

January 2025

Business model, businesses & strategy

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Borregaard investor message | Business model & strategy

Biorefinery business model

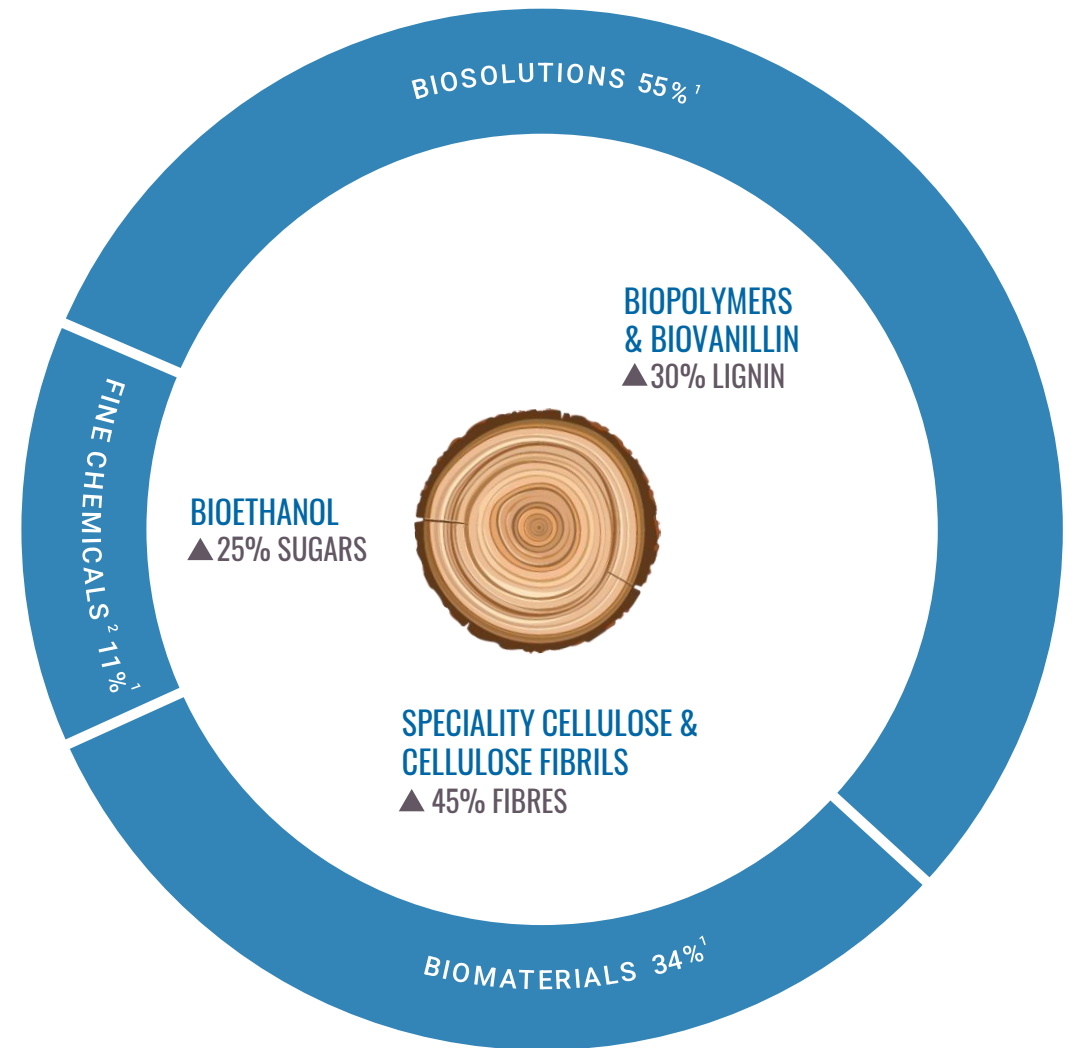
- Biochemicals vs. petrochemicals
- High value added through full raw material utilisation
- A diversified market strategy (800 products) takes risk out of the integrated operations

Specialisation strategy

- Global niche player in markets with high barriers to entry
- Leading market positions through application knowledge and proximity to markets
- Strong innovation efforts and continuous improvement
- Competence is the main competitive advantage

Strategic priorities

- Key actions next 3–5 years to execute specialisation strategy



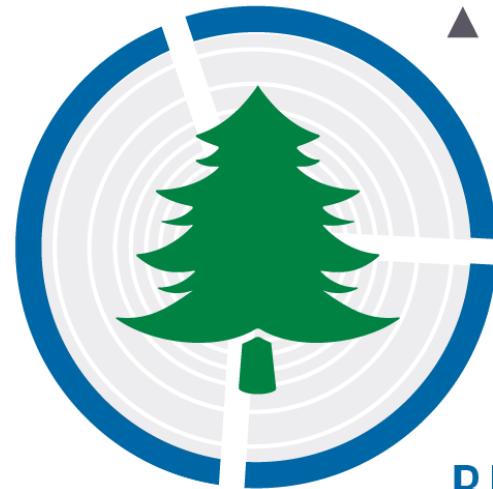
¹ Segment revenue as a % of sales revenue 2024

² Leading producer of fine chemical intermediates for contrast agents, significant producer of 2nd generation bioethanol. Only the latter is made from wood.

Borregaard is a global leader in biochemicals | Business model & strategy

*High value added through full raw material utilisation
Sustainable and environmentally friendly substitutes
for petrochemicals*

**SPECIALITY
CELLULOSE
& CELLULOSE
FIBRILS**
▲ 45% FIBRES



**BIOPOLYMERS
& BIOVANILLIN**

▲ 30% LIGNIN
(BINDING MATERIAL)

BIOETHANOL

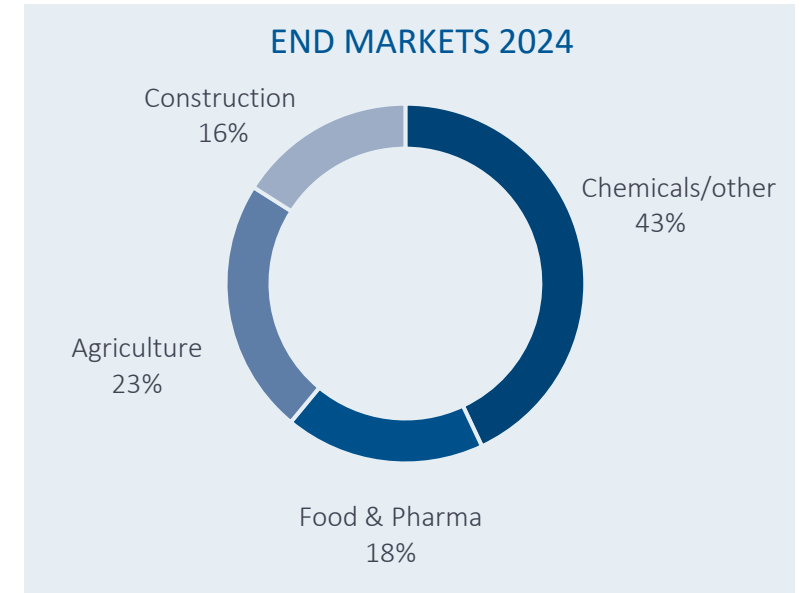
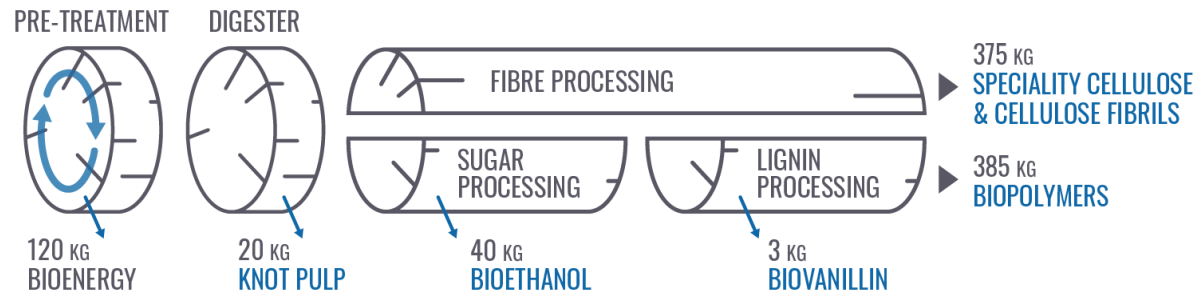
▲ 25% SUGARS

One of the world's most advanced biorefineries

Business model & strategy

INTEGRATED PRODUCTION SYSTEM SERVING DIVERSE MARKETS

1000 KG
WOOD
▼
94%
UTILISATION



Integration models: Own integrated, Partner integrated and Independent

SPECIALITY CELLULOSE

Construction
Filters
Inks and coatings
Casings
Food/pharma/personal care
Textiles

CELLULOSE FIBRILS

Adhesives
Coatings
Agriculture
Personal care
Home care
Construction

BIOPOLYMERS

Construction
Animal feed pellets
Batteries
Briquetting
Crop protection
Plant nutrition

BIOVANILLIN

Food and beverages
Fragrances
Personal care and cosmetics
Pharmaceuticals
Agrochemicals

BIOETHANOL

Biofuel
Disinfectants
Pharmaceutical industry
Home and personal care products
Paints and coatings
Car care

Global niche player with a market driven organisation | Business model & strategy

BioSolutions 55%



- Largest supplier, technology leader in lignin-based biopolymers with global markets
- Only producer of wood-based vanillin

BioMaterials 34%

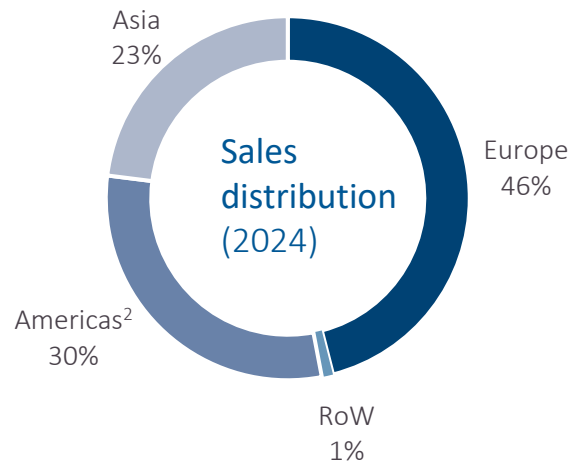


- Leading global speciality cellulose supplier
- Pioneer in cellulose fibrils

FineChemicals 11%



- Leading producer of fine chemical intermediates for contrast agents
- Significant producer of advanced 2G bioethanol



Market driven organisation

- ~115 FTEs strong sales/technical service organisation
- Dedicated sales force for each business unit
- Sales primarily handled through own organisation

1 Segment revenue as a % of sales revenue 2024
2 USA/Canada 24%, rest of Americas 6%

The specialisation strategy | Business model & strategy



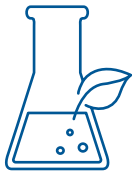
Specialisation in global niches

- Markets with high barriers to entry
- Leading market positions through application knowledge and proximity to markets
- Diversified market strategy and global market positions secure maximum flexibility



Strong innovation efforts and continuous improvement

- Business driven innovation model that involves the entire organisation
- Continuous productivity improvement through more efficient organisation, competence development and smart use of technology



Competence is the main competitive advantage

- Competence differentiates Borregaard from the competitors
- Combination of competences in sales & marketing, R&D and production
- Leverage expert knowledge to grow organically and through acquisitions

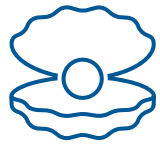


Sustainability – key decision criterion to innovation and new initiatives



The Borregaard Way – our corporate culture and core values

Increasing momentum for bio-based products – considerable potential for further specialisation and value growth



Unique combination of high-value raw material base, biorefinery assets and expert knowledge

Considerable potential for further specialisation and value growth

- 800 products with multiple applications in many markets combined
- The Borregaard specialisation journey is a continuous process towards full specialisation



Specialisation and value growth will take priority

- Significant potential for upgrade of product portfolios in BioSolutions and BioMaterials
- Well positioned in attractive markets with high expected growth rates
- Significant potential for geographic market penetration
- Increased specialisation is the cumulative effect of numerous innovation projects



Explore expansion and debottlenecking opportunities at the Sarpsborg biorefinery

- Low-risk investment raising barriers to entry



Consumer and investor attention drives demand for greener solutions

- EU Green Deal
- Taxonomy
- Science Based Targets initiative

Strategic priorities | Business model & strategy

Increased specialisation and value growth

- Specialisation through innovation and market development
- Leverage high-value lignin raw material base in biopolymers and biovanillin
- Enhance product mix in speciality cellulose
- Development of the cellulose fibrils business
- Targeted investments to support increased specialisation, capacity needs and new initiatives

Sustainability as a value driver

- Exploit full market potential of biochemicals product portfolio
- Delivery of environmental targets strengthens competitive edge
- Sustainability a key decision criterion in relation to innovation and new initiatives



Sustainability – integral part of market offering | Sustainability

RAW MATERIALS



Natural, renewable, sustainable raw materials

Sustainable and certified wood

- Documentation
- PEFC¹ and FSC¹ standards
- Lignin raw materials from certified or controlled forests
- Non-GMO raw material

PROCESSES



Efficient and sustainable production and value chain

Reduced emissions improve LCA²

- Target based CO₂ reductions
 - Energy conservations
 - New/green energy sources
- Reduced emissions to water and air
- “Greener” logistical solutions

PRODUCTS



Sustainable biochemicals

Products add sustainability value to customers

- Climate: LCA² shows favourable GHG footprint
- Bio-based: Natural raw materials preferred
- EHS³: Non-toxic, harmless products

1 PEFC: Programme for the Endorsement of Forest Certification, FSC: Forest Stewardship Council

2 Life Cycle Analysis

3 Environment, Health and Safety



Science Based Targets for GHG emissions

- Approved by Science Based Targets initiative in 2022
- Targeted reductions in GHG emissions (scope 1 and 2):
 - 42% absolute reduction by 2030 (base year = 2020)
 - Net-zero target, 90% absolute reduction by 2050
- Targets in line with 1.5°C goal in Paris Agreement and Norwegian Climate Law

Highlighted as a global leader in corporate climate action by CDP

- Top 25 out of 21,000 companies scored (2023)
 - A within Climate Change (6 years in a row)
 - A within Water security
 - A- within Forest

Gold status in EcoVadis Supply Chain

- Top 5% of over 130,000 reporting companies



Transition plan supporting the specialisation strategy | Sustainability

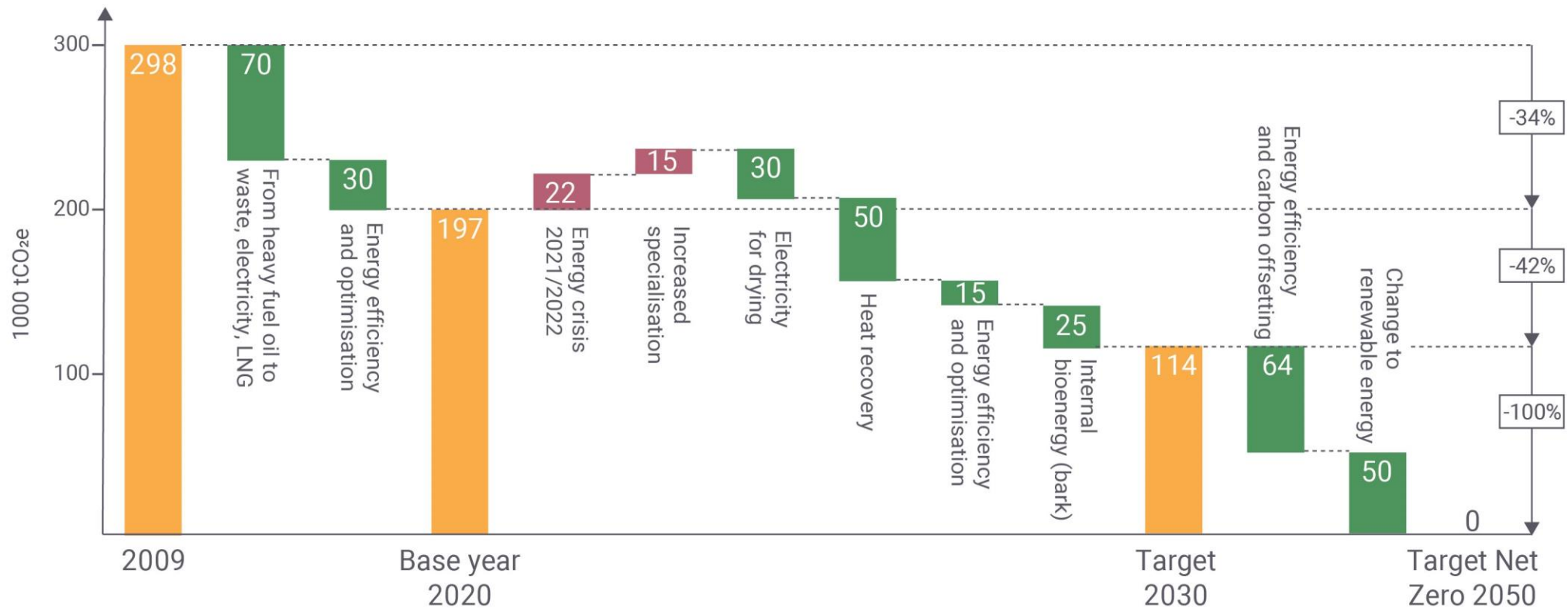
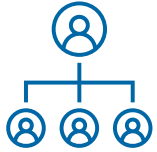


Figure showing Borregard transition plan for scope 1 and 2 GHG emissions

Market driven innovation | Innovation



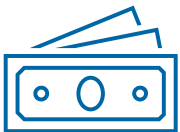
Innovation Management Teams (IMT)

- Interdisciplinary team
- Strategic projects
- Resource use
- Programmes over several years



97 employees in R&D and innovation

- R&D centres in Norway, USA and India
- 32 PhDs

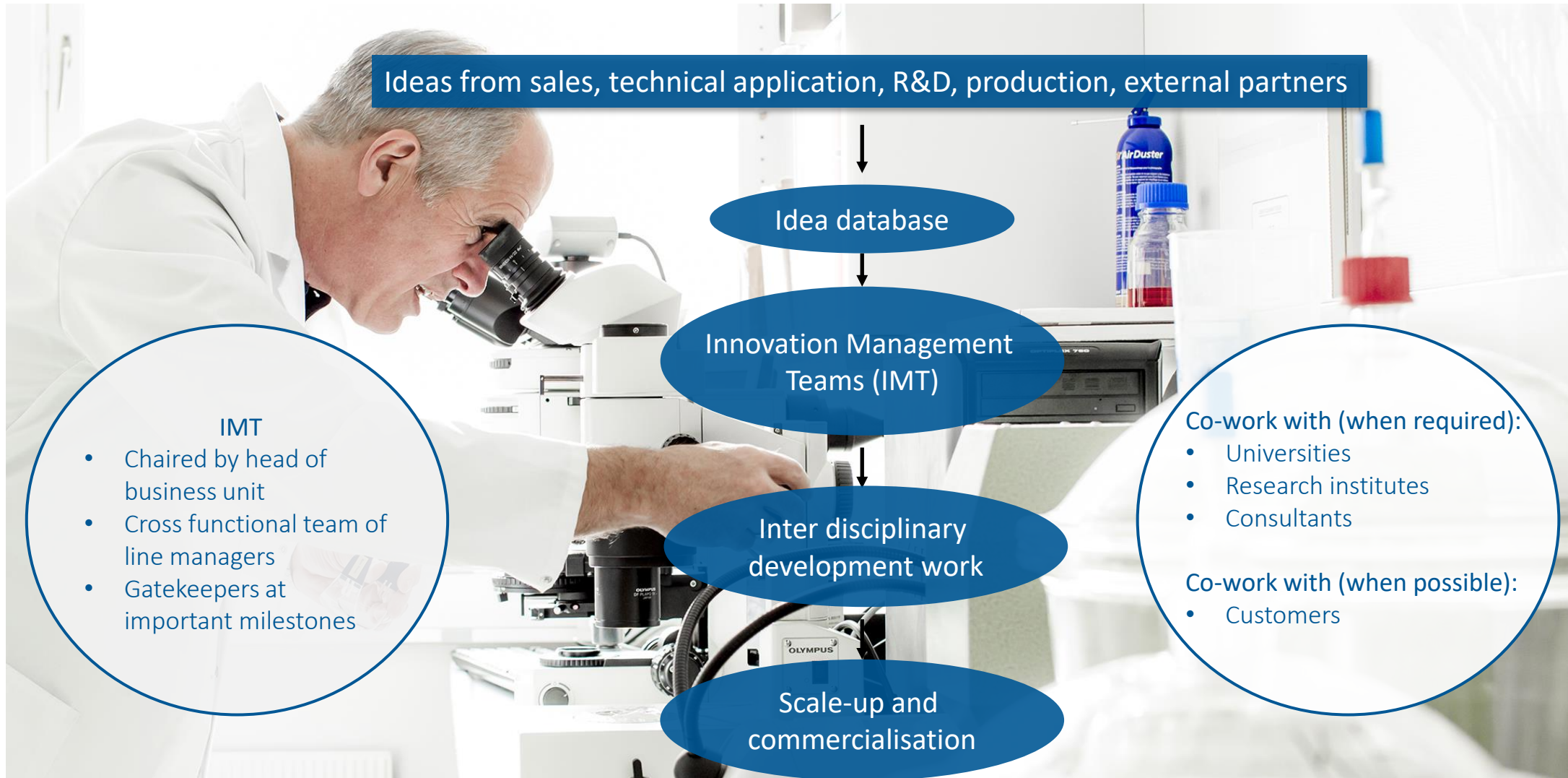


Significant R&D and innovation efforts

- 2024: NOK 229 million (≈3% of revenues)
- Innovation rate of 16%¹ in 2023



Business driven innovation model | Innovation



Overview of innovation portfolio | Innovation

Application-oriented innovation



Crop protection, plant nutrition, feed

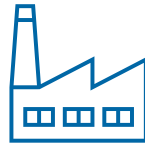


Batteries, pigments, inks, home care and resins



Concrete, coatings, packaging

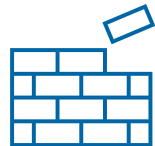
Process-oriented innovation



Process improvements
Capacity, quality, sustainability



Cellulose Acetate
Purity



Cellulose ethers
Viscosity

Business development



Disruptive innovation
New processes and products



Bio-based investments
Investing for the long term





Borregaard investing in bio-based start-ups | Bio-based investments

Selection criteria

- Conversion of bio-based raw materials to chemicals and materials
- Strong ESG profile
- Specialisation potential
- Synergies with Borregaard's existing business and competence
- Significant revenue potential
- Time to market < 5 years
- Geography: Nordics > Europe > Global



Investments in bio-based start-ups | Bio-based investments

	About the company	Ownership and size of investment	Follow-up of investment
	Harvesting and biorefining of macroalgae to ingredients for pharmaceutical and nutraceutical applications (<i>Norway</i>)	<ul style="list-style-type: none">• 35% ownership fully diluted• Total investment ~419 mNOK	<ul style="list-style-type: none">• 2 board positions• Nomination committee• Collaboration in projects• Joint funding applications
	Biorefining of spent coffee grounds to ingredients within personal care, human nutrition and agriculture (<i>Denmark</i>)	<ul style="list-style-type: none">• 12% ownership fully diluted with 3 mEUR investment• Option to increase ownership to 34% by Jan 2026 with additional 9.25 mEUR investment	<ul style="list-style-type: none">• 1 board position• Joint funding application
	Processing of technical lignins from biorefineries for use in personal care as well as industrial applications (<i>Austria</i>)	<ul style="list-style-type: none">• 12% ownership• Total investment 1 mEUR	<ul style="list-style-type: none">• Advisory board
	Biorefining of farmed macroalgae to ingredients within food, health & wellness, skincare and materials (<i>Scotland</i>)	<ul style="list-style-type: none">• 1% ownership• Total investment 0.15 mUSD	

Strategic fit of bio-based investments | Bio-based investments



Harvested kelp

Farmed kelp

Coffee waste

Woody biomass

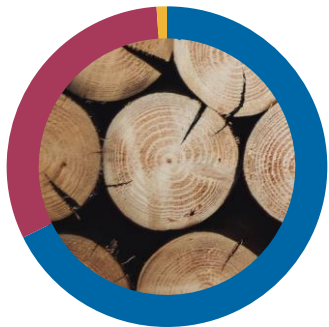
Water soluble lignosulfonate

Non-water soluble technical lignins

Biorefining

Processing

B2B sales



- Fibres, polysaccharides, sugars
- Lignin, polyphenols
- Lipids, resins, oils, proteins

BioSolutions in Borregaard | BioSolutions

Market position

- Largest supplier of lignin
- Only supplier of wood-based vanillin
- Unique technical and application expertise

Production

- Norway, USA, Germany, Czech Republic, UK

Applications

- Concrete admixtures
- Gypsum board
- Ceramics
- Animal feed
- Crop protection
- Plant nutrition
- Oilfield chemicals
- Batteries
- Flavours & fragrances
- Personal care and pharmaceuticals

Key attractions

- A sustainable and broad product portfolio
- Large and diverse customer base
- High barriers to entry



Product performance depends on the pulping process and the raw material

Sulphite pulping process

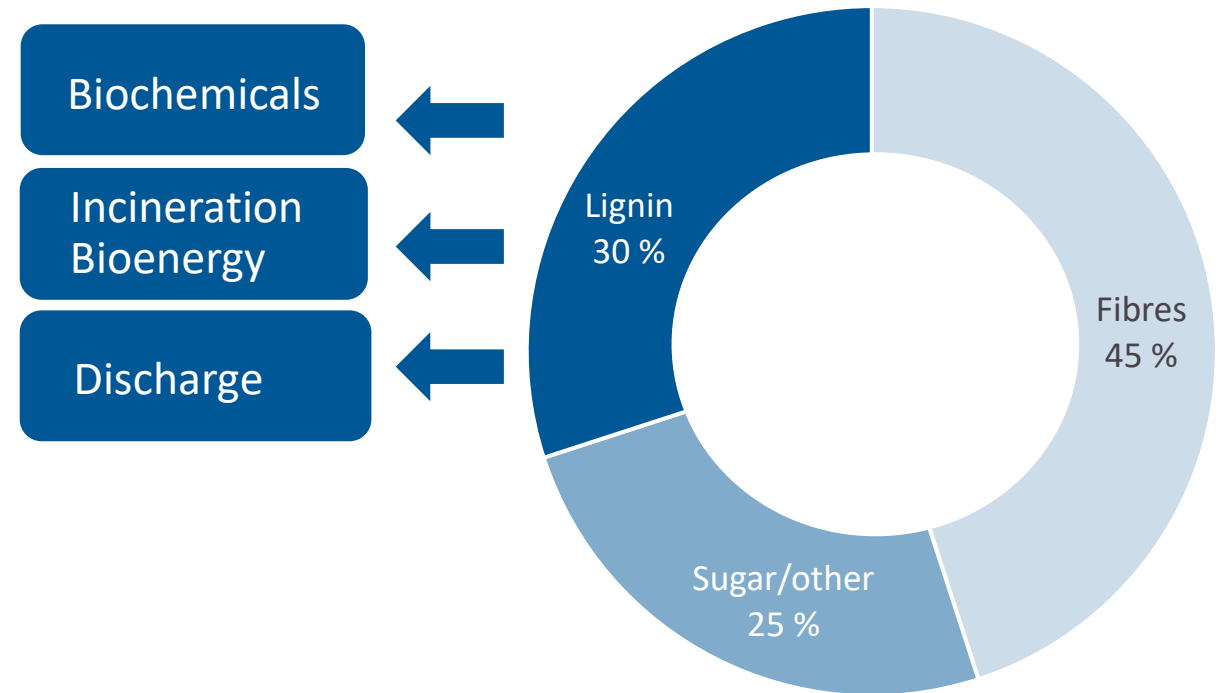
- Versatile lignin used in a variety of products/applications
- Quality depends on the chemicals base
- Water soluble
- Limited number of sulphite mills

Softwood (pine/spruce) vs. hardwood and straw

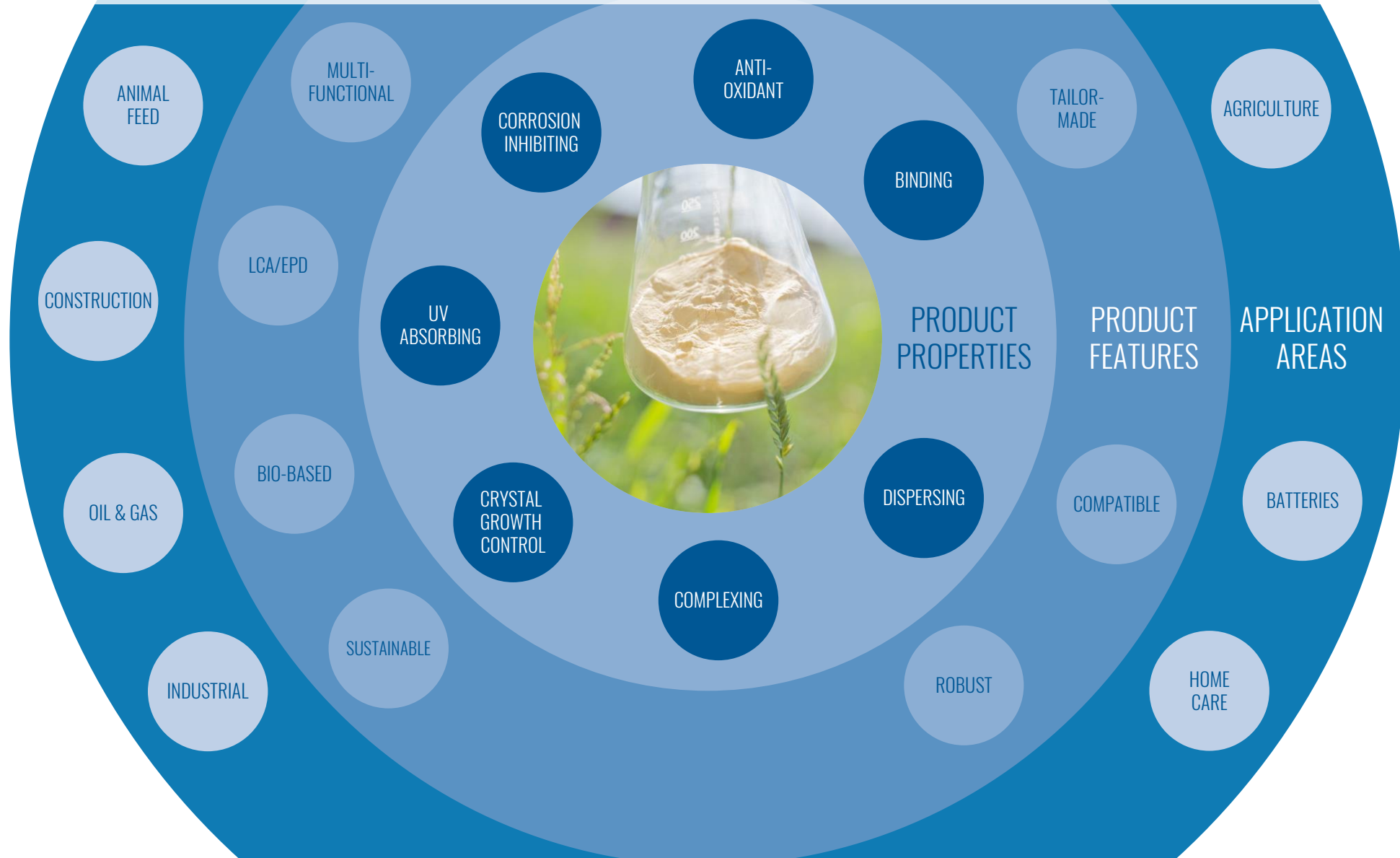
- Softwood lignin has superior modification potential

Kraft (sulfate) pulping process

- Lignin is normally incinerated to recover energy and chemicals
- Not in water soluble form from the pulp mill
- Pulp producers are exploring potential for industrial use of kraft lignin



Lignin biopolymers: Properties, advantages and applications | BioSolutions

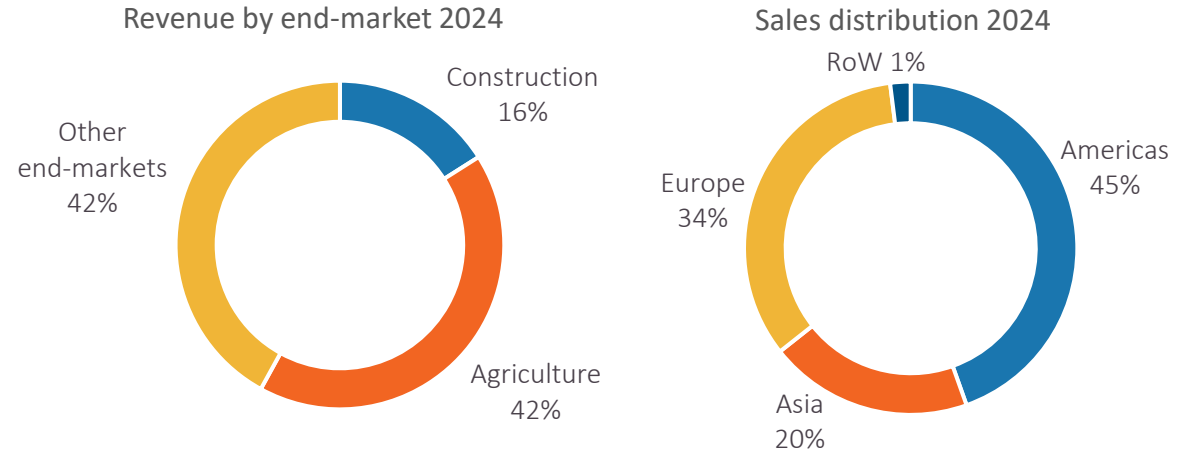


Diversification: 600 products to 2,700 customers | BioSolutions

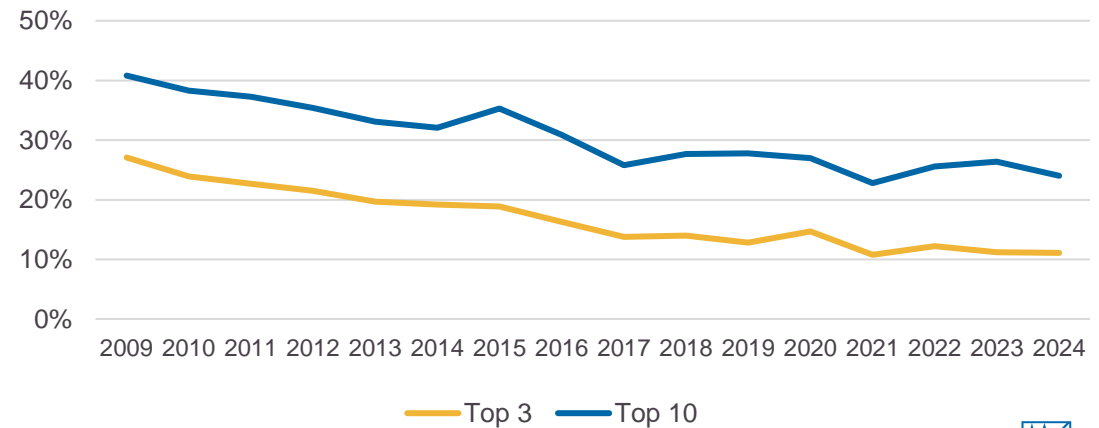
BioSolutions properties and applications

Binding agent	<ul style="list-style-type: none"> • Ceramics • Dust solutions • Feed • Granulated limestone
Dispersing agent/ rheology control	<ul style="list-style-type: none"> • Carbon black and pigments • Concrete admixtures • Dyestuffs • Metals and minerals • Micronutrients • Pesticides and biological pest control
Crystal growth control	<ul style="list-style-type: none"> • Batteries • Oilfield chemicals • Water treatment
Flavours and fragrances	<ul style="list-style-type: none"> • Food • Fragrances • Personal care
Chemical building blocks	<ul style="list-style-type: none"> • Agrochemicals • Pharmaceuticals • Resins
Additional properties	<ul style="list-style-type: none"> • Antioxidant • Anti-microbial • Biostimulant • Complexing agent • Corrosion inhibitor • Emulsion stabiliser • Soil conditioner • UV protection

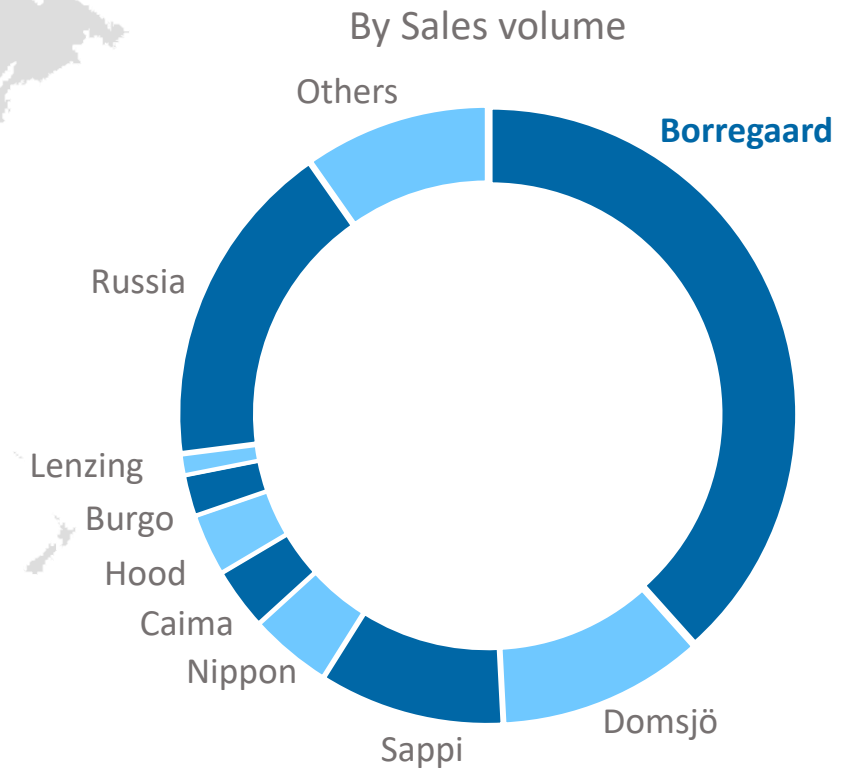
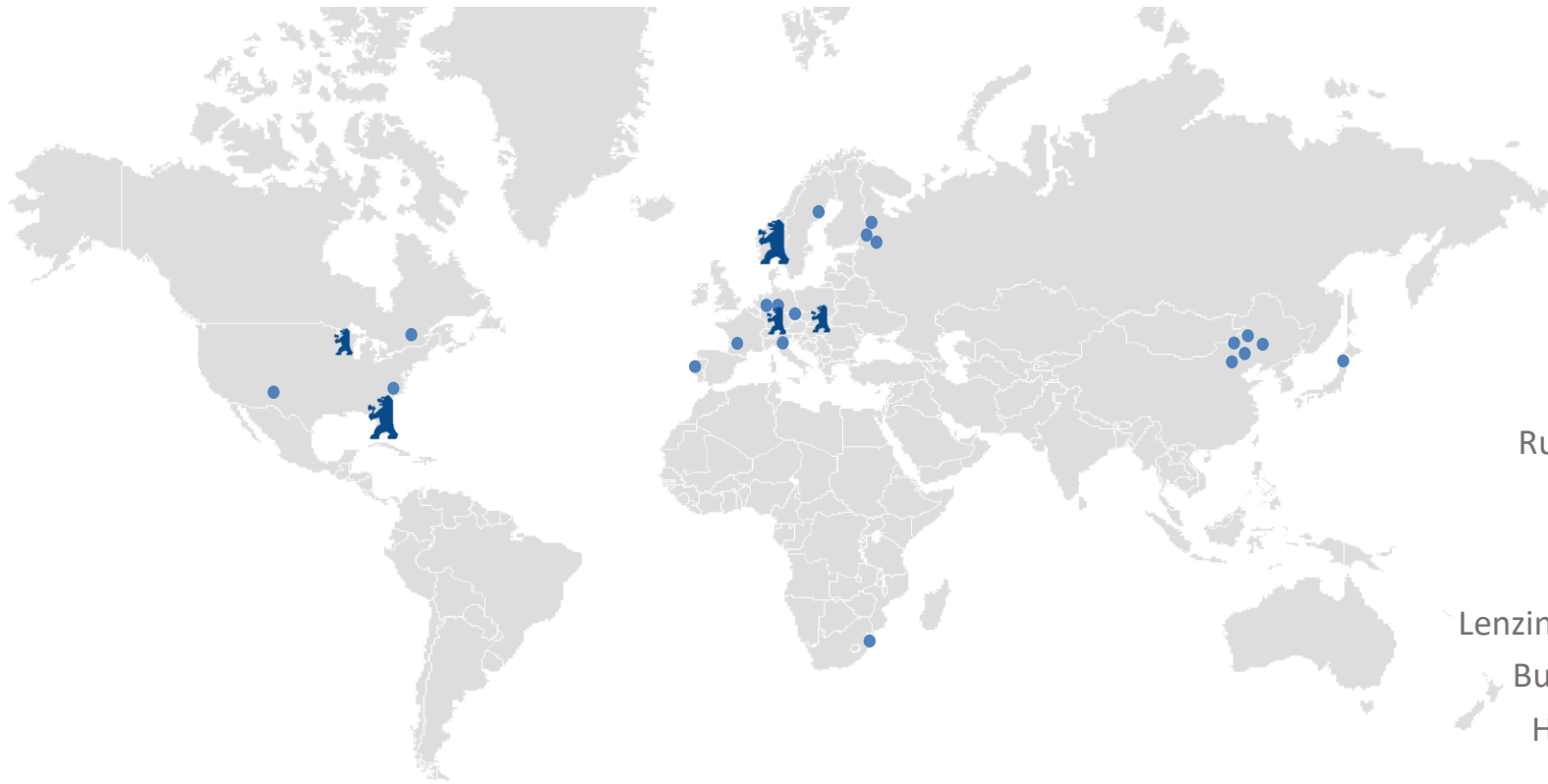
Revenues by end-market and region



Top 10 and top 3 customers in % of revenues



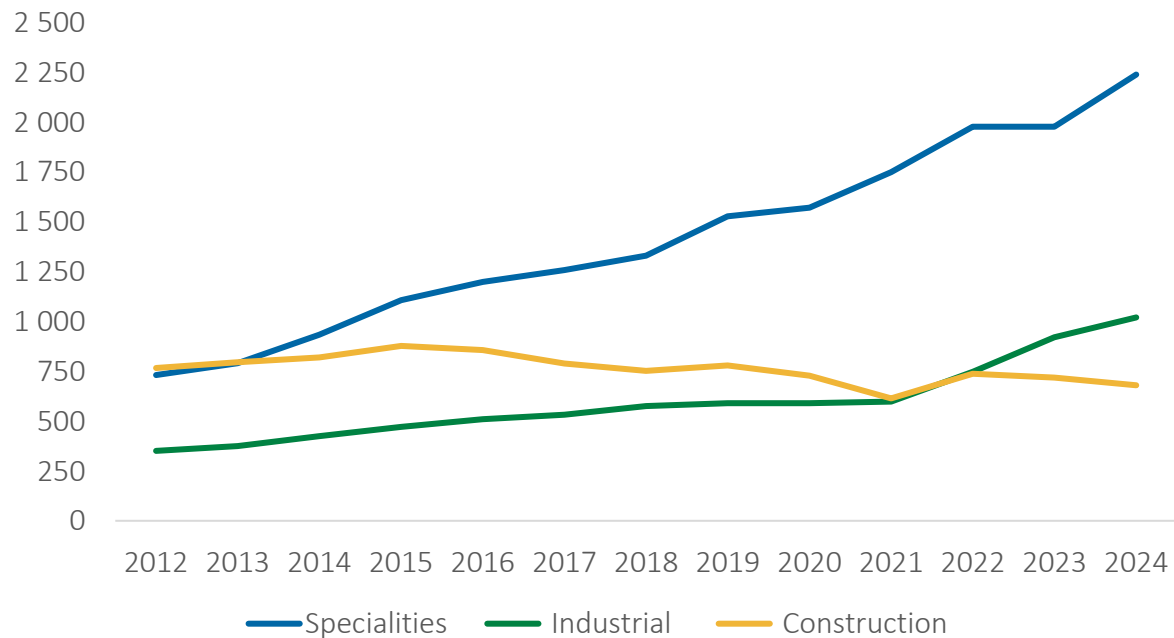
Global lignin supply | BioSolutions



Global lignin supply ~900 – 950,000 mtds

Significant specialisation and value growth over time | BioSolutions

Sales revenues (mNOK)



Strong development in sales to Specialities and Industrial

- Gross sales trebled from 2012

Significant portfolio optimisation

- Increased specialisation
- Reduced exposure to low-value markets
- Less cyclicality

Sustainability and regulatory offering new opportunities | BioSolutions

Sustainability and regulatory trends – key driver for new business and innovation

- Customer GHG reduction initiatives – alternatives to fossil-based solutions
- Formaldehyde/microplastics/single-use plastics bans
- Antibiotics bans/restrictions and product authorisations

Well-documented competitive edge in sustainability

- Life Cycle Assessments (LCAs) and Environmental Product Declarations (EPDs)
- Innovative digital solution tracking Borregaard's scope 3 impact on customer's GHG emissions (*in progress*)

Proactive and tailored market communication

- Geographical market, application and customer specific



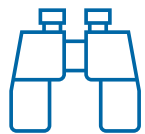
Attractive growth opportunities in Asia | BioSolutions

Fastest growing region and sustainability trends

- ~60% of world population (4.8 billion)
- Solid growth across the region and in key application areas

Increased market presence in multiple countries

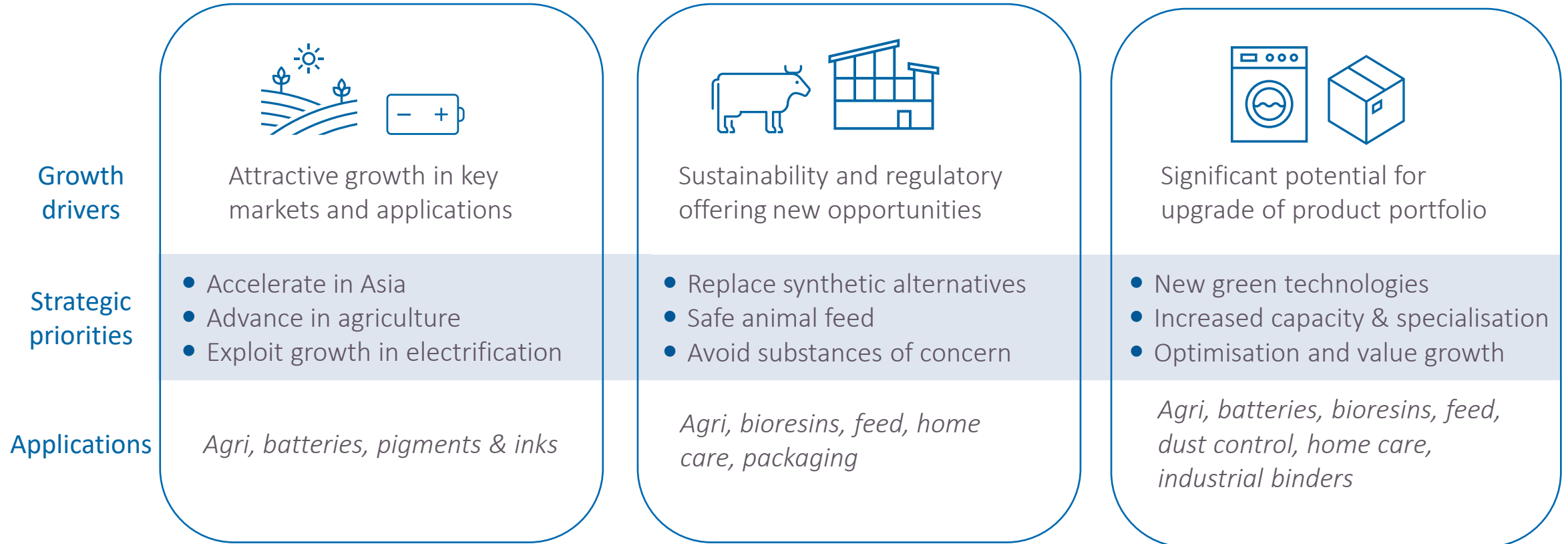
- More technical and commercial resources
- Increased R&D capability in India











Significant growth opportunities within agriculture and industrial applications



Specialisation and value growth



Biopolymers in agriculture | BioSolutions

Plant nutrition			Crop protection			Seed coating	Feed
							
Micronutrients	Soil conditioners /biostimulants	Granulated limestone and fertilizers	Pesticides	Biological pest control	Adjuvants	Encrusted and pelleted seeds	Animal feed
<ul style="list-style-type: none"> • Ready-to-use micronutrients • Complexing agents • Rheology modifiers for suspensions 	<ul style="list-style-type: none"> • Nutrient use efficiency • Resistance to abiotic stress • Organic carbon source 	<ul style="list-style-type: none"> • Binder • Dedusting agent 	<ul style="list-style-type: none"> • Dispersant • Binder • Rheology modifiers 	<ul style="list-style-type: none"> • Dispersant • UV protection • Rheology modifiers 	<ul style="list-style-type: none"> • Compatibility agent • Uptake enhancer 	<ul style="list-style-type: none"> • Binder • Microplastic-free film formers 	<ul style="list-style-type: none"> • Binder • Antioxidant
8–9% CAGR	7–12% CAGR	7–12% CAGR	2–3% CAGR	11–12% CAGR	6–7% CAGR	8–9% CAGR	2–3% CAGR



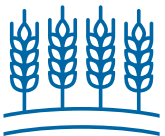
Plant nutrition market

- CAGR 12%¹



Sustainable plant nutrition

- Maximises use of nutrients present in the soil or added during fertilization
- High internal competence and global R&D capabilities



Soil conditioners and biostimulants increase crop yield

- Products with solubility, compatibility and agronomic performance
- Improves nutrient use efficiency, soil fertility and plant resistance to harsh conditions





Biocontrol market

- CAGR 12%¹



Sustainability as a driver

- Market pull for more sustainable crop protection
- Biopesticides – pest control derived from natural source



Bio-based formulation aids needed

- High internal competence and R&D capabilities
- Borregaard's biopolymers offer viability and efficacy



Lead batteries: Borregaard products as industry standard | BioSolutions



Lead batteries - essential battery technology

- Close to 45% of the world's rechargeable power¹
- Low cost, safe and reliable



Sustainable technology

- Most sustainable battery technology (99% recycling rate)
- Well suited for Energy Storage Systems (ESS)
- 70 mNOK expansion investment to meet future demand



Indispensable for lead battery performance

- Improved battery life, capacity and cold temperature performance
- High internal competence and R&D capabilities
- Cooperation with industry on new products for ESS and auxiliary batteries for electric vehicles (EVs)





Fastest growing battery technology

- Main battery technology for EV and ESS
- CAGR 27% towards 2030¹



Leveraging competence and technology

- High internal competence and global R&D capabilities
- New battery test lab in US

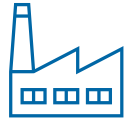


New products launched

- Improved battery properties and cost reduction
- Sustainable and non-toxic
- Ongoing trials with key global players



New green technology: Opportunities in high-end markets | BioSolutions



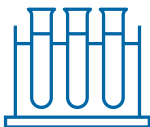
Demonstration plant

100 mNOK investment, first step operational Q3 2024, completion mid-2025



Natural polymer backbone

Modified lignin-based polymer from sustainably managed Norway spruce



Unique features

Enables Borregaard to compete with advanced fossil-based polymers like e.g. polyacrylates



Market opportunities

Home care, industrial cleaners, water treatment, coatings, agriculture, leather tanning, oil field chemicals



New green technology: Entering the home care market | BioSolutions



Sustainable formulation

5–8% dosage in dishwasher tablet or powder



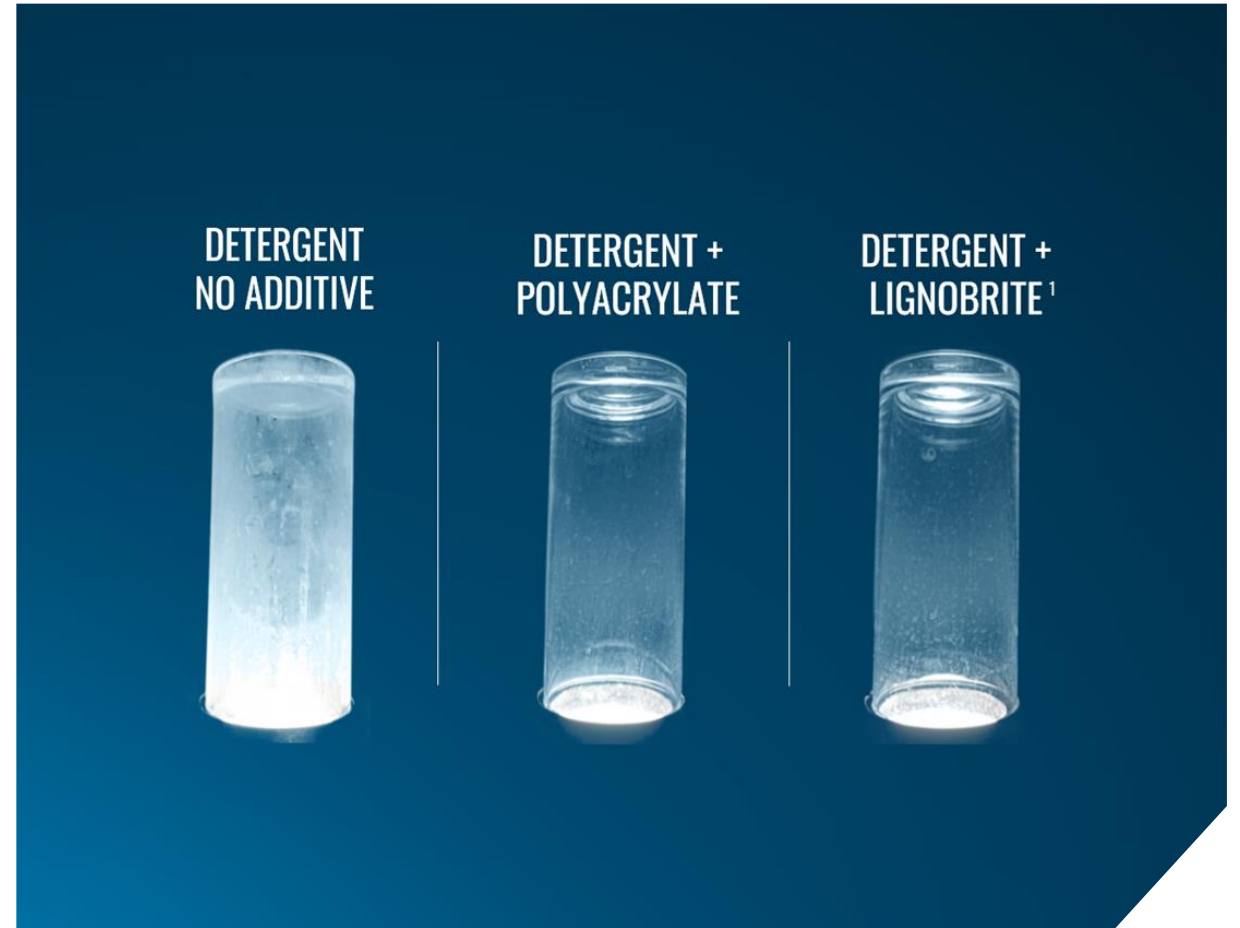
Effect

Less film on glass, plastic and ceramic



Customer value

Excellent replacement for polyacrylate
Effective and sustainable anti-filming agent in auto dishwasher detergents



New green technology: Entering the coatings market | BioSolutions



Sustainable alternative

Novel bio-based high-performance dispersant for coatings



Effect

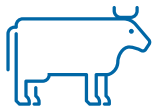
Improved dispersion of pigments
Better scrub resistance and hiding power
No colour variation



Customer value

Enables replacement of advanced fossil-based dispersants in coatings
Product launch in 2024





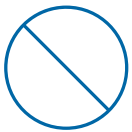
Multitude of applications

Borregaard's products used as pelleting aids, emulsion stabilisers, bypass protein, acidifiers



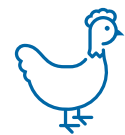
Trends

Increasing demand for high-quality and sustainable products
CAGR 2–3% for animal-based food



Regulated market

Compliance and certifications required to serve the market



Customer value

Improved productivity and product quality, bio-based, no animal origin, non-GMO, safe to use, global availability



Animal feed: Regulatory driving change | BioSolutions

PELLETING AIDS



Benefits

Better pellet consistency and durability
Improved production rates
Decreased energy consumption



Regulatory

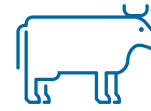
Borregaard's lignin re-authorized for use in animal feed within EU – February 2024



Outlook

Consumption of meat per capita expected to increase towards 2030
Strong trends towards bio-based and efficient products

BYPASS PROTEIN



Benefits

Feed protein content is key in milk production
Bypass technologies prevent loss of protein
Borregaard offers cost-efficient and sustainable solutions



Regulatory

Formaldehyde ban in dairy production within EU



Outlook

Modest growth for dairy products in coming years
Expect other regions to follow EU's formaldehyde ban, will offer opportunities to Borregaard

Animal feed: New feed binder for the aqua culture industry | BioSolutions



Background

90% of shrimp feed contain binders
Dominating synthetic binders (urea formaldehyde) will be banned
Strong demand for non-synthetic sustainable binders



Effect

New binder formulation developed and tested by customer
Similar performance as synthetic binders
New binder formulation patented (pending)









Outlook

Currently in the scale-up stage
Product launched in 2024
First commercial sale in 2025



Borregaard – the only producer of wood-based vanillin | BioSolutions

	Vanilla beans	Plant-based vanillin				Oil-based & ethyl vanillin	
							
Raw material	Beans	Ferulic acid from bran/straw	Eugenol from clove	Lignin from wood	Guaiacol from creosote/tar	Guaiacol (vanillin)	Guethol (ethyl vanillin)
Key selling points	Natural/flavour profile	Plant based/natural raw material/sustainability /flavour profile				Price	
Sales volume 2023 (mt) ¹	≈2,400 ²	≈1,800				≈17,000	≈6,000
Indicative price level USD/kg ¹	≈50–60	≈200	30–70			10 – 15 ³	
# of manufacturers ¹	1,000+	4	5	1	3	3	4
Growth ¹	≈5%				≈2-3%		

¹ Company estimates

² Cured vanilla pods contain around 1-2% vanillin, corresponding to around 25 – 50 mt on pure vanillin basis

³ Towards the end of 2023, the prices of synthetic and ethyl vanillin dropped below 10 USD/kg due to increased Chinese production

Biovanillin – well positioned for growth | BioSolutions

Strong demand growth for bio-based vanillin

- Consumer preferences
- Sustainability

Competitive edge

- Global market leader in bio-based vanillin
- Advanced and attractive flavour profile
- >90% reduced carbon footprint vs fossil-based vanillin
- Certified spruce wood, sustainable forestry
- Cost competitive technology

Outlook

- Capacity expansion well above the +20% target
- Continued gradual introduction
- Significant expansion of fossil-based capacity



Anti-dumping investigations chinese vanillin

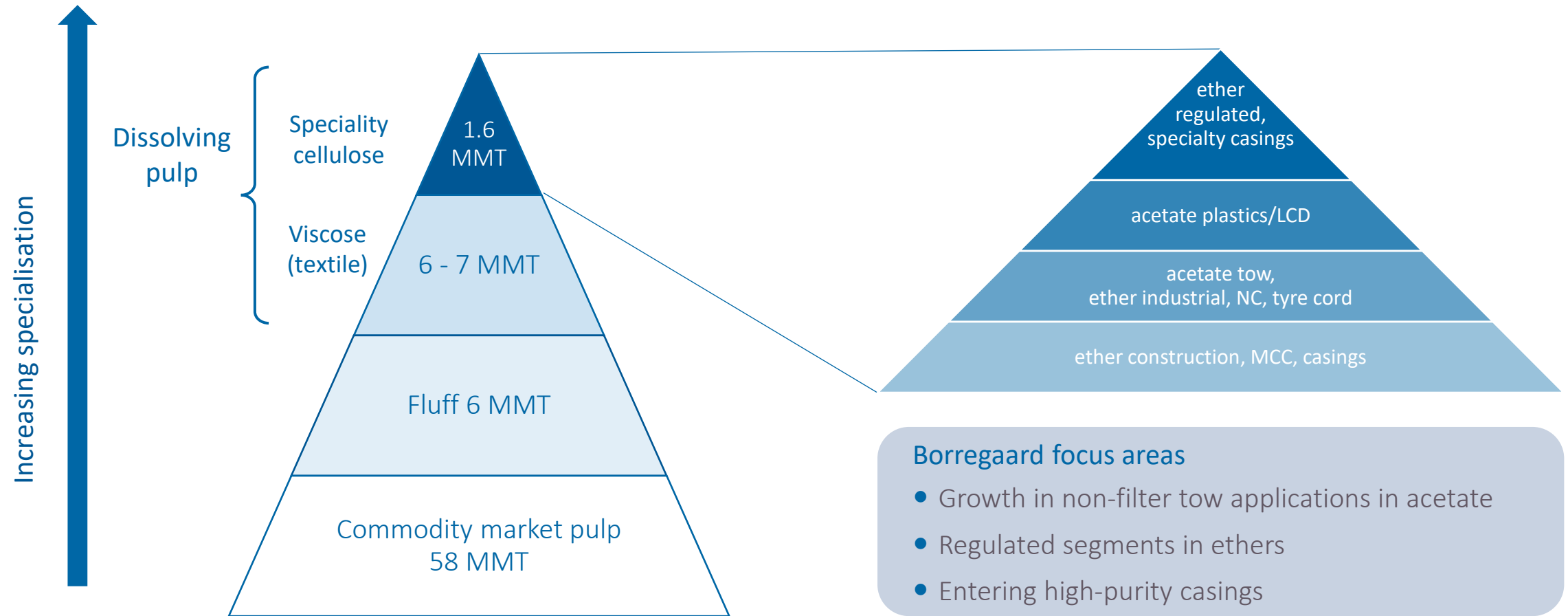
- Both in EU¹ and the US², anti-dumping investigations have been initiated for all grades of vanillin produced in China
- On January 10, the US announced preliminary antidumping and countervailing duties on vanillin from China³
- Borregaard expects a positive but limited impact from these duties

¹ <https://eur-lex.europa.eu/eli/C/2024/3241>

² <https://www.trade.gov/initiation-ad-and-cvd-investigations-vanillin-china>

³ <https://www.trade.gov/preliminary-determination-ad-investigation-vanillin-china>

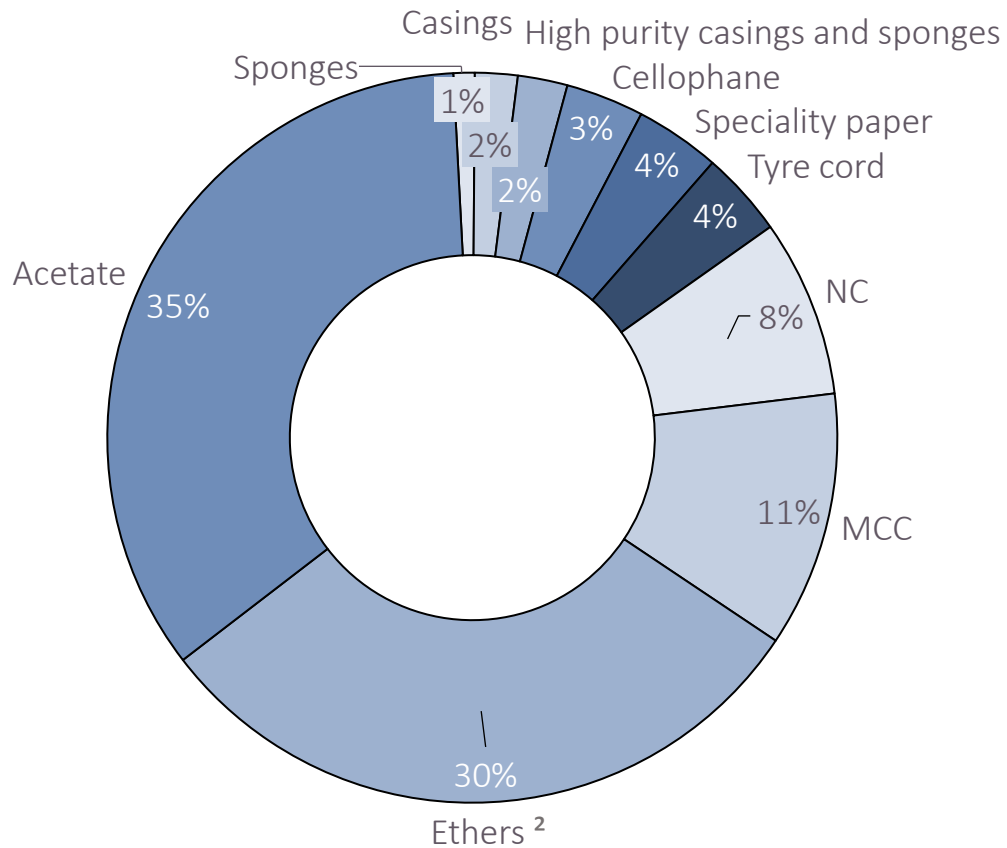
Global speciality cellulose market – Borregaard focus areas | BioMaterials



Source: Celco market reports, RISI and Borregaard estimates
1 Million metric tonnes

Market overview – targeting highly specialised applications | BioMaterials

Speciality cellulose demand ≈1.6 million mt¹



Target segments in highly specialised applications

Segments	Applications	CAGR 2024-2027
Acetate	Cigarette filters, plastics, LCD, yarn	0–2%
Ethers	Construction, coatings, food, pharma, personal care	3–4%
Tyre cord	High-performance tyre cords	2–3%
High purity casings and sponges	Sausage casings, sponge cloths	0–1%

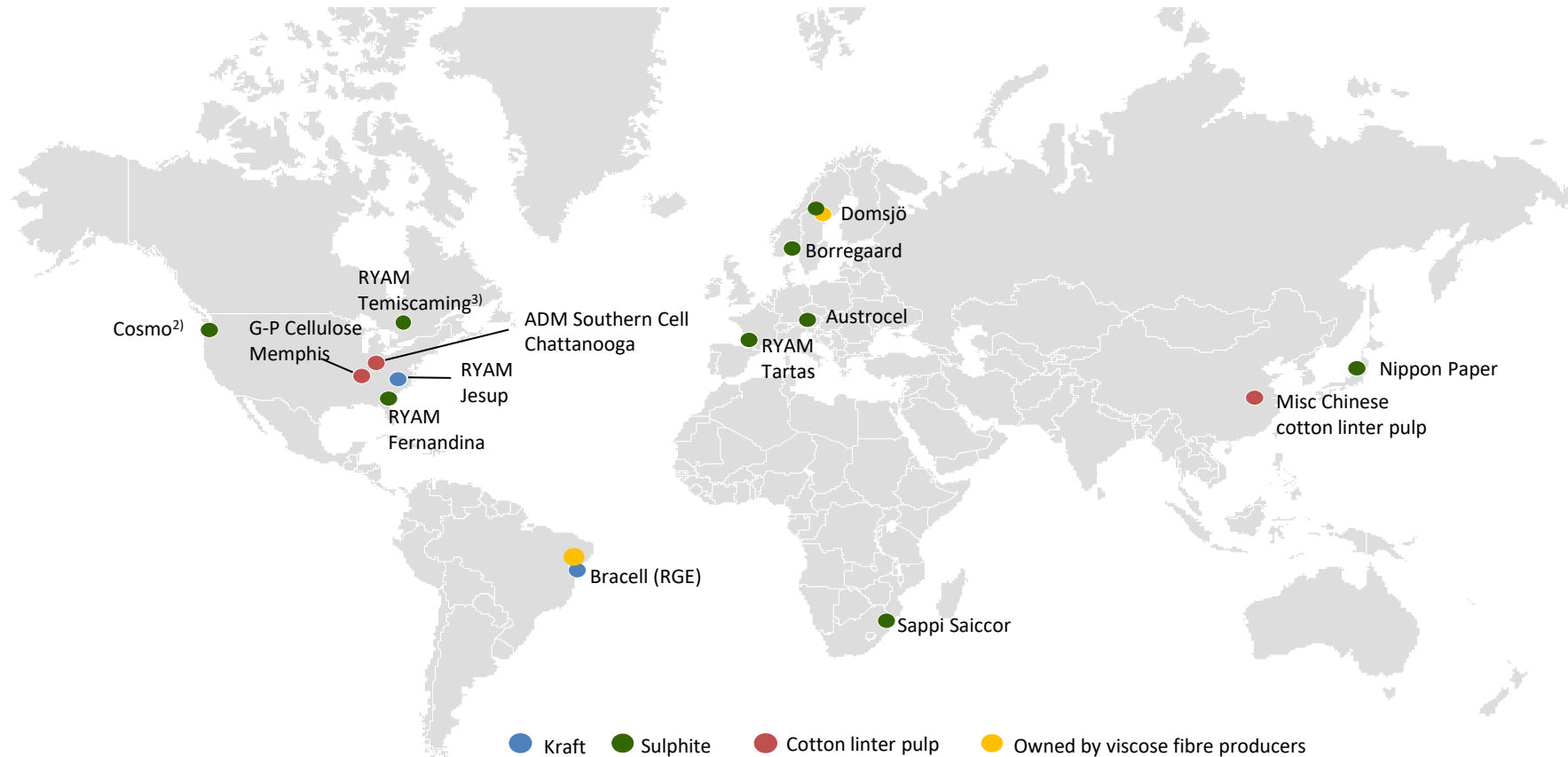
Source: Celco market reports, RISI and Borregaard estimates

¹ Metric tonne

² Cellulose ether capacity excl. technical grade CMC

Speciality cellulose suppliers | BioMaterials

- 10 players supplying 1.6 million mt speciality cellulose¹
- Top players use textile and fluff markets as capacity filler
- Limited volumes from viscose pulp producers into speciality segments due to barriers to entry

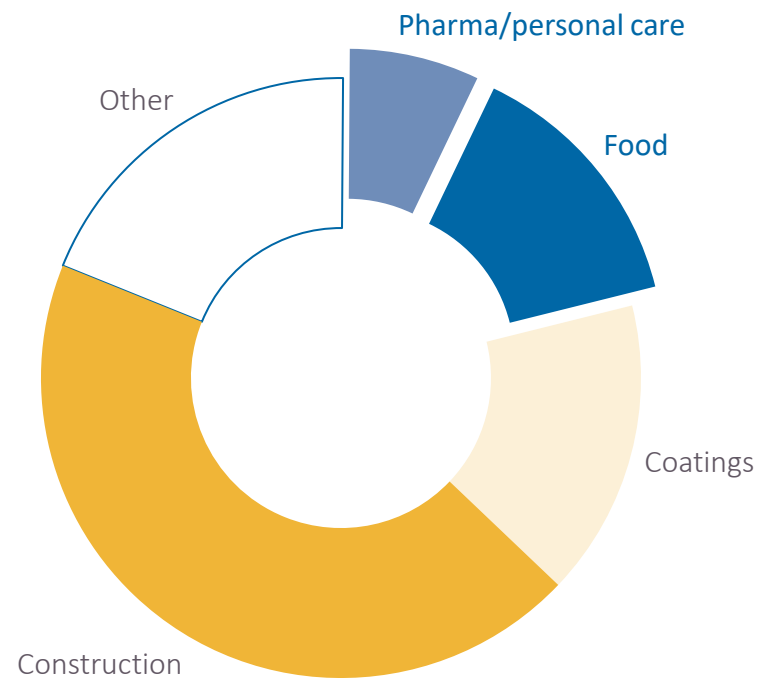


¹ Source: Celco market reports and Borregaard estimates. Includes miscellaneous Chinese CLP producers.

² Currently idle, announced intention to re-start March 2025, primarily for viscose. Source: RISI November 2024

³ Indefinitely idled. Source: RYAM press release

Cellulose ether market by application



Borregaard's ether strategy

Focus on regulated applications like food, pharma and personal care

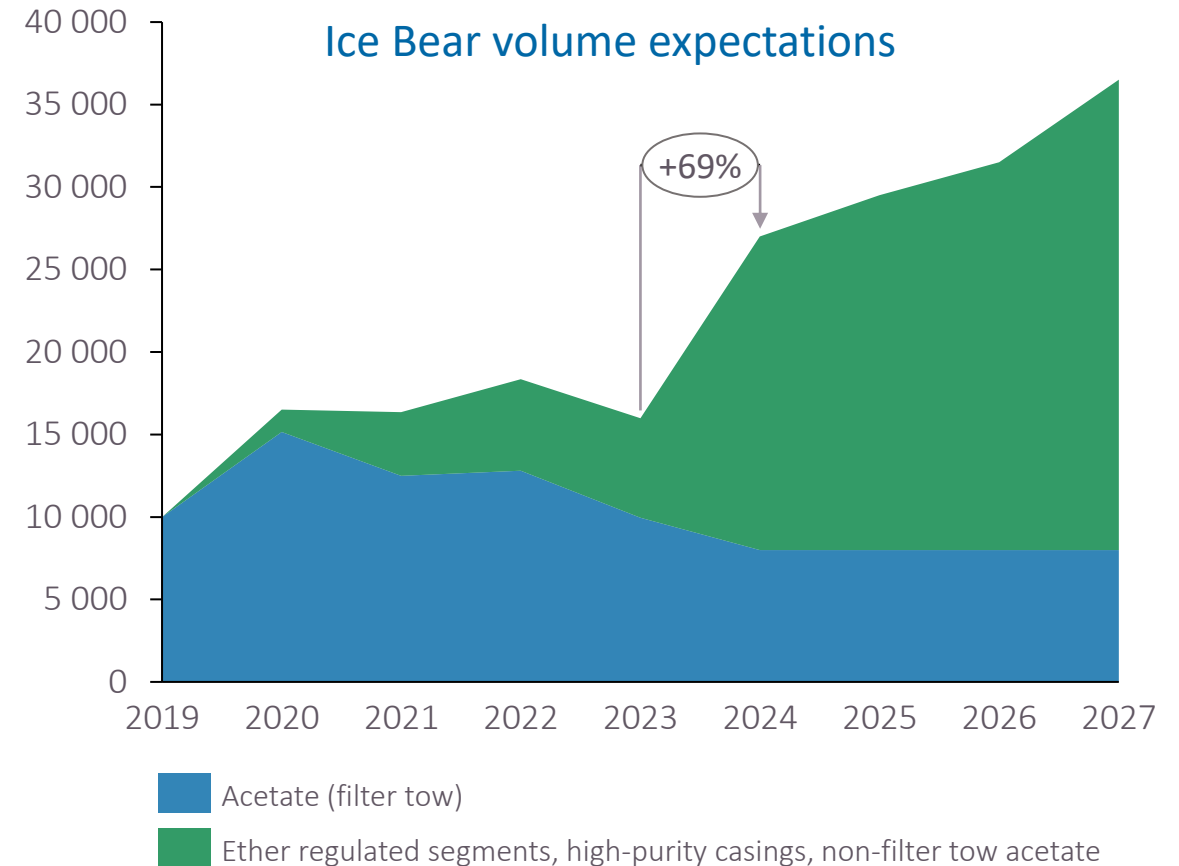
- Substantial growth expected in the 2025–2027 period
- High viscosity industrial applications (such as paints and automotive applications) with barriers to entry will remain a profitable and growing focus area
- Gradual reduction of share within industrial applications by reducing exposure to low-value grades in construction

Ice Bear technology: Driving high-value product portfolio | BioMaterials



Market and ambitions for Ice Bear

- Enabler for ambitions within ether regulated applications
- Rapid growth in high-purity casings after GP's Foley closure
- Significant market share growth within non-filter tow
 - Acetate producers developing products within non-filter tow
- Ramp-up of Ice Bear production based on market demand



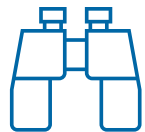
Ice Bear in bio-based plastics | BioMaterials

Challenges

- Significantly higher price vs. fossil-based plastics
- Technical requirement of bio-based plastics

Current status

- Implementation of microplastic regulations
- Substantial rise in demand for biodegradable plastics
- More than 10,000 tonnes Ice Bear contracted for 2024



Long-term potential of 50,000 tonnes



Cellulose fibrils | BioMaterials



Global leader in micro-/nanofibrils

- More than 30 application areas from pharma to concrete
- Competitors in pilot plant or captive use phase
- Embryonic but fast-growing market



Large scale plant with 1000 tonnes dry capacity

- Growing customer base
- Zero emissions



Network of micro and nano fibrils with large surface area

- Cellulose fibers defibrillated into millions of tiny fibrils (100,000 times thinner than hair)
- 1 gram covers a tennis court



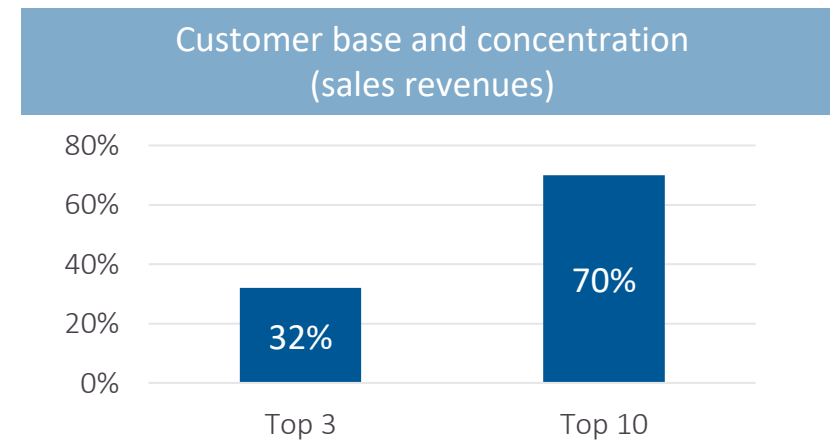
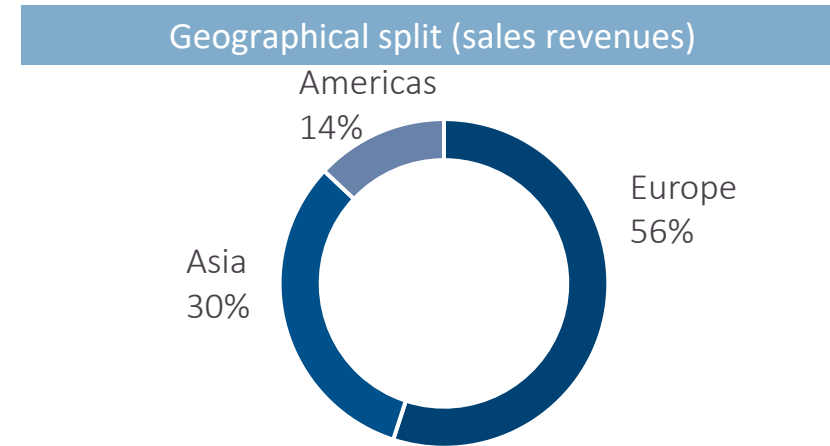
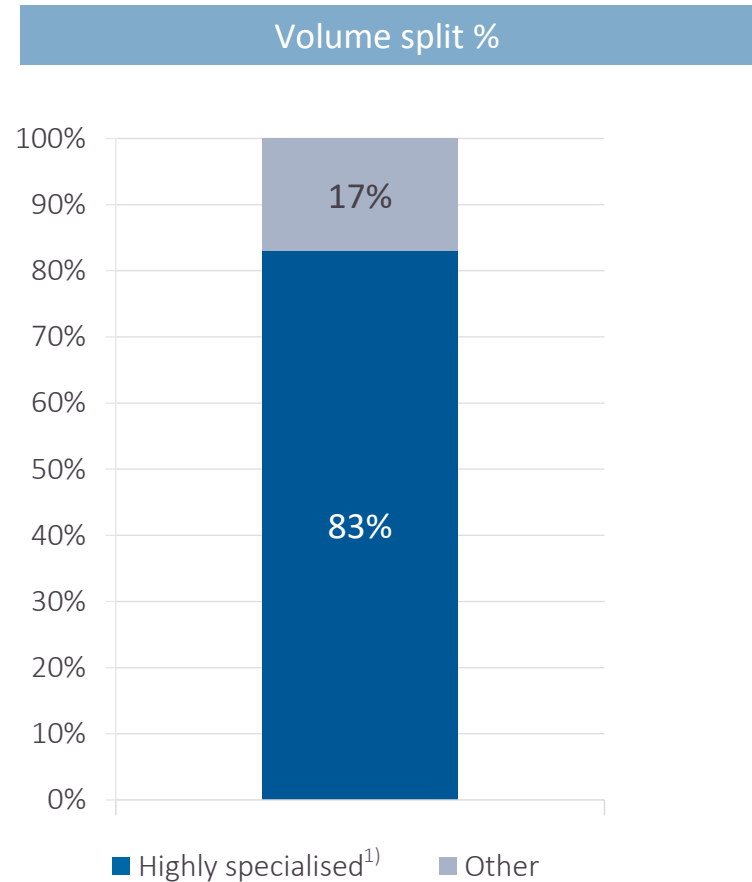
Key benefits

- Improves flow, stability, flexibility and strength in industrial formulations and materials

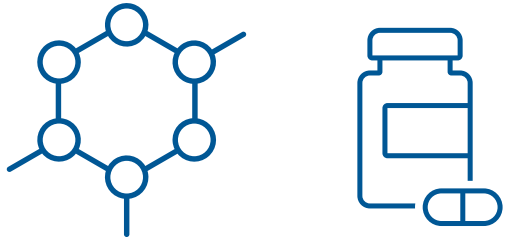


Sales distribution 2024 | BioMaterials

Borregaard is positioned in high-end segments in Europe and Asia, with strong and long-lasting customer relationships

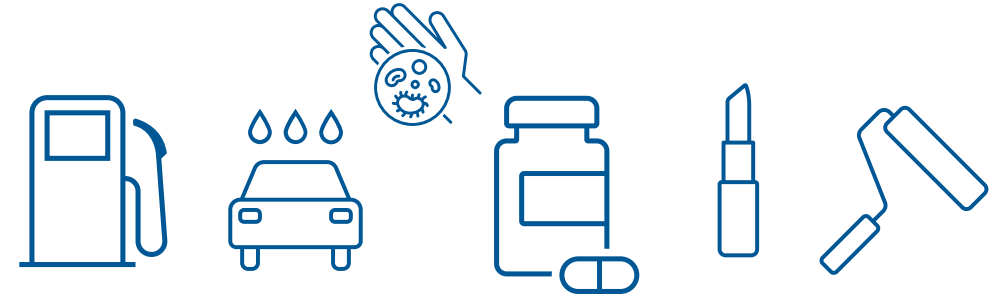


Fine Chemicals in Borregaard | Fine Chemicals



Fine chemical intermediates

- Leading producer of intermediates for contrast agents
- Production of C3 aminodiols and intermediates for pharmaceutical products in Sarpsborg, Norway
- Applications: Contrast agents for medical imaging and medicines
- 5–7% market growth



Bioethanol

- Leading producer of advanced 2G bioethanol
- Favourable climate footprint
- Production of pure and denatured bioethanol in Sarpsborg, Norway
- Applications: Biofuel, disinfectant, pharmaceutical industry, home and personal care products, paint/varnish, car care
- Capacity of 20 million liters

Financial objectives

- ROCE² >15% pre-tax over a business cycle
- IRR >15% pre-tax for expansion capex
- Average net working capital at 20% of operating revenues
- Replacement capex at depreciation level
- Maintain key financial ratios corresponding to an investment grade rated company
 - Leverage ratio¹ targeted between 1.0 and 2.25 over time
 - Issuer rating of A-/Stable from Scope ratings affirmed in April 2024

Borregaard's dividend policy

- To pay regular and progressive dividends reflecting Borregaard's expected long term earnings, free cash flows and expansion capex
- Annual dividend is targeted between 30% and 50% of net profit for the preceding fiscal year

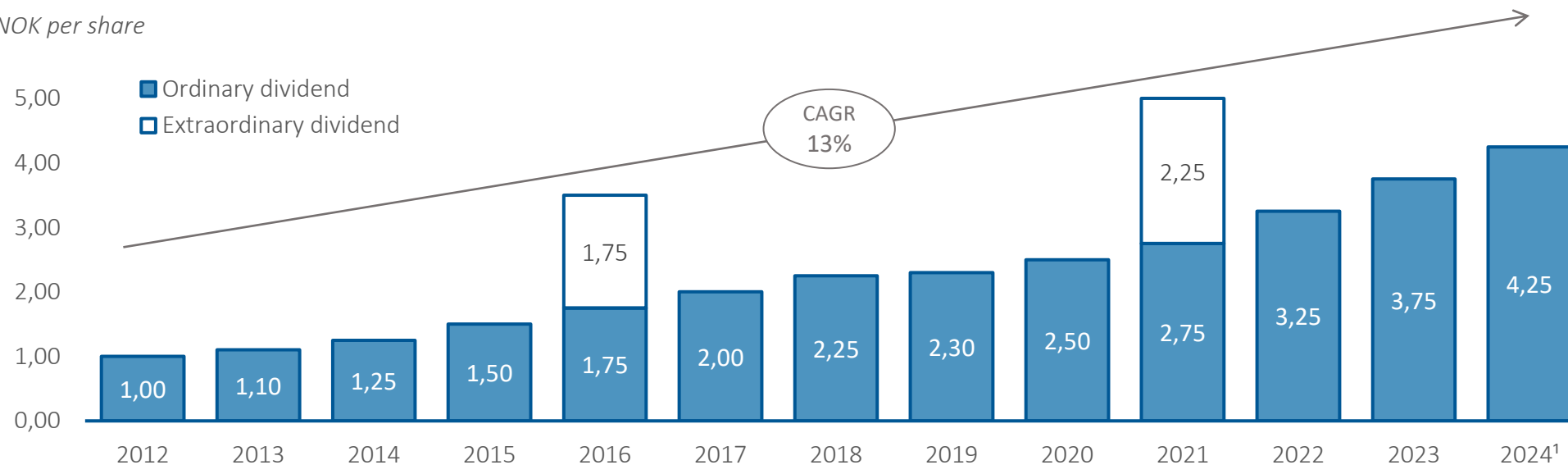


¹ Net interest-bearing debt divided by last twelve months' EBITDA²

² Alternative performance measure – see Appendix

Progressive dividends over time | Financials

NOK per share



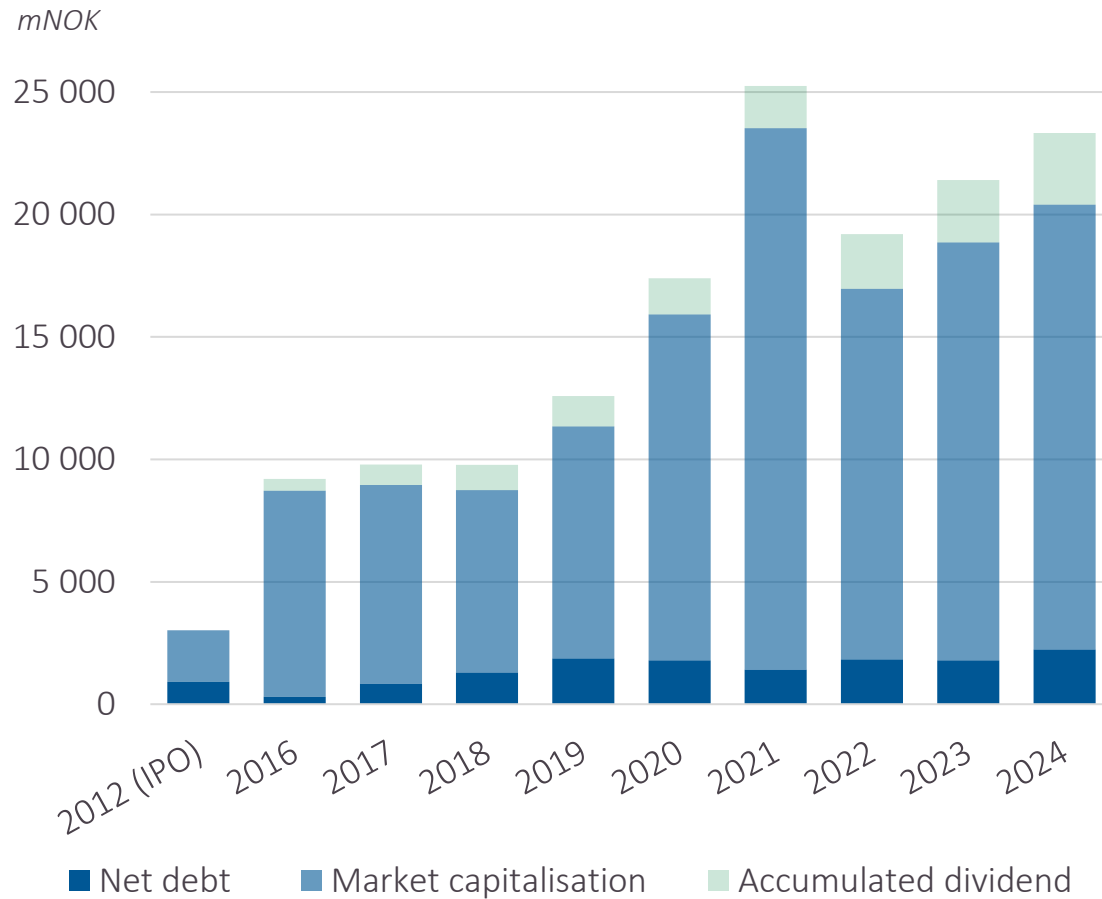
Borregaard's dividend policy

- To pay regular and progressive dividends reflecting Borregaard's expected long-term earnings, free cash flows and expansion investments
- Annual dividend is targeted between 30% and 50% of net profit for the preceding fiscal year

Dividend reflects improved profitability and cash flow over time

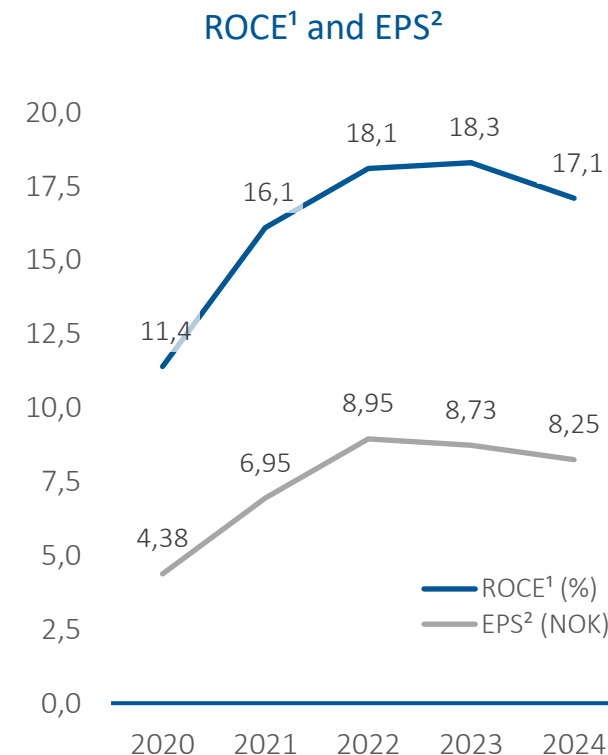
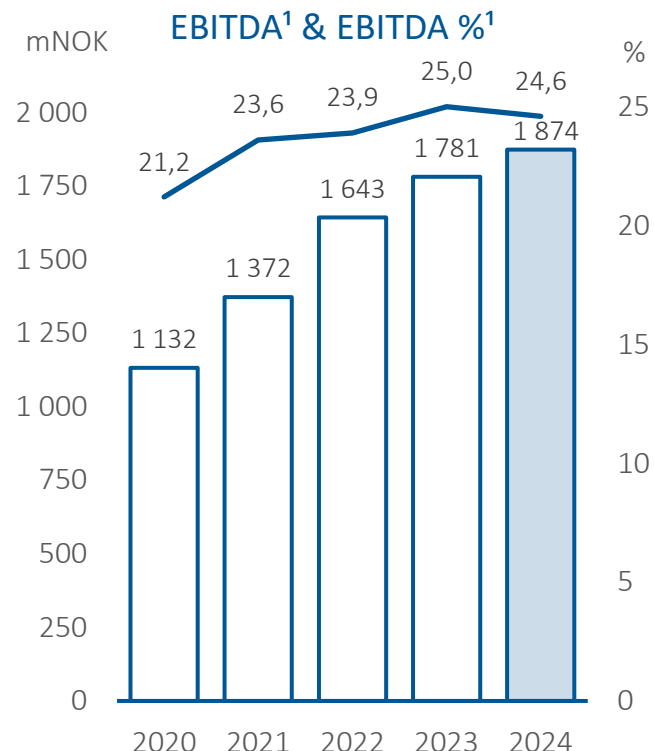
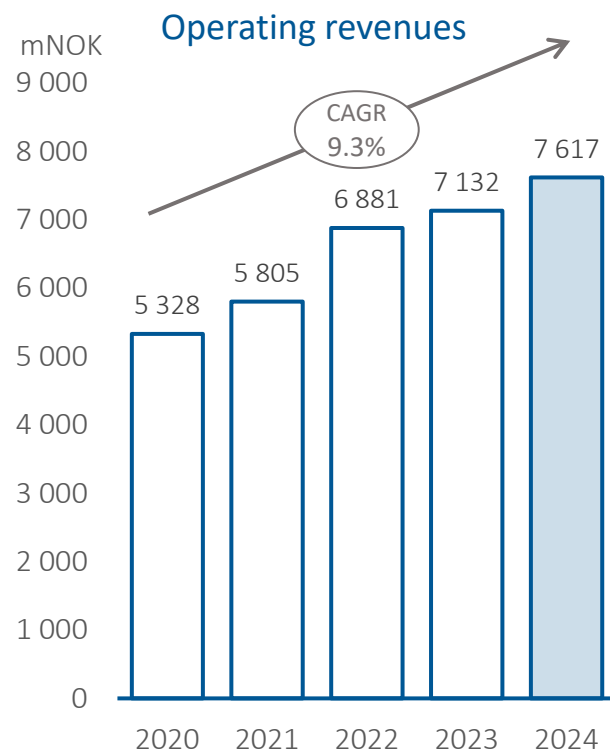
- Proposed dividend for 2024 more than four times higher than 2012 (IPO)
- Extraordinary dividend for 2016 and 2021
 - Strong earnings, cash flow, leverage ratio and outlook

Value creation since IPO | Financials



	CAGR
Share price, including reinvestment of dividend	22.6%
Enterprise value = market cap + net debt	16.9%

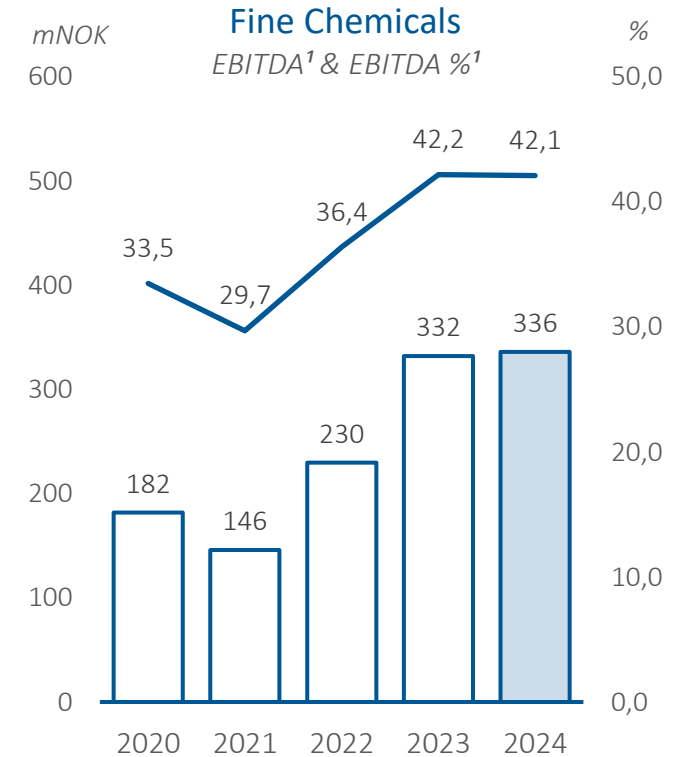
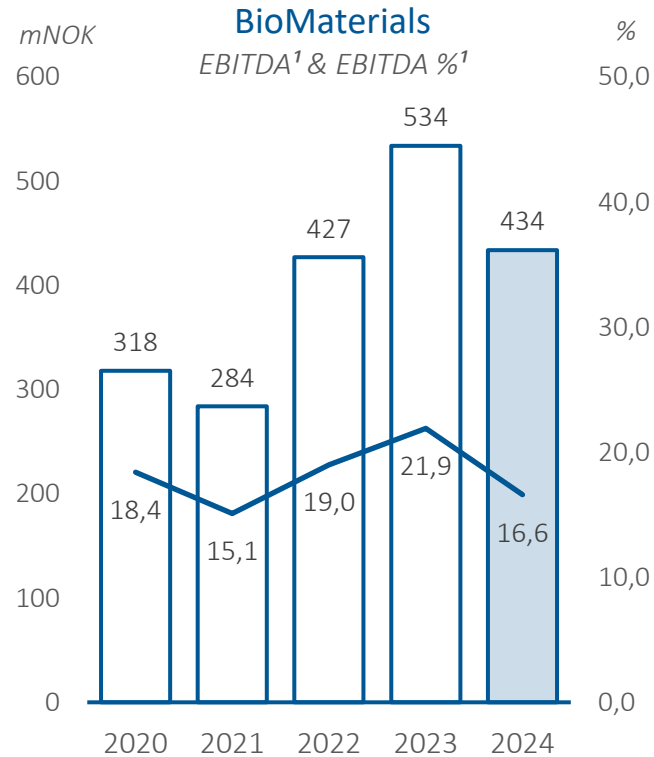
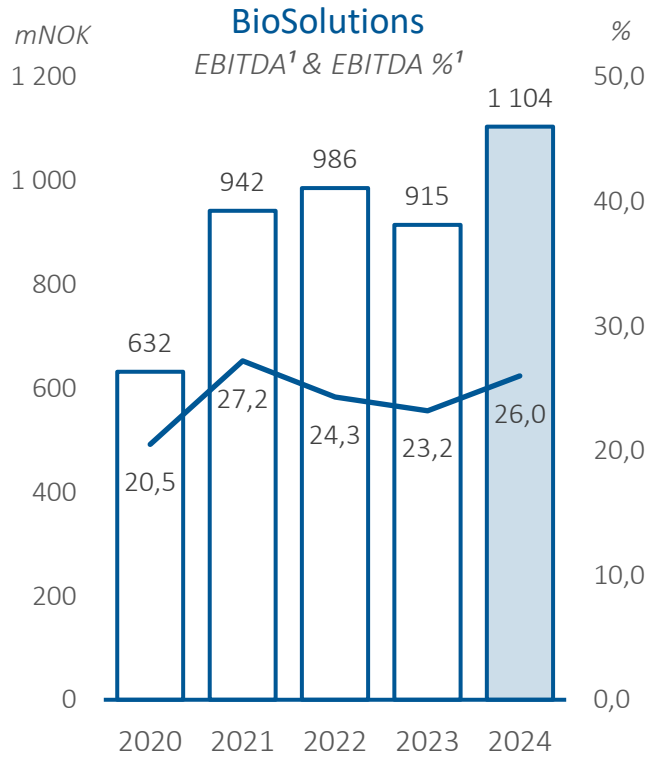
Improved performance during a period with uncertainty | Financials



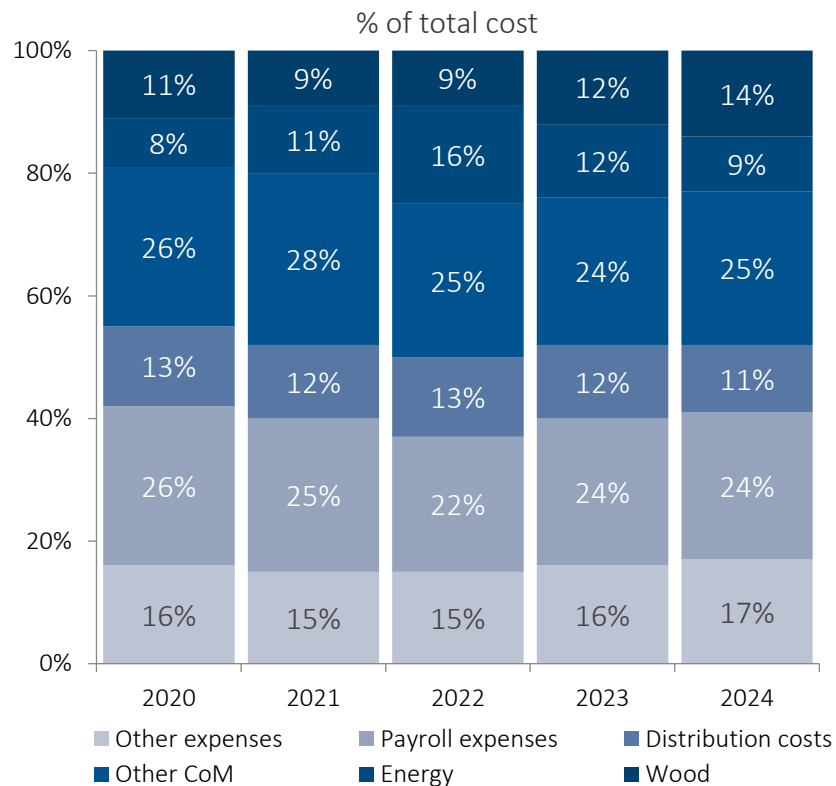
1 Alternative performance measures – see Appendix

2 Earnings per share

Solid results in all business segments | Financials



Key cost items 2020-2024 | Financials



- Total costs in 2024 were 5.7 billion NOK
- 8.2% CAGR from 2020 to 2024
- Main cost components' share of total costs relatively stable over time

Wood	<ul style="list-style-type: none"> • 75%-85% sourced from Norway, the rest mainly from Sweden • Annual price and volume contracts, mid-year adjustments occur • Includes inbound logistics, ~30% of wood cost
Energy	<ul style="list-style-type: none"> • Energy consumption: Heat energy 2/3, electricity 1/3 • Heat energy: Base load mainly covered by renewable energy sources, peak-load mainly covered by LNG, light oil and spot electricity. • Electricity: Long term contracts to 2029 & 2033 for substantial part of needed volume
Other CoM	<ul style="list-style-type: none"> • Chemicals¹ and other raw materials like lignin raw material • Internal production of caustic soda • Contract manufacturing of petrochemical-based vanillin • Change in inventories
Distribution costs	<ul style="list-style-type: none"> • Most products sold delivered customer • Logistical optimisation important, especially for Biopolymers
Payroll expenses	<ul style="list-style-type: none"> • Continuous productivity improvement, including de-manning and cost reduction activities
Other expenses	<ul style="list-style-type: none"> • Repair and maintenance, external services, rental/leasing and other operating expenses

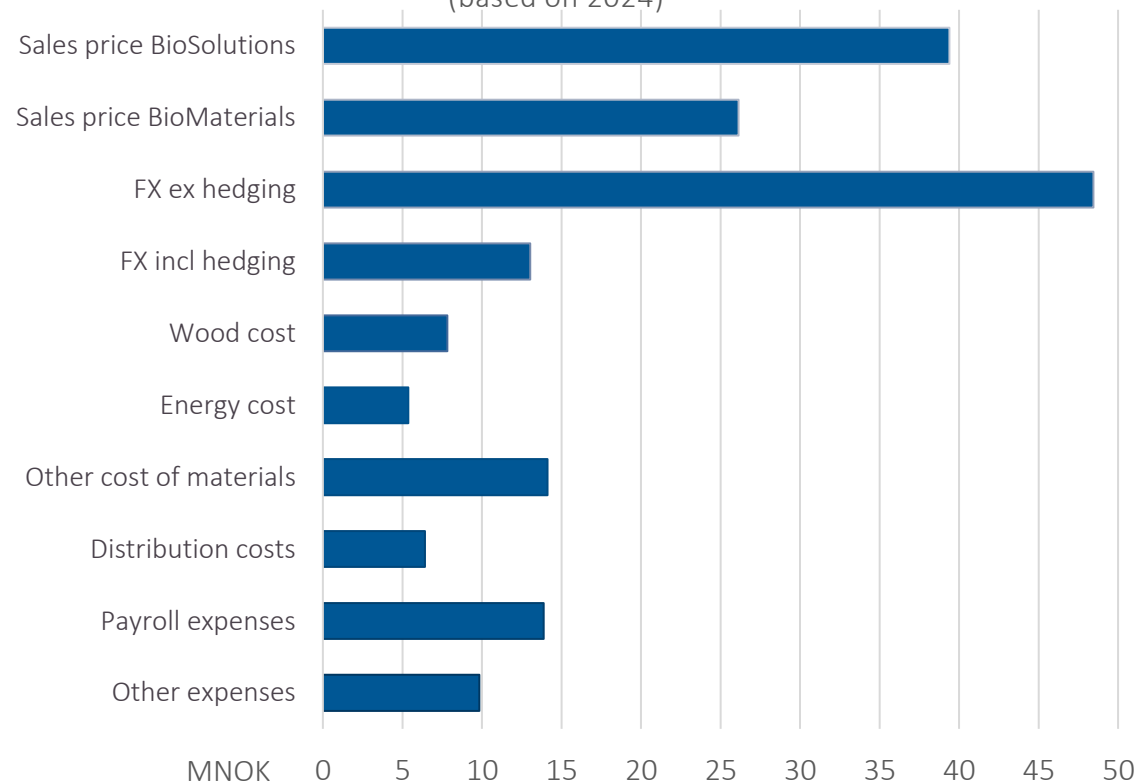
¹ Main chemicals are caustic soda, salt, sulphur and epichlorohydrine

Sensitivity on EBITDA¹ | Financials

- Global presence, diversified product portfolio and GDP-driven demand reduce market risk
- Oil price affects demand and competition in certain markets, but main effect historically has been on NOK FX rate
- Significant FX exposure, softened by FX hedging² in the medium term
- No major single component in other cost of materials
- Distribution costs: Most products sold “delivered customer”
- Other expenses are repair and maintenance, external services, rental/leasing etc.

Sensitivity of 1% change

(based on 2024)



¹ Alternative performance measure – see appendix

² Hedging based on expected net cash flow (EBITDA)

- Base hedge - 75%/50% on a rolling basis for 6/9 months for major currencies

- Extended hedge - 75%/50% of the next 24/36 months if USD and EUR are above predefined levels

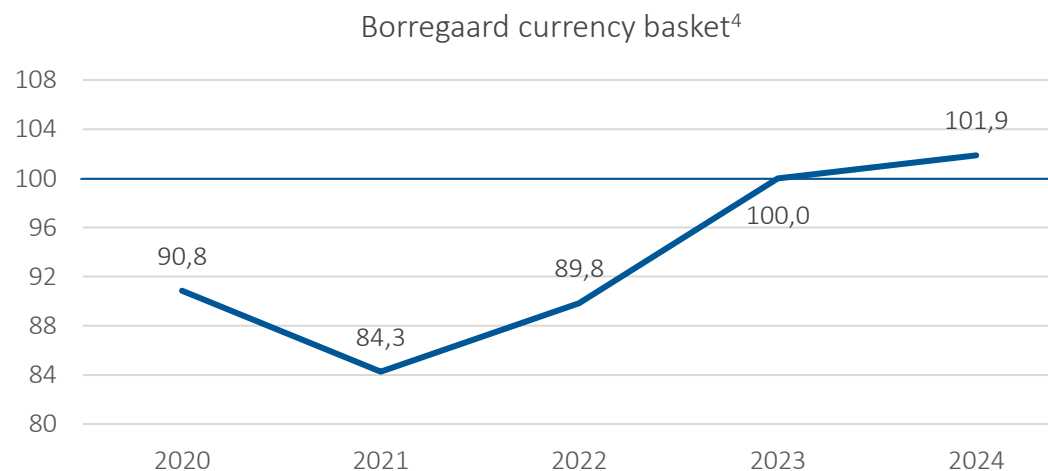
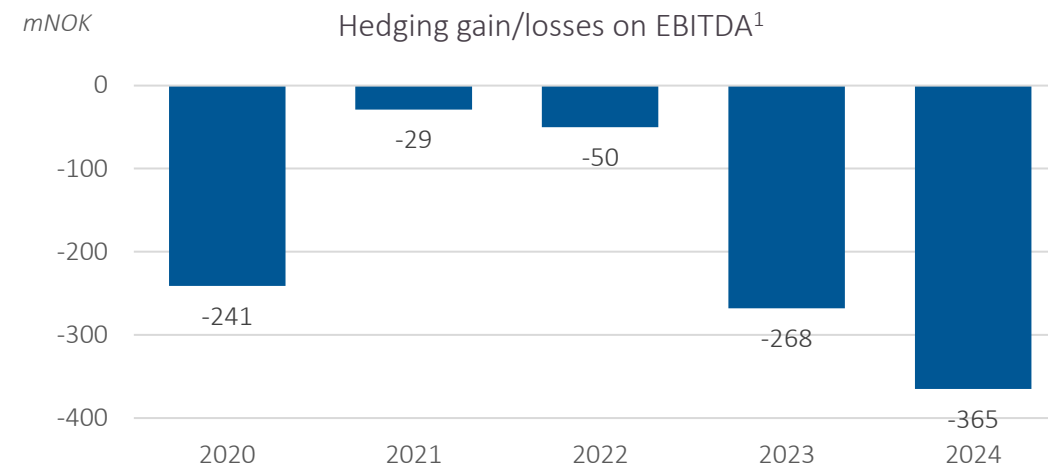
FX impact and policy | Financials

Currency hedging strategy

- Purpose is to delay effects of currency fluctuations and secure competitiveness
- Hedging based on expected net cash flow (EBITDA¹)²
- Base hedge: 75%/50% on a rolling basis for 6/9 months for major currencies
- Extended hedge: 75%/50% of the next 24/36 months if USD and EUR are above defined levels
 - EUR; gradually increased at effective rates from 10.50 to 11.00
 - USD; gradually increased at effective rates from 9.50 to 10.00
- Contracts³ 100% hedged
- Balance sheet exposure hedged 100%
- Net investments in subsidiaries hedged up to 90% of book value in major currencies

FX exposure

- Borregaard's revenues are primarily in USD or EUR, while costs are primarily in NOK
- Net FX exposure in 2023 USD: 60% (approximately 232 mUSD)
- EUR: 42% (approximately 149 mEUR)
- Other: -2% (GBP, BRL, SGD, SEK)



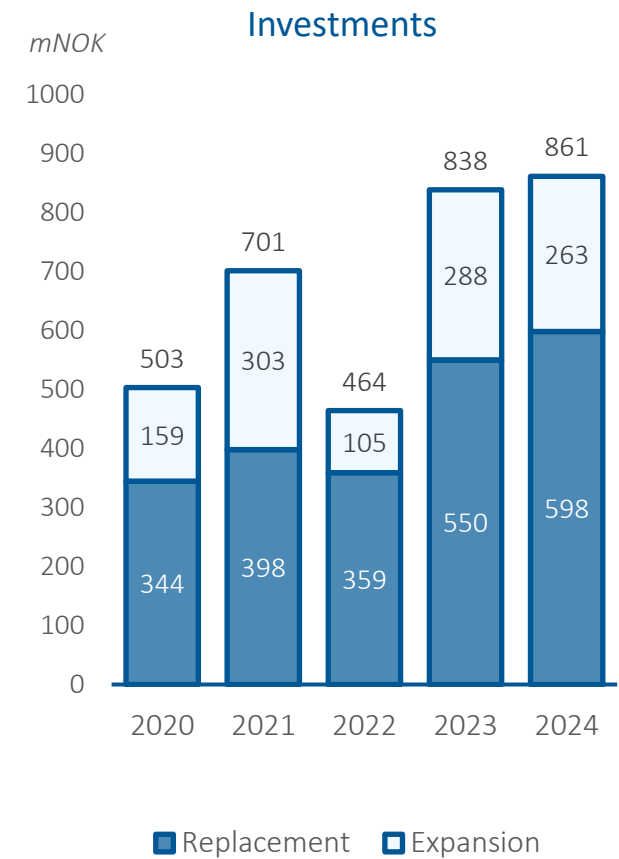
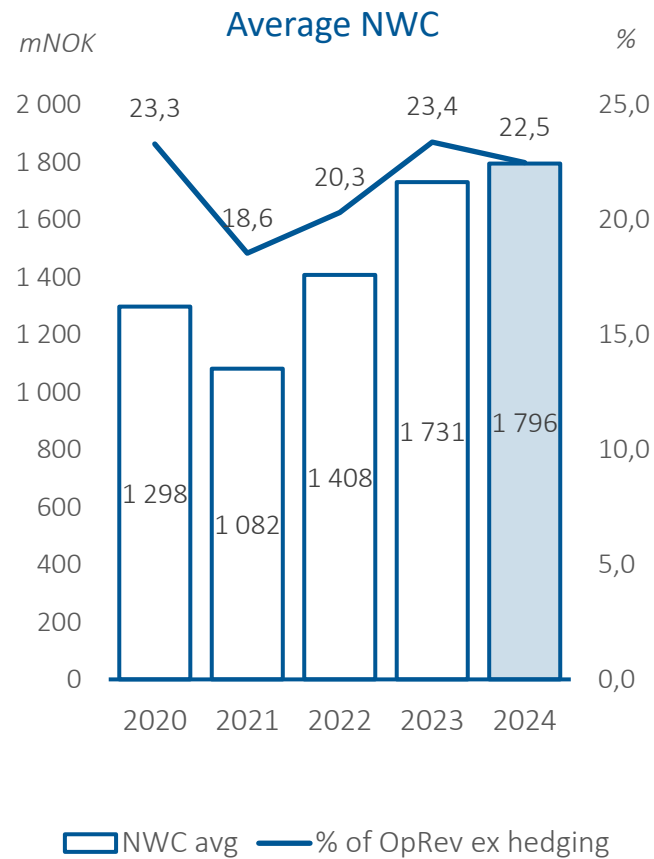
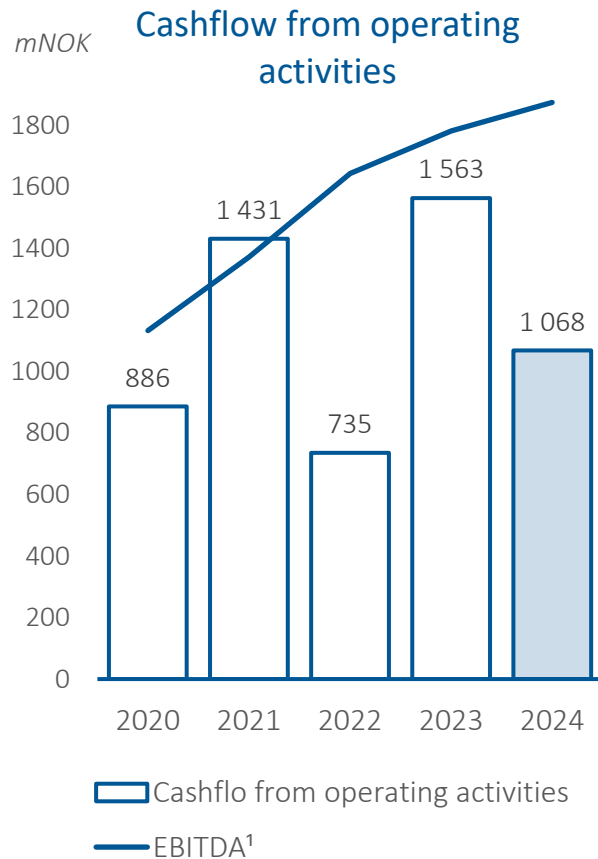
¹ Alternative performance measures - see Appendix

² Net cash flow hedging mainly in the Norwegian company

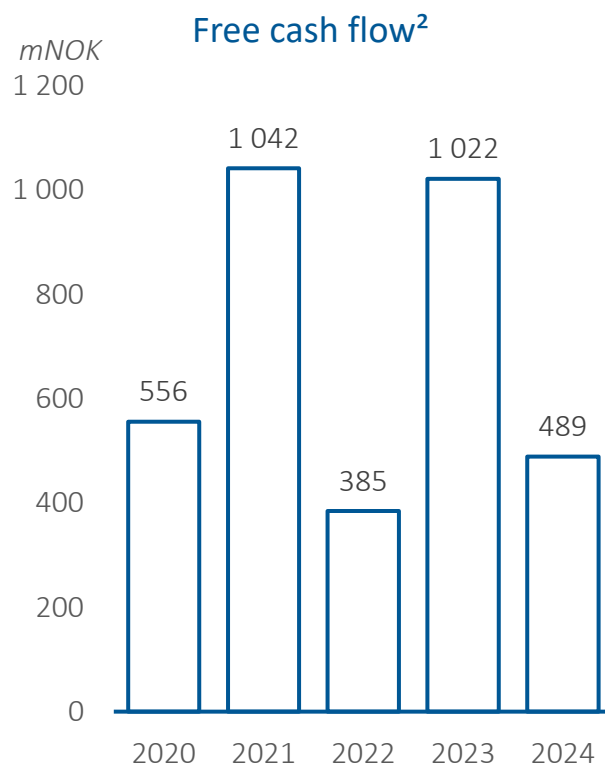
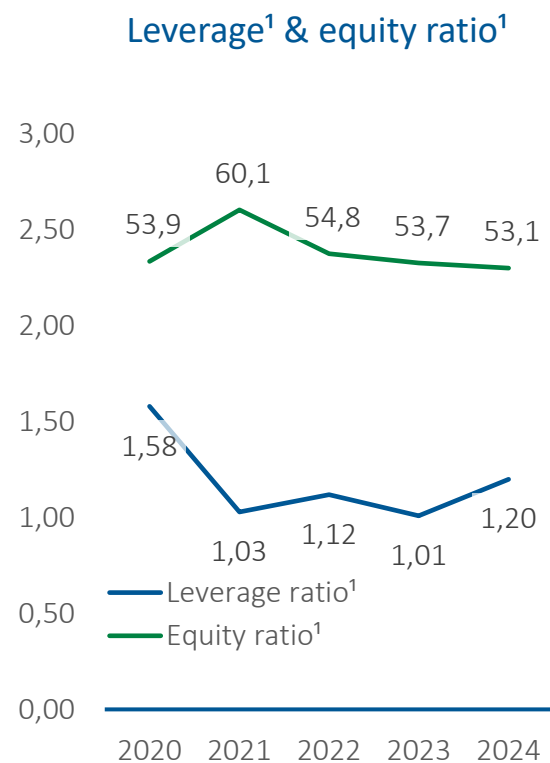
³ Strict definitions for contracts applied for 100% hedging (mutually binding agreement in which price, currency, volume and time are defined)

⁴ Currency basket based on Borregaard's net exposure in 2023 (=100)

Cash flow, NWC and investments | Financials



Solid financial position and strong cash flow | Financials



Solid financial position

- Leverage ratio¹ 1.20 and equity ratio¹ 53% (2024)
- Maintain key financial ratios corresponding to an investment grade rated company
- Issuer rating of A-/Stable from Scope ratings
- Leverage ratio target: Between 1.0 and 2.25
- Substantial undrawn credit facilities

Strong cash generation

- Variations between years, mainly due to changes in net working capital

1 Alternative performance measures – see Appendix

2 Free cash flow defined as cash flow from operating and investing activities, excluding expansion investments

Investments to reduce CO₂ emissions in line with transition plan | Financials

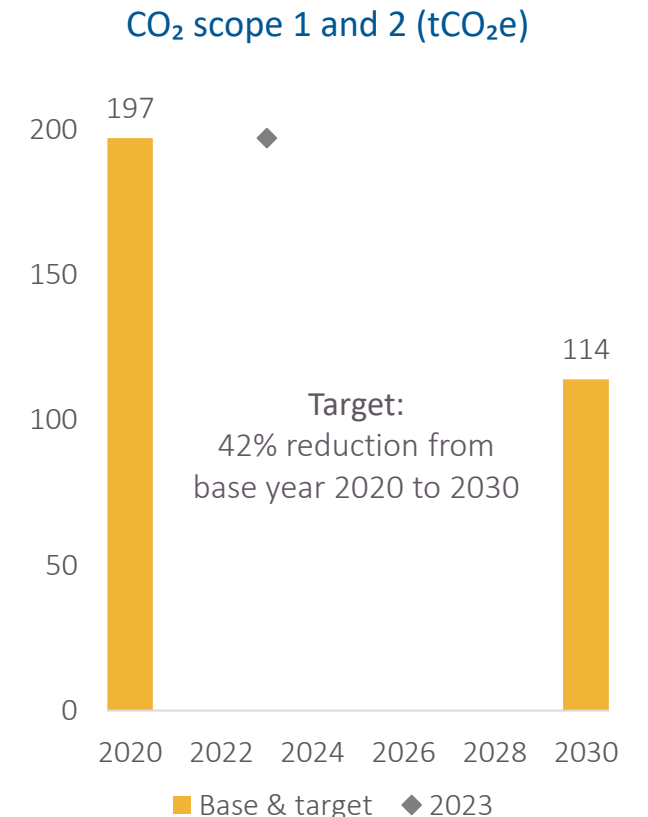
Completed and on-going investment projects

- Investments forecast to give higher than expected reduction in CO₂ emissions and energy savings
- So far, investment spending below initial transition plan forecast

	Reduced CO ₂ (tCO ₂ e)	Saved energy (GWh)	Investment (mNOK)	Completed
Increased utilisation of residuals from production processes as bioenergy	10,800	53	90	2022 (2023 impact)
Investment to reduce CO ₂ emissions and increase flexibility at the biorefinery in Norway	30,000	40–50	230	Q3 2024, full effect 2025
Investment to upgrade electricity transformation capacity at the biorefinery in Norway	Facilitates CO ₂ and energy savings in future projects		275	2028

Additional projects to reduce CO₂ emissions and COD¹ effluents

- Increase electric boiler capacity for heat energy production
- Produce more biofuel from residuals and process improvements
- Wastewater incineration technology, innovative heat recovery



1 COD: Chemical Oxygen Demand

Value growth through expansion investments | Financials

On-going projects in BioSolutions

- Specialisation investment
 - Main target is batteries, also targeting oilfield chemicals, agrochemicals, pigments and dyes
 - Investment 70 mNOK, operational Q4-24
- New green technology platform
 - Commercial scale demonstration plant
 - Investment 100 mNOK, first step operational Q3-24

Significant impact from earlier expansion investments

- BioSolutions
 - Upgrade of biopolymers facility in Norway, Florida expansion, capacity increase for biovanillin
- BioMaterials and Fine Chemicals
 - Ice Bear project, capacity increase bioethanol, debottlenecking fine chemical intermediates



Expansion projects 2024 to 2027 | Financials



Debottlenecking Sarpsborg biorefinery

- Two-step capacity increase
 - Decision first step in Q4-24
- Expected total capacity increase 5–10%
 - Production output expected to increase gradually from H2-26
- Other benefits
 - Reduced costs and volume of residuals
 - Energy savings and reduced caustic soda consumption
 - Reduced COD effluents

Several smaller and medium sized expansion investments

- Further specialisation of lignin-based biopolymers, including upgrade further specialisation of Wisconsin facility
- Ramp-up of Ice Bear production and further improvement of quality
- Removing capacity restraints in bioethanol and fine chemical intermediates

Bio-based start-ups

- Support existing investments
- Seek new opportunities

Investment forecast¹ 2024-2027 | Financials

Replacement investments

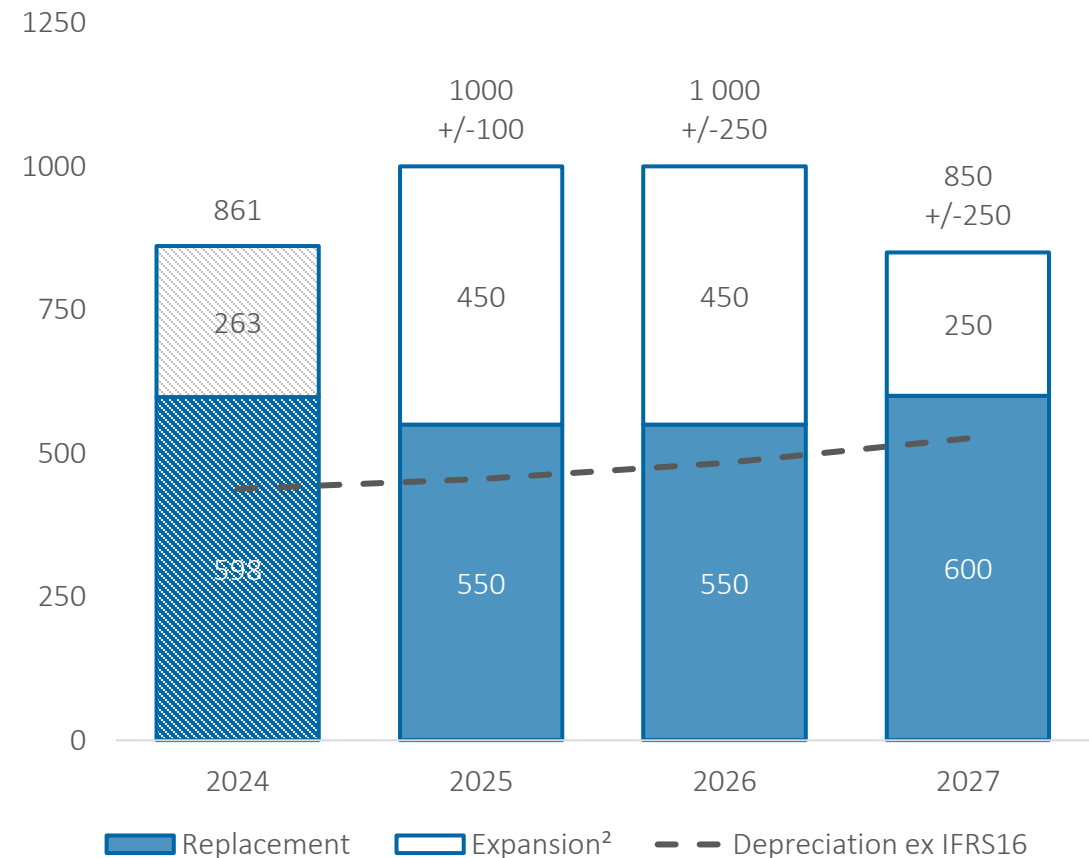
- Targeted CO₂ and COD reductions and general cost increases explain above target level investments
 - Target: Replacement investments at depreciation level
- Supporting specialisation and value growth investments

Expansion investments²

- Increased specialisation
- Debottlenecking at the Sarpsborg site

New projects may lead to additional investments

- Future investments in bio-based start-ups are not included
 - Share of Alginor's capital raise in 2024 included (150 mNOK)



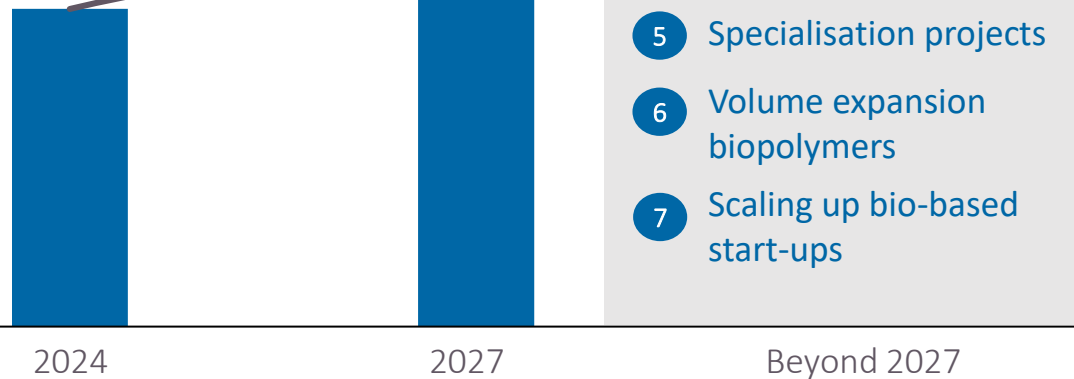
¹ Uncertainty is related to final investment decisions, timing of investment payments, execution time and risk and unexpected events

² Alternative performance measures - see Appendix

Borregaard positioned for accelerated growth | Financials

Growth driven by

- 1 Specialisation projects
- 2 Debottlenecking Norway
- 3 Sustainability and regulatory
- 4 Delayed FX impact from hedging



Illustrative figure

Details on growth drivers, applications and effects

- 1 Investments in agri, home care, batteries and Asia strategy in BioSolutions, Ice Bear in BioMaterials
- 2 Debottlenecking Sarpsborg, 5–10% more volume, above IRR target of 15%
- 3 Environmental investments mitigating cost risks, regulatory tailwinds in feed, strengthened sustainability profile
- 4 Significant delayed FX impact from hedging over next three years assuming constant FX rates
- 5 Further specialisation and value growth in BioSolutions, targeting regulated markets in BioMaterials
- 6 Option to grow volumes at Florida plant +50,000 tonnes, alternatively build BALI plant
- 7 Scaling up bio-based start-ups (Alginor, Kaffe Bueno etc), cellulose fibrils expansion

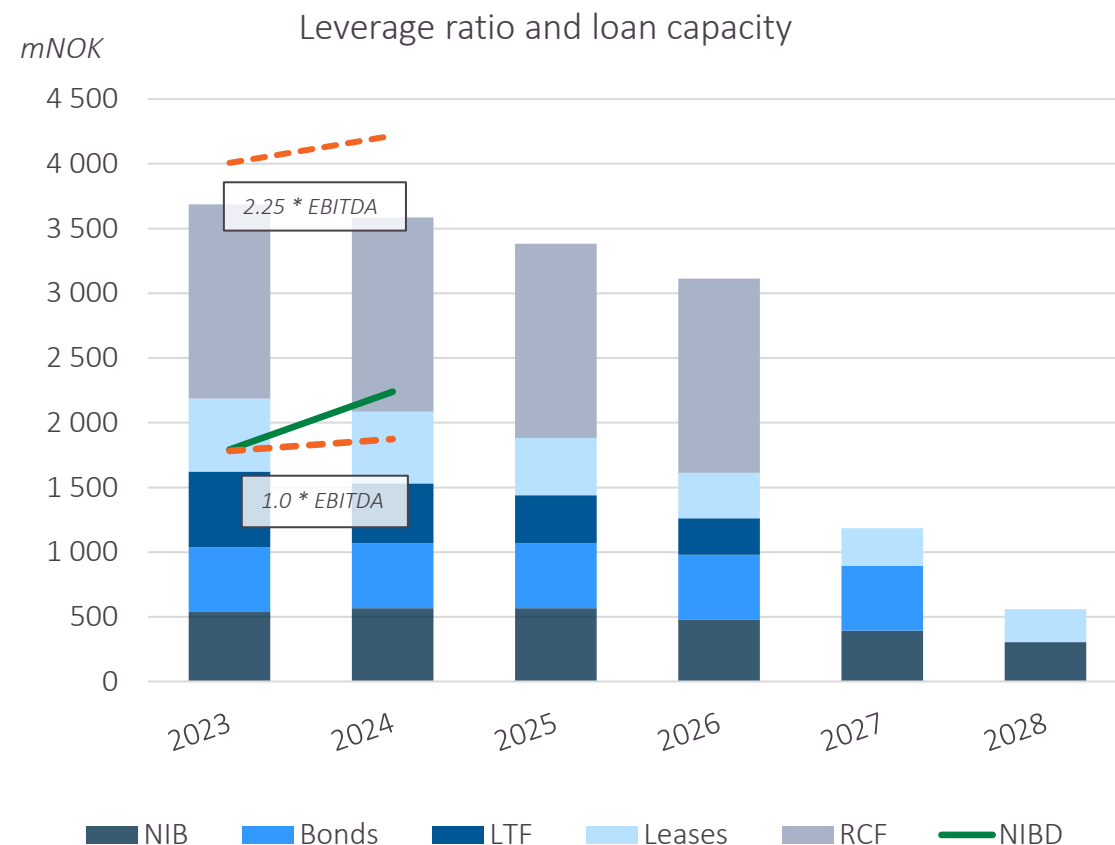
Capital structure – credit facilities and maturities | Financials

Long-term credit facilities

- Revolving credit facilities (RCF) in July 2020, maturity 2027, margin linked to sustainability targets
- 60 mUSD term loan for LignoTech Florida (LTF), maturity 2027
- 500 mNOK 5-year green bonds, maturity 2028 (issued June 2023)
- 50 mUSD Nordic Investment Bank (NIB) loan, maturity 2032

Short-term credit facilities

- 225 mNOK overdraft facilities
- 15 mUSD overdraft facility in LignoTech Florida



Highly experienced and proven management team | Management



Per A. Sørli

CEO since 1999

Member of management team since 1990

35 years with Borregaard



Per Bjarne Lyngstad

CFO

27 years in current position

37 years with Borregaard



Tom Erik Foss-Jacobsen

EVP BioSolutions

6 years in current position

26 years with Borregaard



Gisle Løhre Johansen

EVP Speciality Cellulose and Fine Chemicals

6 years in current position

34 years with Borregaard



Liv Longva

SVP Strategic Sourcing

5 years in current position

17 years with Borregaard



Kristin Misund

SVP R&D and Business development

6 years in current position

32 years with Borregaard



Ole Gunnar Jakobsen

Plant Director Sarpsborg Site

17 years in current position

30 years with Borregaard



Dag Arthur Aasbø

SVP Organisation and Public Affairs

17 years in current position

32 years with Borregaard



Sveinung Heggen

General Counsel

12 years in current position

12 years with Borregaard

Appendix – alternative performance measures

In the discussion of the reported operating results, financial position and cash flows, Borregaard refers to certain measures which are not defined by generally accepted accounting principles (GAAP) such as IFRS. Borregaard management makes regular use of these alternative performance measures and is of the opinion that this information, along with comparable GAAP measures, is useful to investors who wish to evaluate the company's operating performance, ability to repay debt and capability to pursue new business opportunities. Such alternative performance measures should not be viewed in isolation or as an alternative to the equivalent GAAP measure.

- *EBITDA*: Operating profit before depreciation, amortisation and other income and expenses.
- *EBITDA margin*: EBITDA divided by operating revenues.
- *Equity ratio*: Equity (including non-controlling interests) divided by equity and liabilities.
- *Expansion investments*: Investments made in order to expand production capacity, produce new products or to improve the performance of existing products. Such investments include business acquisitions, pilot plants, capitalised R&D costs and new distribution set-ups.
- *Other income and expenses*: Non-recurring items or items related to other periods or to a discontinued business or activity. These items are not viewed as reliable indicators of future earnings based on the business areas' normal operations. These items will be included in the Group's operating profit.
- *Leverage ratio*: Net interest-bearing debt divided by last twelve months' EBITDA.
- *Net interest-bearing debt (NIBD)*: Interest-bearing liabilities minus interest-bearing assets.
- *Return on capital employed (ROCE)*: Last twelve months' capital contribution (operating profit before amortisation and other income and expenses) divided by average capital employed based on the ending balance of the last five quarters. Capital employed is defined as the total of net working capital, intangible assets, property, plant and equipment, right-of-use assets and investment in joint venture minus net pension liabilities.