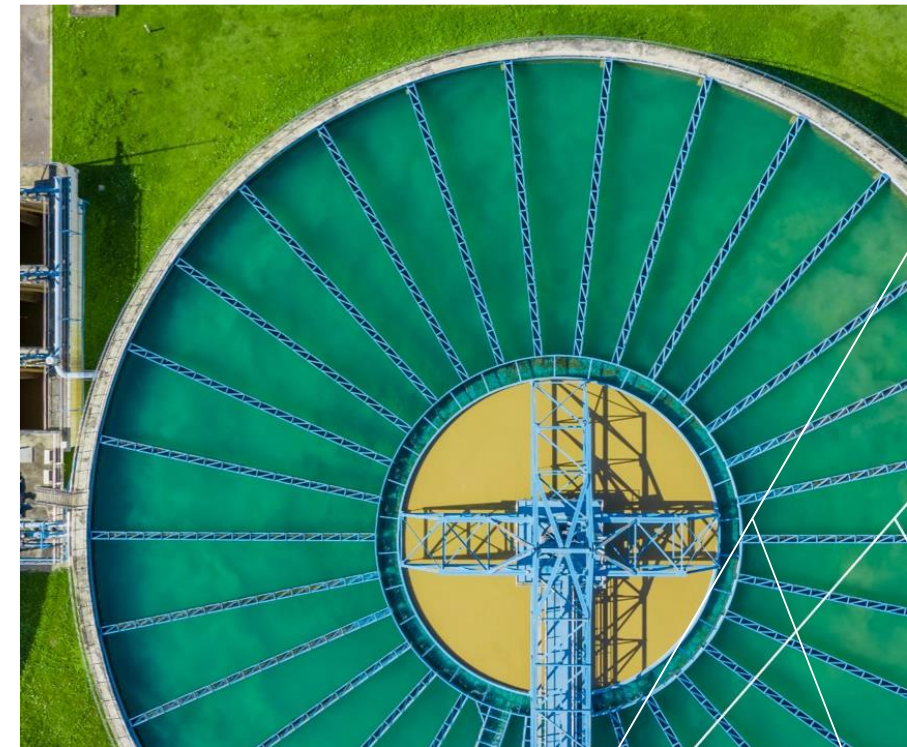
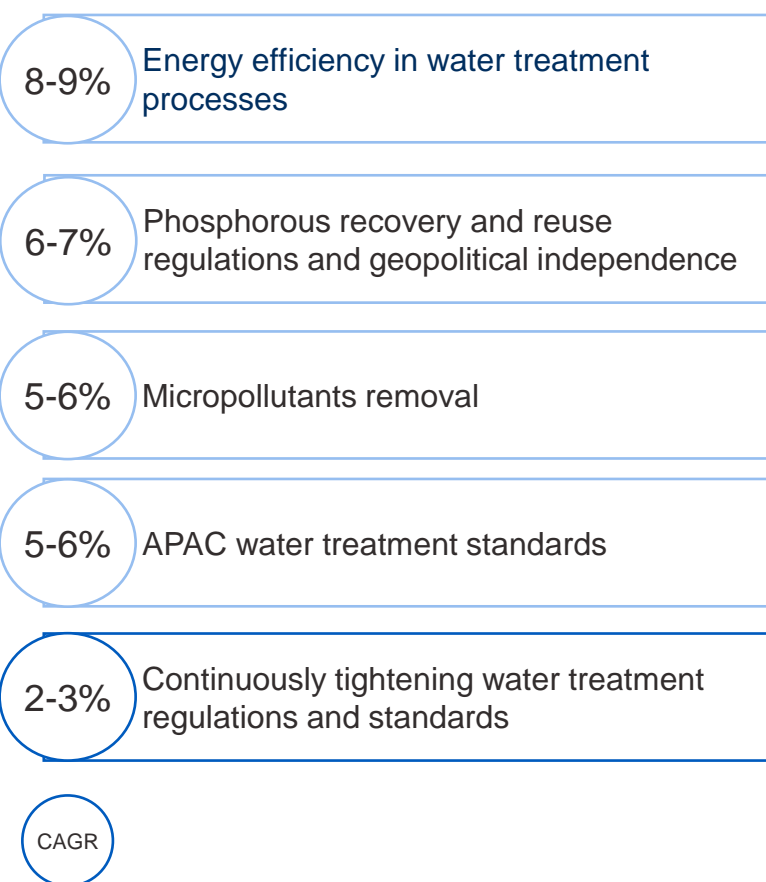
# Trends in water treatment provide solid opportunities for sustainable growth

## Relevant water treatment products & solutions market

EUR billion



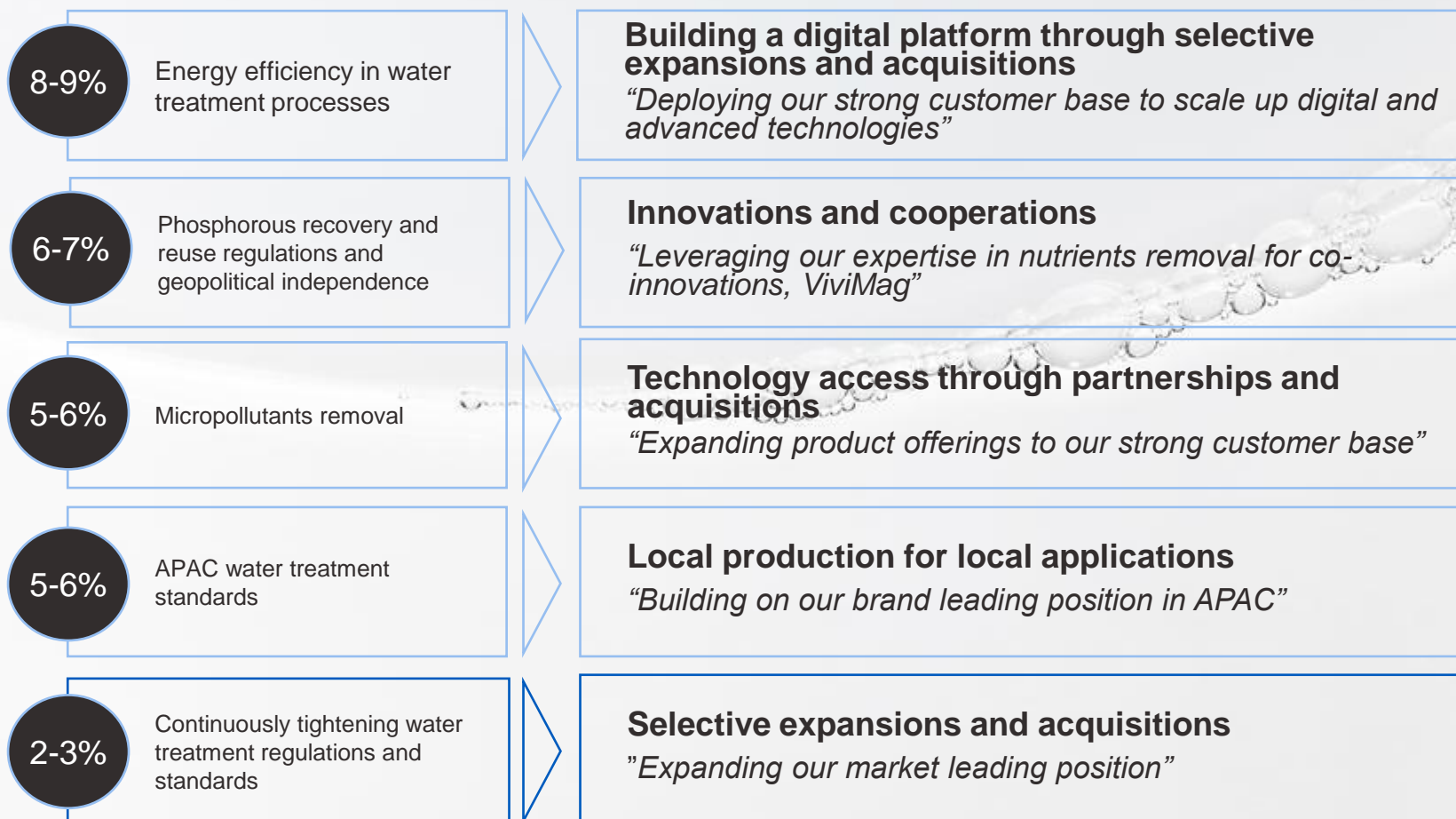
## Relevant market trend and expected growth



# We are accelerating our investments in water

## Relevant market trend and expected growth

## I&W strategic growth road map in execution



**Accelerated growth investments**

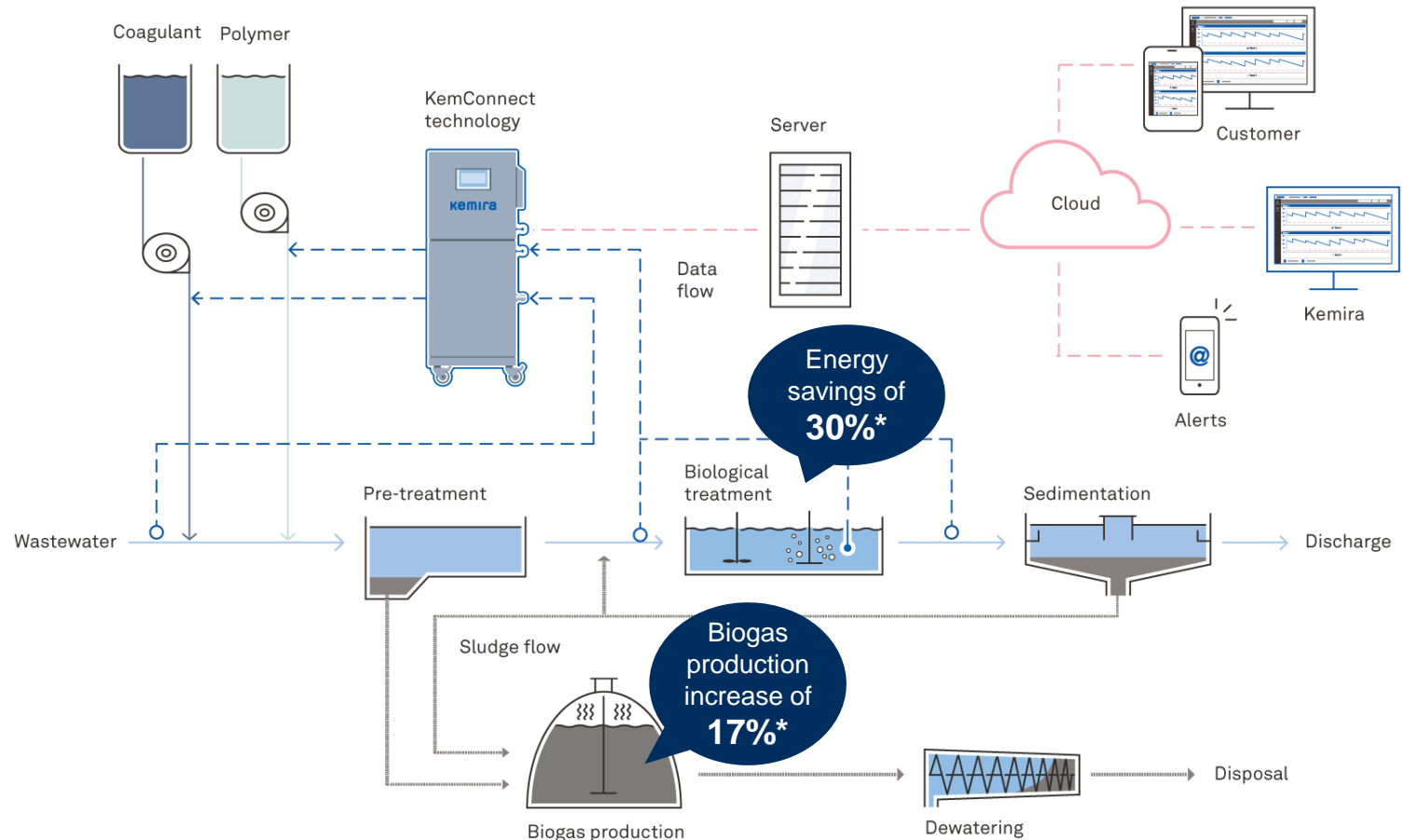
**&** Acquisitions  
Innovation  
Organic expansions

# Our advanced digital water treatment solutions address one of the most critical trends in the water industry: energy reduction

Recently commercialized  
KemConnect™ PT solution for  
municipal wastewater treatment  
enabling:

- energy savings of up to 30%
- biogas production increase of up to 20%\*

## Digital platform with KemConnect™ PT application





# Our Oil & Gas customers focus on energy security, efficiency and CO<sub>2</sub> reduction from operations

## Recent drivers in the Oil & Gas industry

### CO<sub>2</sub> REDUCTION IN OIL & GAS PRODUCTION

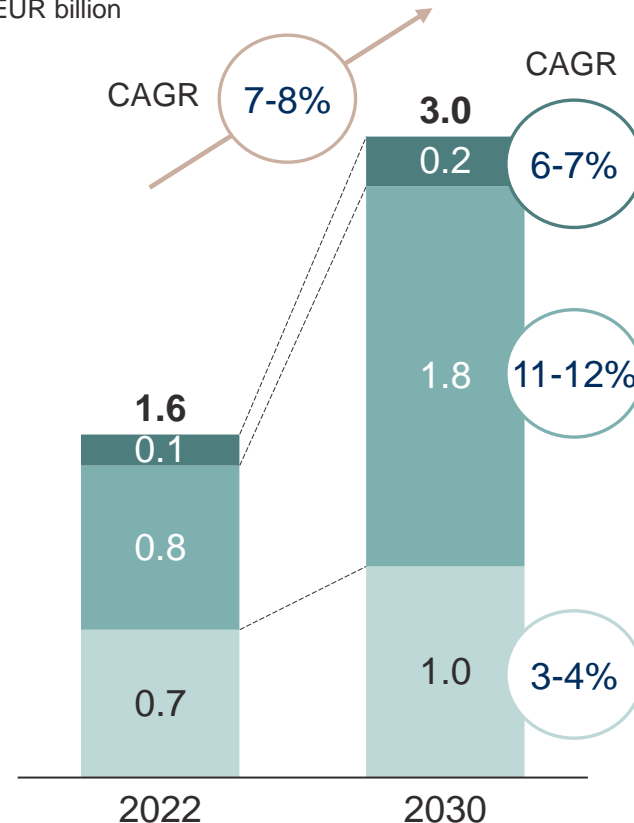
- Key strategic target of major Oil & Gas companies

### ENERGY SECURITY AND INDEPENDENCE

- Increased priority for governments following geopolitical tensions and war in Ukraine

## Relevant Oil & Gas products & solutions market

EUR billion



## Relevant market developments

### Tailings Water Treatment in Oil Sands

- Executing on Tailings Treatment obligation plans regulated by the government

### cEOR (Chemically Enhanced Oil Recovery)

- Accelerating new cEOR projects to secure energy independence and reduce CO<sub>2</sub> footprint
- Long-term stability in ongoing production

### Shale Oil & Gas

- Recovering from COVID downcycle
- Supplying energy demand from US and Europe



# Our products are essential in mitigating environmental impact and reducing cost in Oil & Gas energy production



## Tailings Water Treatment in Oil Sands

Enabling the restoration of natural landscape after oil sands operations

## cEOR (Chemically Enhanced Oil Recovery)

CO<sub>2</sub> footprint in mature fields **50-60%** lower vs. alternative unconventional methods

Reduced water needs by **70-80%** per barrel compared to steam or water floods

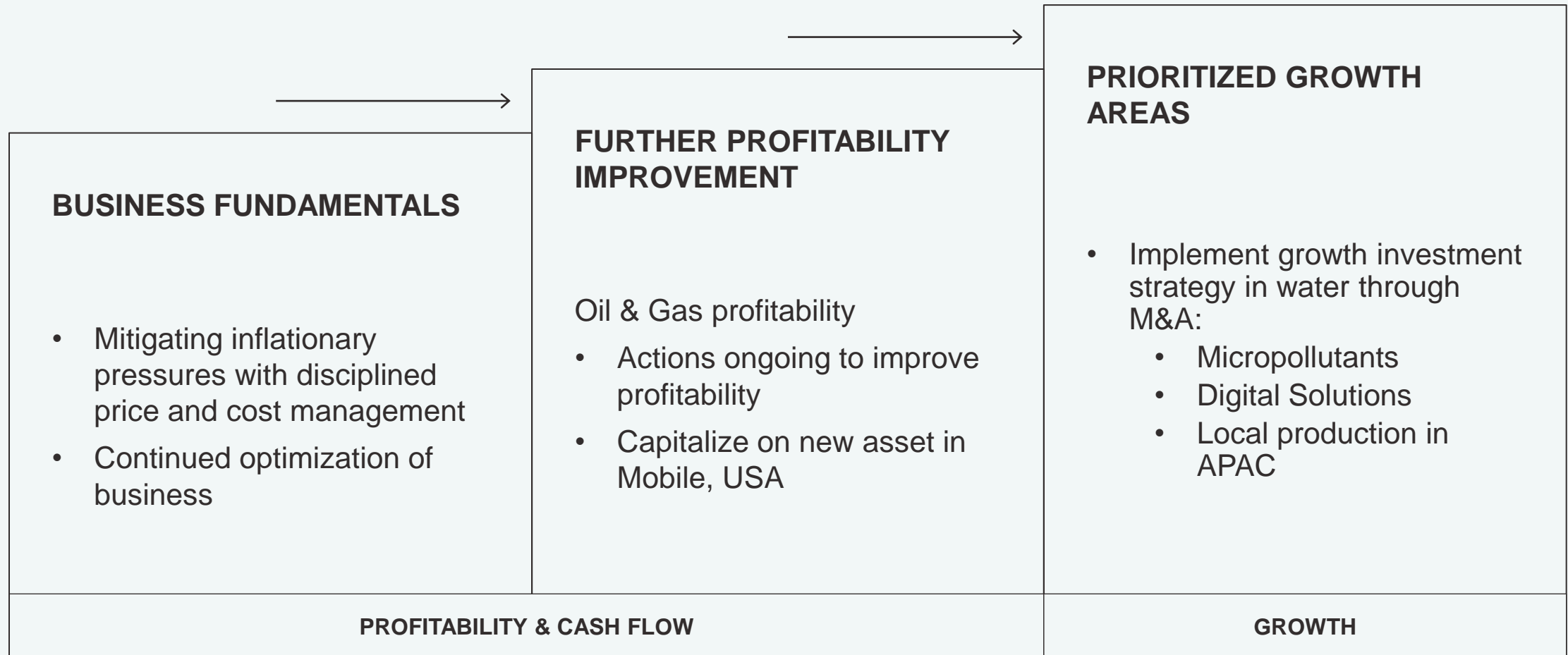
## Shale Oil & Gas

CO<sub>2</sub> footprint reduction by **40-70%** per barrel compared to non-polymer products

Fresh water reduction of up to **100%**, and less produced water to dispose of



# Accelerating sustainable growth in water





# Kemira

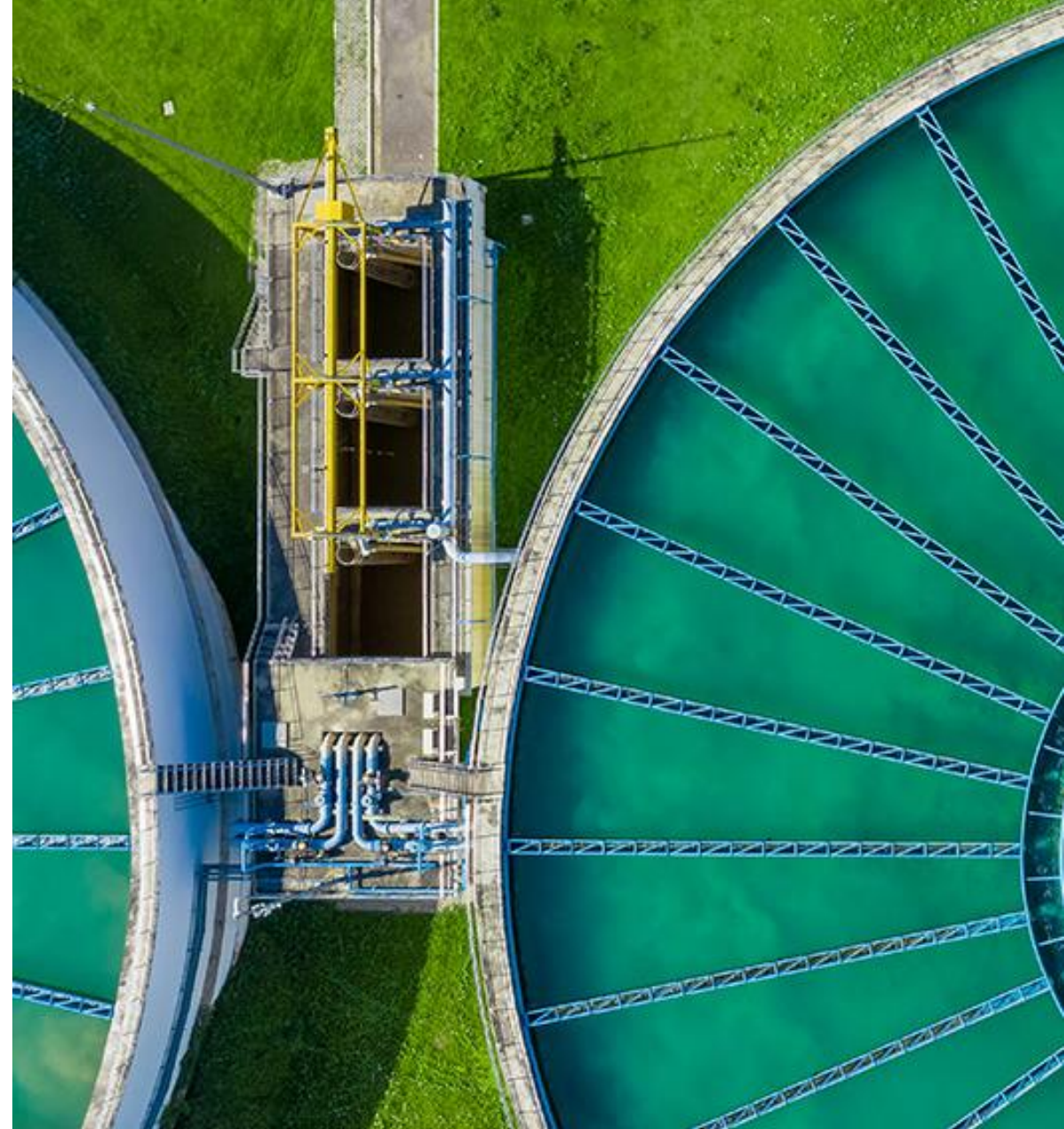
Chemistry with a purpose.  
Better every day.

# Appendix



# We have strong positions particularly in EMEA water treatment

	MARKET POSITION	MARKET OUTLOOK
<b>EMEA</b>		
Water treatment <sup>1,2)</sup>	<b>#1</b>	<b>↗</b>
<b>NORTH AMERICA</b>		
Water treatment <sup>1)</sup>	<b>#2</b>	<b>↗</b>
<b>APAC</b>		
Water treatment <sup>2)</sup>	<b>Top 10</b>	<b>↗</b>
<b>OIL &amp; GAS</b>		
CEOR <sup>2)</sup>	<b>Top 5</b>	<b>↗</b>
Shale <sup>2)</sup>	<b>#2</b>	<b>↗</b>
Oil Sands Tailings <sup>2)</sup>	<b>#1</b>	<b>↗</b>





# Upcoming changes in European water treatment regulation

	COMMENTS & IMPLICATIONS
 <b>Urban Wastewater Treatment Directive (UWWT)*</b>	<ul style="list-style-type: none"> <li>• Basis for wastewater treatment business in Europe</li> <li>• Target to better enforce existing legislation in all countries</li> <li>• Other potential improvement areas: energy efficiency and micropollutants control</li> <li>• Revised directive will increase use of coagulants and polymers in non-compliant countries</li> <li>• New regulation expected to be fully operational in late 2025</li> </ul>
 <b>Water Framework Directive (WFD)</b>	<ul style="list-style-type: none"> <li>• Regulation evaluated to be fit for purpose and won't be opened for changes</li> </ul>
 <b>Drinking Water Directive (DWD)</b>	<ul style="list-style-type: none"> <li>• Only minor changes with small impact:             <ul style="list-style-type: none"> <li>– New tighter limits for Lead and Chromium in drinking water</li> </ul> </li> <li>• New directive entered in force in January 2021, and Member States will have two years to transpose it into national legislation.</li> </ul>
 <b>Water Reuse regulation</b>	<ul style="list-style-type: none"> <li>• New EU wide regulation (no additional national implementation required) defining minimum quality standards for water reuse in agriculture</li> <li>• The regulation does not incentivize increased water reuse, however clear quality standards are hoped to boost water reuse</li> <li>• The new Regulation will apply from 26 June 2023 and are expected to stimulate and facilitate water reuse in the EU</li> </ul>

# Kemira

Chemistry with a purpose.  
Better every day.

PETRI CASTRÉN  
CFO

# Recession-resistant business model

CAPITAL MARKETS DAY  
SEPTEMBER 13, 2022

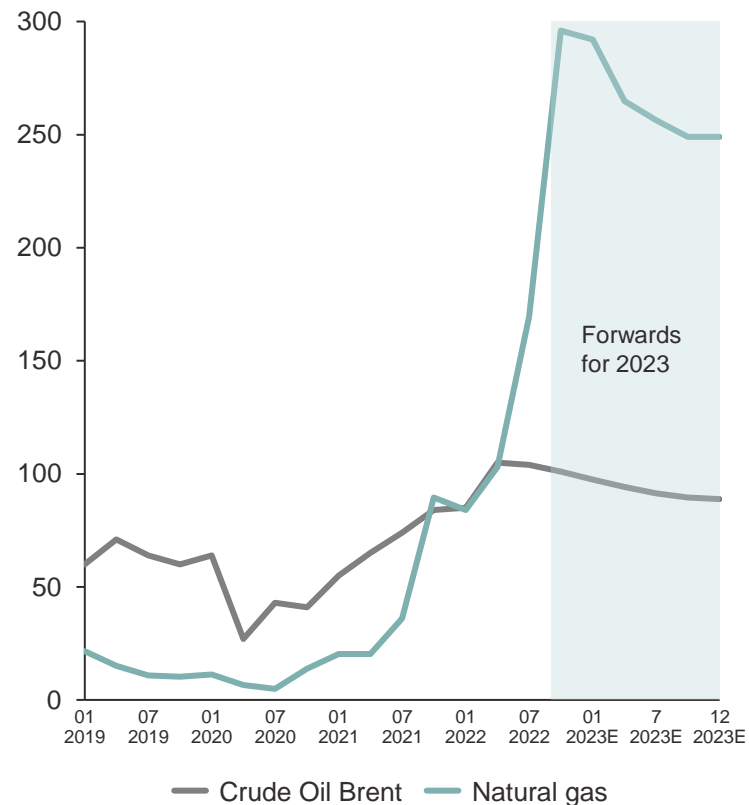
kemira



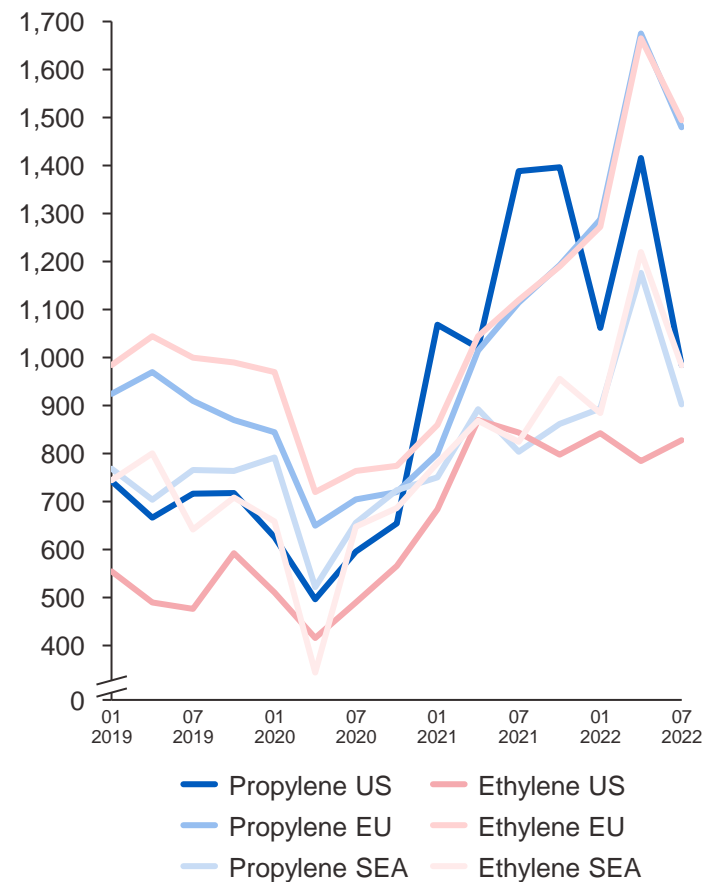


# Unprecedented cost pressure during the past two years – signs of moderation visible

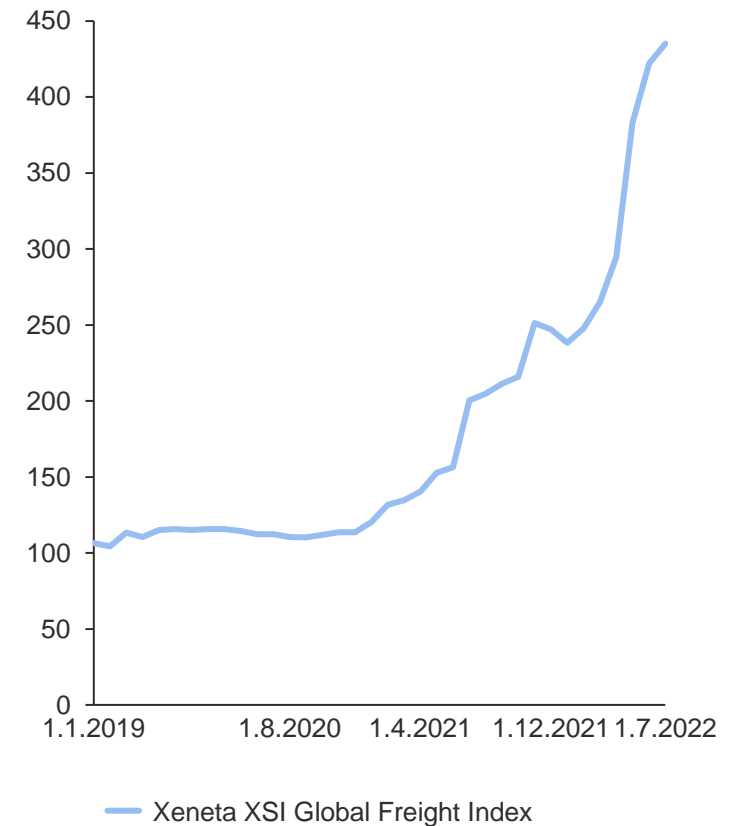
## HIGHER OIL AND NATURAL GAS PRICES



## ETHYLENE AND PROPYLENE ARE IMPORTANT DERIVATIVES

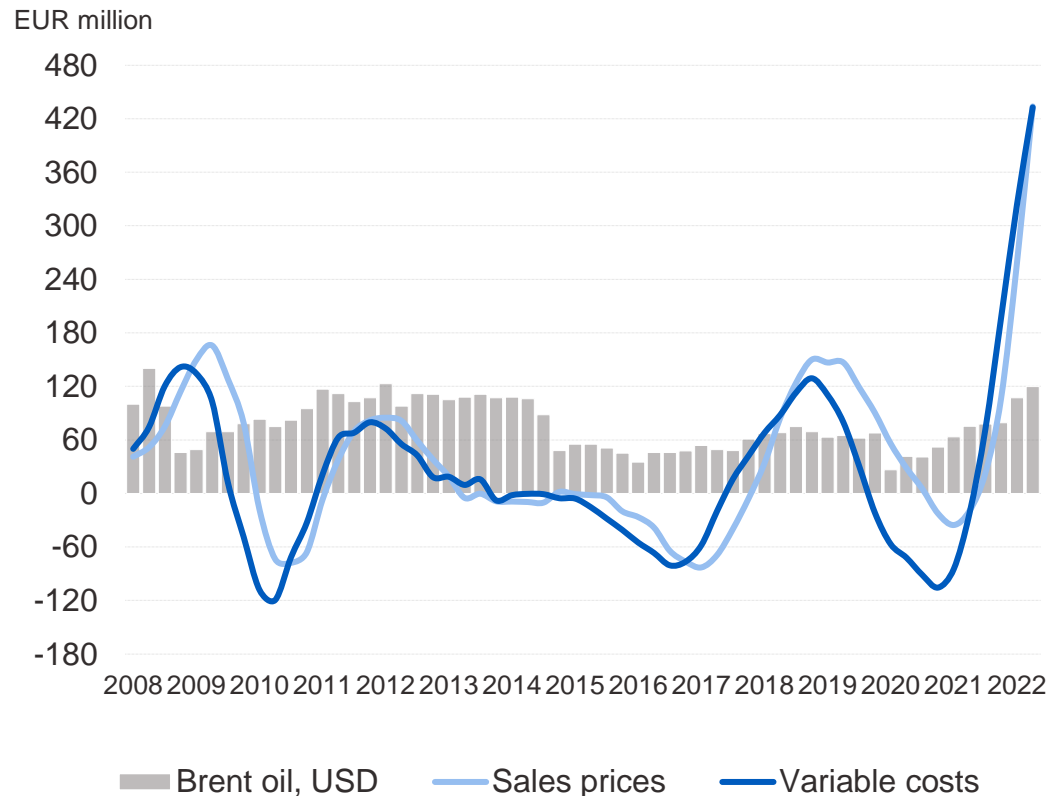


## INCREASED LOGISTICS COSTS



# We have shown agility in an exceptional operating environment

## SALES PRICE VS VARIABLE COST TREND (ROLLING 12-MONTH CHANGE Y-O-Y)



## RESILIENT BUSINESS MODEL

### Contract structure

- Pulp & Paper: contract pricing checkpoints shortened; share of formula-or spot-based based contracts 35%
- Industry & Water: share of formula- or spot-based based contracts 30%

### Multi-asset footprint

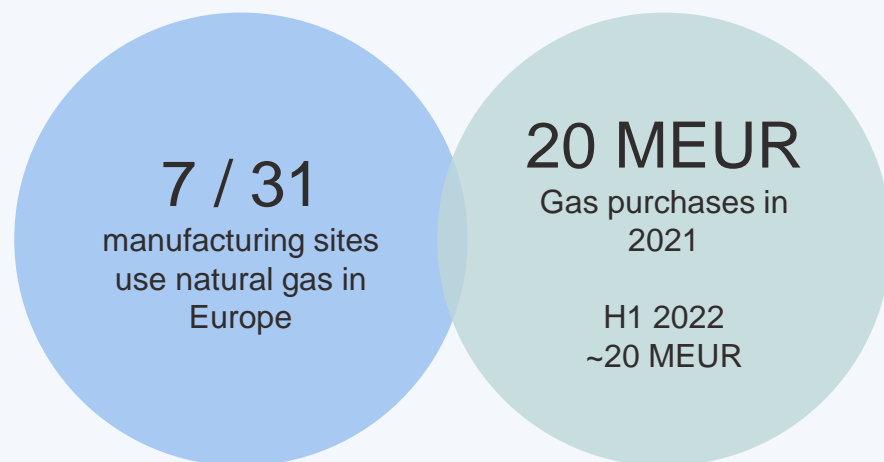
- 62 manufacturing facilities globally, 3 global R&D centres
- Local production and close proximity to customers

### High customer satisfaction

- Net promoter score (NPS) 53 in H1 2022; significant improvement since 2019

# Our reliance on natural gas is low; electricity independence a competitive advantage

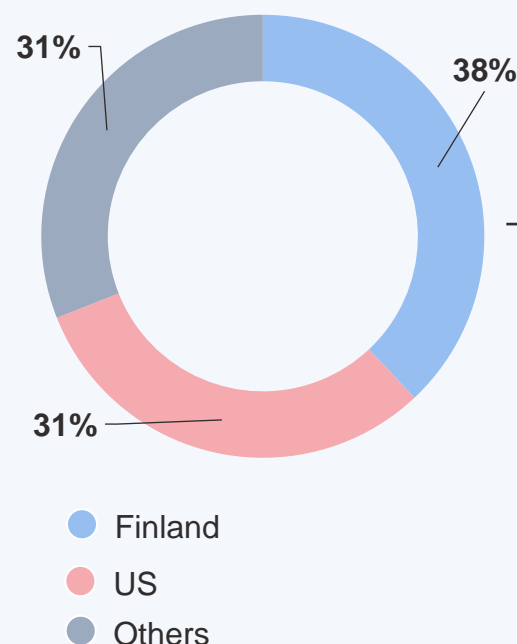
## KEMIRA'S MANUFACTURING SITES ARE NOT RELIANT ON NATURAL GAS



Larger impact of high natural gas prices expected to come through suppliers and customers if they are forced to curtail production

## ANNUAL ELECTRICITY PURCHASES AROUND EUR 140 MILLION IN 2021

Electricity & energy use by country (by Gwh)



### FINLAND

→ Kemira entitled to 4% of upcoming OL3's\*\* capacity, around 60 MW

OL3 will further increase Kemira's electricity backward integration in Finland and share of carbon-free energy to around 80%\*\*

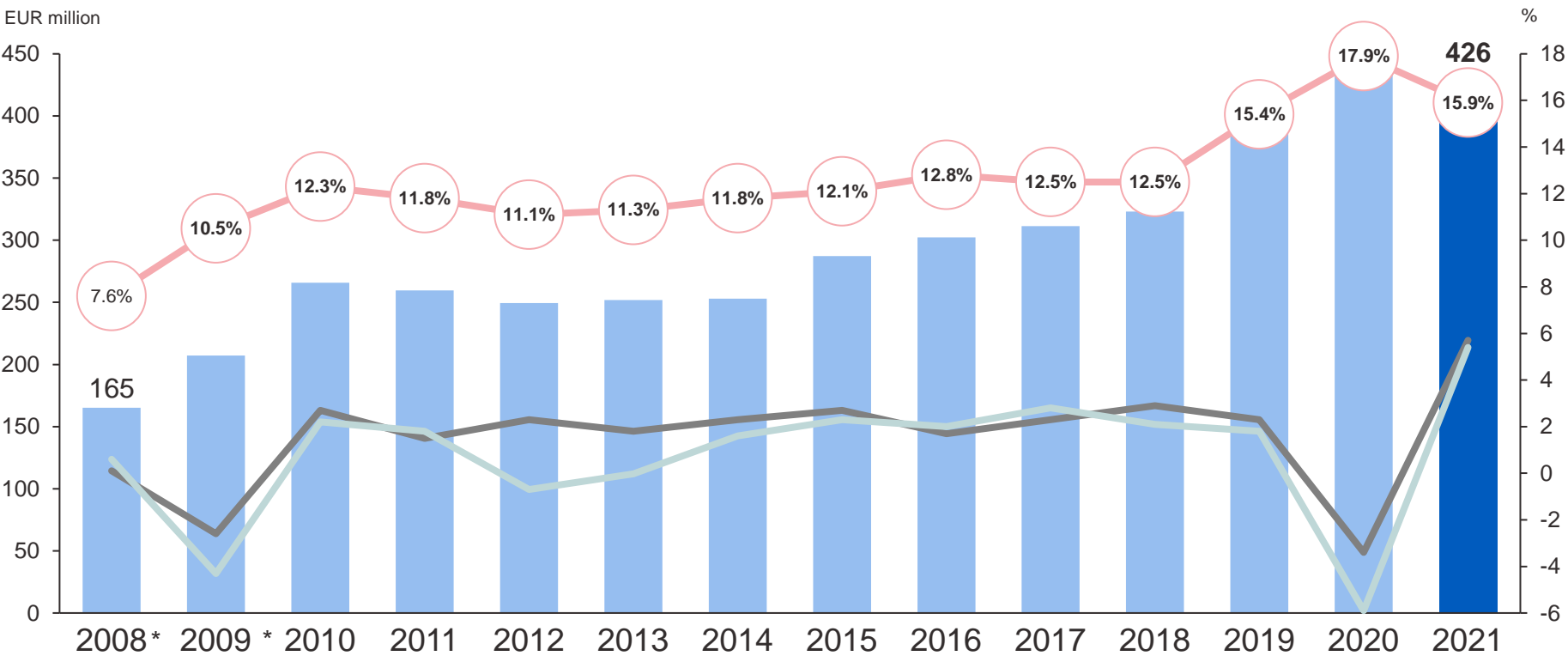
Value of Kemira's shares in Pohjolan Voima and Teollisuuden Voima around EUR 400 million at end of June 2022. Value of shares increased by EUR 141 million during Q2 2022.

\*OL3= Olkiluoto 3, new nuclear plant in Finland  
\*\*assuming OL3 produces at full capacity of 1,600 MW



# Our products are consumable chemicals with resilient demand through economic cycles

## OPERATIVE EBITDA DEVELOPMENT HAS BEEN STEADY THROUGH ECONOMIC CYCLES



2008-2011 are reported EBITDA figures, not operative.  
Figures hence not fully comparable.

\*excluding Tikkurila



Our products are mostly used in customers' processes. Our demand is tied to customer production volumes.

Source for GDP data: World Bank

# WE REMAIN COMMITTED TO OUR FINANCIAL TARGETS

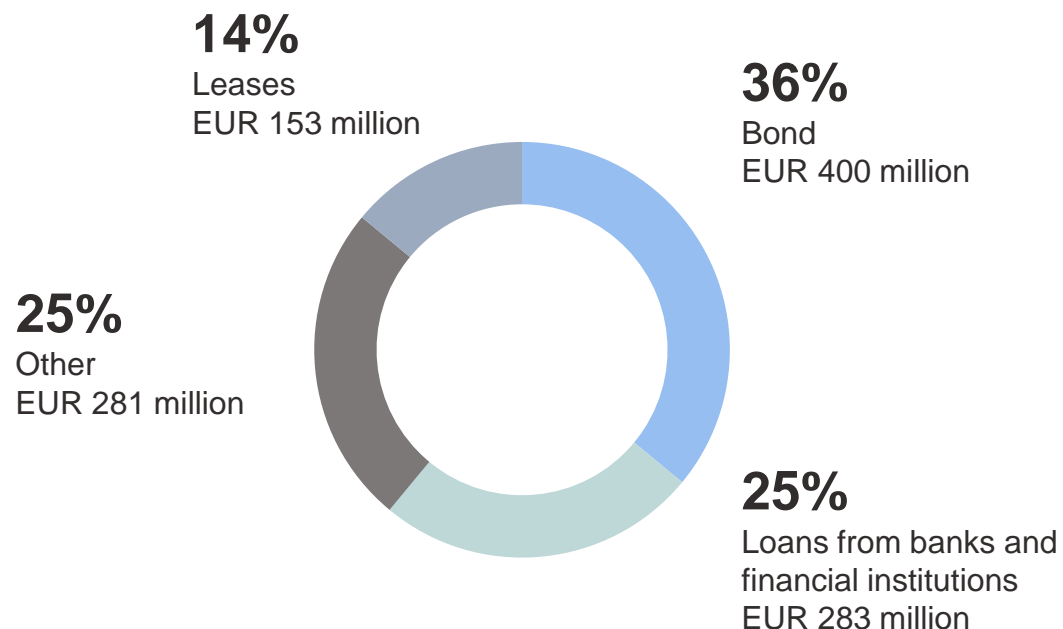
<b>FASTER THAN MARKET GROWTH</b>	<b>OPERATIVE EBITDA 15-18%</b>	<b>GEARING BELOW 75%</b>
<p><b>NEXT STEPS</b></p> <p>Capture organic growth opportunities</p> <p>Continue to progress biobased strategy and partnerships</p> <p>Better positioned for M&amp;A, particularly to add new geographic reach and new product capabilities</p>	<p><b>NEXT STEPS</b></p> <p>Maintain operative EBITDA margin within range</p> <p>Continue disciplined price and cost management</p> <p>Capitalize on recent and upcoming investments</p>	<p><b>NEXT STEPS</b></p> <p>Maintain gearing below 75%</p> <p>Capacity to temporarily increase leverage if clear plan to reduce it</p>

# Maintaining the operative EBITDA margin within the 15-18% range

FACTORS WITHIN OUR CONTROL		
<p><b>CUSTOMER PROFITABILITY</b></p> <p>Particular focus on Oil &amp; Gas profitability</p> <p>Proactive actions to mitigate impact from higher input costs</p>	<p><b>EFFICIENCY OF OPERATIONS</b></p> <p>Continued focus on asset utilization</p> <p>Optimization of product portfolio</p>	<p><b>GROWTH</b></p> <p>Focus on water treatment, biobased chemicals and the APAC region</p>
FACTORS OUTSIDE OUR CONTROL		
<p><b>INCREASING RAW MATERIAL PRICES</b></p> <p><b>DECREASING RAW MATERIAL PRICES</b></p>	<p>→</p> <p>→</p>	<p><b>HISTORICALLY</b></p> <p>Positive for revenue, pressure on margins</p> <p>Negative for revenue, positive for margins</p>

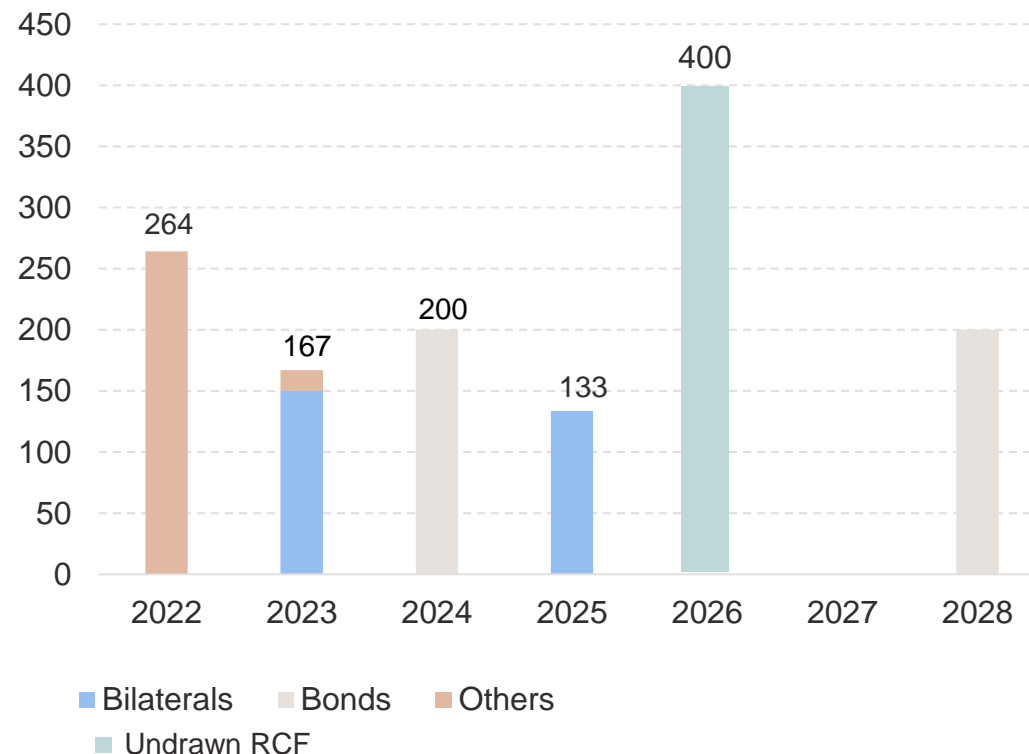


# We have a strong balance sheet and no imminent debt maturities



Average interest rate 1.6% (excl. leases)  
 Average duration 23 months  
 Share of fixed-rate loans 67% (incl. leases)

**GROSS DEBT END OF JUNE 30, 2022 EUR 1,106 MILLION, MATURITY PROFILE EXCLUDING LEASES**



# M&A AND BIOBASED INVESTMENT TO DRIVE FUTURE CAPITAL ALLOCATION

Better positioned for M&A, particularly in water treatment and biobased opportunities

**M&A TO DRIVE GROWTH**

Biobased capex  
Looking at capital-efficient ways to grow with our partners




Biobased investments expected to start in 2023; no step change to current capex frame

**CAPITAL EXPENDITURE TO DRIVE GROWTH**

Dividend policy intact: competitive and over-time increasing dividend

**SHAREHOLDER RETURNS**

# Factors to watch in 2023

FACTORS EXPECTED TO IMPACT OPERATIVE EBITDA DEVELOPMENT IN 2023		
 <p><b>SUPPORTING</b></p> <ul style="list-style-type: none"> <li>• Competitive advantage from energy independence</li> <li>• Contribution from upcoming investment in Uruguay</li> <li>• Solid end-market demand in water treatment and Pulp &amp; Paper despite economic cycles</li> <li>• Good demand expected for Oil &amp; Gas supported by short-term energy market trends</li> </ul>	 <p><b>UNCERTAINTIES</b></p> <ul style="list-style-type: none"> <li>• Global economic uncertainty</li> <li>• FX and raw material price development</li> </ul>	 <p><b>POSSIBLE NEGATIVE FACTORS</b></p> <ul style="list-style-type: none"> <li>• Fixed cost pressure following high inflation and return to normality after COVID-19 pandemic</li> <li>• War in Ukraine and its impact on European energy markets</li> </ul>





# Why invest in Kemira

1.

## FOCUS ON PROFITABLE SUSTAINABLE GROWTH

Organic growth  
H1 2022 23%

Operative  
EBITDA margin  
H2 2022 14.8%

2.

## RESILIENT BUSINESS MODEL ENABLING AN ATTRACTIVE DIVIDEND

Dividend policy:  
competitive and over-  
time increasing dividend

Dividend for 2021 EUR  
0.58 per share

3.

## SUSTAINABILITY AT THE CORE OF STRATEGY

Kemira will become the leading provider  
of sustainable chemical solutions  
for water-intensive industries

# Kemira

Chemistry with a purpose.  
Better every day.