Stora Enso
investor kit
Disclaimer

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Stora Enso in brief

Part of the global bioeconomy, Stora Enso is a leading provider of renewable products in packaging, biomaterials, and wooden construction, and one of the largest private forest owners in the world. We believe that everything that is made from fossil-based materials today can be made from a tree tomorrow. Sustainability is integral in Stora Enso’s business strategy – it is at the core of what we do.

Stora Enso shares are listed on NASDAQ OMX Helsinki and Stockholm. In addition, the shares are traded in the USA as ADRs.

Sales
€11.7 billion
in 2022

Operational EBIT
€1,891 million
in 2022

~21,000
employees
We are creating the foundation for a renewable future

Our products replace and substitute fossil-based products

Foundation
- Forest
- Pulp
- Traditional wood products

Key strategic growth areas
- Renewable packaging
- Sustainable building solutions
- Renewable biomaterials innovations
Exceeding all long-term Group level financial targets in 2022

<table>
<thead>
<tr>
<th>Group long-term financial targets</th>
<th>Q4 21</th>
<th>Q4 22</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dividend*</td>
<td>-</td>
<td>-</td>
<td>0.55</td>
<td>0.60**&lt;br&gt;●</td>
</tr>
<tr>
<td>Growth YoY</td>
<td>39%</td>
<td>5%</td>
<td>29%</td>
<td>17%</td>
</tr>
<tr>
<td>Net debt to operational EBITDA</td>
<td>1.1</td>
<td>0.7</td>
<td>1.1</td>
<td>0.7</td>
</tr>
<tr>
<td>Net debt to equity</td>
<td>22%</td>
<td>15%</td>
<td>22%</td>
<td>15%</td>
</tr>
<tr>
<td>Operational ROCE excl. Forest</td>
<td>20.4%</td>
<td>13.2%</td>
<td>17.8%</td>
<td>20.9%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Divisional long-term financial targets</th>
<th>Q4 21</th>
<th>Q4 22</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packaging Materials</td>
<td>16.8%</td>
<td>3.6%</td>
<td>18.0%</td>
<td>18.2%</td>
</tr>
<tr>
<td>Packaging Solutions</td>
<td>19.4%</td>
<td>-1.4%</td>
<td>10.8%</td>
<td>-0.7%</td>
</tr>
<tr>
<td>Biomaterials</td>
<td>27.1%</td>
<td>35.0%</td>
<td>20.8%</td>
<td>25.8%</td>
</tr>
<tr>
<td>Wood Products</td>
<td>53.1%</td>
<td>-7.5%</td>
<td>59.4%</td>
<td>44.2%</td>
</tr>
<tr>
<td>Forest</td>
<td>3.6%</td>
<td>4.4%</td>
<td>5.1%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Paper</td>
<td>-2.9%</td>
<td>-0.7%</td>
<td>-4.5%</td>
<td>0.9%</td>
</tr>
</tbody>
</table>

*Annual dividend **Dividend proposal
## Capacities by division

<table>
<thead>
<tr>
<th>Division</th>
<th>Capacity 1,000 t</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Packaging Materials</strong></td>
<td></td>
</tr>
<tr>
<td>Consumer Board</td>
<td>3,490</td>
</tr>
<tr>
<td>Containerboard*</td>
<td>2,315</td>
</tr>
<tr>
<td>Barrier coating</td>
<td>655</td>
</tr>
<tr>
<td>Paper</td>
<td>990</td>
</tr>
<tr>
<td><strong>Packaging Solutions</strong></td>
<td>1,775 Mm²</td>
</tr>
<tr>
<td><strong>Wood Products</strong></td>
<td></td>
</tr>
<tr>
<td>Sawing</td>
<td>5.4 Mm³</td>
</tr>
<tr>
<td>Further processing</td>
<td>2.5 Mm³</td>
</tr>
<tr>
<td>Building Solutions</td>
<td>495 m³**</td>
</tr>
<tr>
<td>Pellets</td>
<td>485</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Division</th>
<th>Capacity 1,000 t</th>
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</thead>
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<tr>
<td><strong>Biomaterials</strong></td>
<td></td>
</tr>
<tr>
<td>Softwood and fluff pulp</td>
<td>1,550</td>
</tr>
<tr>
<td>Hardwood pulp</td>
<td>1,325</td>
</tr>
<tr>
<td>Kraft lignin</td>
<td>50</td>
</tr>
</tbody>
</table>

| Group forest assets       |                |
| Total area                | 2.0m ha        |
| Productive area           | 1.6m ha        |

*Including De Jong

**CLT site in Ždírec, Czech Republic, in the ramp-up phase
Group financial performance

Sales

<table>
<thead>
<tr>
<th>Year</th>
<th>MEUR Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>12,000</td>
</tr>
<tr>
<td>2018</td>
<td>10,000</td>
</tr>
<tr>
<td>2019</td>
<td>8,000</td>
</tr>
<tr>
<td>2020</td>
<td>6,000</td>
</tr>
<tr>
<td>2021</td>
<td>4,000</td>
</tr>
<tr>
<td>2022</td>
<td>2,000</td>
</tr>
</tbody>
</table>

Sales excluding Paper

<table>
<thead>
<tr>
<th>Year</th>
<th>MEUR Sales excluding Paper</th>
</tr>
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<tbody>
<tr>
<td>2017</td>
<td>12,000</td>
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<td>2021</td>
<td>4,000</td>
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<tr>
<td>2022</td>
<td>2,000</td>
</tr>
</tbody>
</table>

Operational EBIT

<table>
<thead>
<tr>
<th>Year</th>
<th>MEUR Operational EBIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>1,500</td>
</tr>
<tr>
<td>2018</td>
<td>1,700</td>
</tr>
<tr>
<td>2019</td>
<td>1,900</td>
</tr>
<tr>
<td>2020</td>
<td>2,100</td>
</tr>
<tr>
<td>2021</td>
<td>2,300</td>
</tr>
<tr>
<td>2022</td>
<td>2,500</td>
</tr>
</tbody>
</table>

Net debt

<table>
<thead>
<tr>
<th>Year</th>
<th>MEUR Net debt</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>1,500</td>
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<tr>
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<td>2021</td>
<td>2,300</td>
</tr>
<tr>
<td>2022</td>
<td>2,500</td>
</tr>
</tbody>
</table>

Historical figures before 2018 not restated
Annual financial performance - divisions

MEUR Packaging Materials

MEUR Packaging Solutions

MEUR Biomaterials

MEUR Wood Products

MEUR Forest

MEUR Paper

- Sales
- Operational EBIT margin
- Operational EBITDA margin
- Operational ROOC
- Operational ROCE
Quarterly financial performance - divisions

- Packaging Materials
  - Sales
  - Operational EBIT margin
  - Operational EBITDA margin
  - Operational ROOC, 4Q rolling
  - Operational ROCE, 4Q rolling

- Packaging Solutions
  - Sales
  - Operational EBIT margin
  - Operational EBITDA margin
  - Operational ROOC, 4Q rolling
  - Operational ROCE, 4Q rolling

- Biomaterials
  - Sales
  - Operational EBIT margin
  - Operational EBITDA margin
  - Operational ROOC, 4Q rolling
  - Operational ROCE, 4Q rolling

- Wood Products
  - Sales
  - Operational EBIT margin
  - Operational EBITDA margin
  - Operational ROOC, 4Q rolling
  - Operational ROCE, 4Q rolling

- Forest
  - Sales
  - Operational EBIT margin
  - Operational EBITDA margin
  - Operational ROOC, 4Q rolling
  - Operational ROCE, 4Q rolling

- Paper
  - Sales
  - Operational EBIT margin
  - Operational EBITDA margin
  - Operational ROOC, 4Q rolling
  - Operational ROCE, 4Q rolling
Strategic growth areas 60% of sales (pro forma 2022)

*Strategic growth areas include Packaging Materials, Packaging Solutions, Biomaterials Innovations (part of Biomaterials) and Building Solutions (part of Wood Products)

**2022 pro forma illustration excludes Paper and includes De Jong Packaging
Ambition to significantly reduce earnings cyclicality and long market pulp position

- Exiting paper business
- Growth in packaging with increased integration of eucalyptus pulp
- Developing a more value-add pulp product mix
- Growing the share of building solutions

Group net standard* pulp position for the next twelve months (million tonnes)

Ambition: Significantly reduced market pulp position

*Standard pulp excludes fluff and unbleached kraft pulp, total long market pulp position is 2.2 million tonnes for the next twelve months
We make a positive climate impact

Our value chain emissions: 8.0 million tonnes of CO₂

Our forests remove carbon: -1.5 million tonnes of CO₂

Our carbon products store: -2.5 million tonnes of CO₂

Our products substitute fossil-based products save: -16.2 million tonnes of CO₂

Calculated by the Swedish University of Agricultural Sciences (SLU) based on Stora Enso’s forest and production figures:
Climate effects of a forestry company – including biogenic carbon fluxes and substitution effects
Our sustainability performance

**Targets**
- **CO₂**
  -50% reduction in absolute emissions by 2030 (Scope 1,2,3)

**Status**
- **CO₂**
  -27% (2022 compared to the base year 2019)
  -27% (2022 compared to the base year 2019)

**Net positive**
- 100% Recyclable products by 2030
- 94% (2022)
- Target to reach 100% compliance by indicator*

*The indicators are: high stumps, deadwood, soil and water, habitats, and tree retention
Stora Enso ~2030 ambition*

- **+30% sales** vs 2021 (excl. inflation)
- **15% operational EBIT margin** over a cycle

### Packaging
- >60% of sales

### Wood Products
- >40% of sales from Building solutions
- +75% operational EBITDA over a cycle**

### New revenue streams
- 1 BEUR sales from Biomaterials innovation
- 5-10 TWh of wind power on own forest land

**Earnings cyclicalilty reduced by half**
- No paper exposure
- Significantly reduced market pulp exposure

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*The above 2030 ambition should not be considered as targets or guidance for 2030
**Compared to 2016-2021. Measured as standard deviation over a cycle
Divisions
Packaging

- Packaging Materials
- Packaging Solutions
Packaging Materials division in brief

- Aims to lead the development of circular packaging, providing premium packaging materials based on virgin and recycled fiber

- Helping customers to replace fossil-based materials with low-carbon, renewable and recyclable alternatives for their food and drink, pharmaceutical or transport packaging

- World-class cost-competitive integrated production sites close to raw material sources

- Main products: consumer board, containerboard and barrier coatings

- The customers are converters, brand owners and retailers
Packaging Materials key figures

<table>
<thead>
<tr>
<th>Divisional strategic target</th>
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<tr>
<td>Packaging Materials Operational ROOC &gt; 20%</td>
<td>16.8%</td>
<td>3.6%</td>
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</table>
Packaging Solutions in brief

- Develops and sells premium fiber-based packaging products and services
- Innovation collaboration throughout the whole value chain for developing renewable packaging materials
- High-end, eco-friendly packaging products which are used by leading brands across multiple market sectors, including the retail, e-commerce and industrial sectors
- The portfolio includes converting corrugated board and cartonboard

From 1 January 2023, the reporting of emerging businesses, including Formed Fiber, Circular Solutions (biocomposites), and Selfly Stores, was transferred from the Packaging Solutions division to Segment Other
Packaging Solutions key figures

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<td>Operational ROOC &gt; 15%</td>
<td>19.4%</td>
<td>-1.4%</td>
</tr>
</tbody>
</table>
We have the broadest portfolio in the industry

Sales mix Q4 2022

Consumer board
- Liquid Packaging Board
- Food Service Board
- Coated Unbleached Kraft
- Solid Bleached Sulphate
- Folding Boxboard

Containerboard
- Kraftliner
- Testliner
- Semi-chemical fluting

Packaging Solutions
- Corrugated packaging and new businesses

Packaging Solutions
- Consumer Board
- Containerboard
- Consumer Board
Leading market positions in Europe and global reach

- **Top 10 largest** global supplier of packaging board
- **Premium products and services** for demanding end uses
- **Kraftliner and SC fluting** global premium niche
- **Corrugated packaging** market fragmented
- **Capacity increases** through organic and acquisitive growth

### Consumer board
Stora Enso’s market position
- LPB #1 Globally
- FSB #1 in Europe
- FBB #2 in Europe
- CUK #1 in Europe
- SBS #1 in Europe

### Containerboard
- Kraftliner #4 in Europe
- SC fluting #3 in Europe
- Recycled containerboard* #5 in Eastern Europe

### Packaging solutions
- Corrugated boxes #1 in Nordics
- Corrugated boxes top three in Benelux

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*Including testliner and recycled fluting

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THE RENEWABLE MATERIALS COMPANY
Integration benefits in core regions

Nordics and Baltics
- Premium carton and liquid packaging board
- Virgin fiber containerboard and converting
- Megasites for economies of scale and integration benefits
- Smaller production sites with niche product concepts
- Optimising product mix

Eastern and Western Europe
- Recycled containerboard and converting in Poland
- Beverage carton recycling in Poland
- De Jong Packaging acquisition combined with planned Langerbrugge conversion

*Ongoing divestment process for Beihai site and plantations in China
Accelerated revenue growth and strengthened European footprint through the acquisition of De Jong Packaging

Founded in 1996

- €1* billion
  Sales est 2022
- €114* million
  EBITDA est 2022

- Capacity increase by ~1,200 million m² to more than 2,000 million m²
- €30 million
  average annual synergies over the cycle after three years
- €40 million
  additional annual EBITDA impact by 2025 from ongoing expansions

Excellent fit with possible conversion in the Langerbrugge site

Local presence is key

- Stora Enso corrugated packaging operations
- De Jong Packaging Group operations

17 sites

*Numbers communicated in the related press release on 8 September 2022
De Jong Packaging excellent fit with a potential Langerbrugge conversion

- Ongoing feasibility study to convert the newsprint machine to 700,000 tonnes testliner and recycled fluting grades, decision H1 2023

- Possibility to combine
  - A converted Langerbrugge – the most cost-efficient containerboard site in Europe
  - De Lier production site – the largest and most modern corrugating site in Europe after ongoing expansion

- Proximity offers additional opportunities for commercial and cost integration benefits over the business cycle
Investing ~€1bn in 2022 – 2025 to convert the second idle paper machine at our Oulu site in Finland

Production estimated to start early 2025

Starting consumer board line for folding box board and coated unbleached kraft to a total capacity of 750,000 tonnes/y

Expected annual sales ~€800m

Reducing earnings volatility by lowering the Group’s market pulp exposure by ~250,000 tonnes/y

Target end-use segments: food and drink, frozen and chilled, mainly in Europe and North America
Stora Enso’s assets well positioned in European cost curves

Estimated European* FBB reels, delivered Frankfurt
EUR/tons 2022
Cost based pricing for captive pulp

Estimated European* recycled containerboard, delivered Frankfurt
EUR/tons 2022

*Excludes Russia and Belarus
Source: AFRY Smart database and Stora Enso

**Ongoing feasibility study to convert the newsprint machine to 700,000 tonnes testliner and recycled fluting grades, decision H1 2023
Planning and implementation of growth projects

- Pre-feasibility study: ~2–3 quarters
- Feasibility study: ~1 year
- Construction: ~2 years
- Ramp-up phase: ~2–3 years
- Full production

Capex: ~3–4 years

Investor kit Q4 2022
Group annual containerboard net balance

Testliner, recycled fluting capacity 650,000

SC Fluting capacity 300,000

Kraftliner capacity 855,000

Total containerboard capacity 1,805,000**

Internal consumption*** 305,000

External purchases*** 67,000

Net balance ~1,430,000

*Excluding De Jong, impact to be disclosed in Q1 2023
**Excluding Ostroleka sack and wrapping paper capacity of 130,000 tonnes
***Based on rolling 12 months figures and excluding Russian operations
2030 growth plan: focus on organic and acquisitive growth

Sales split
- Packaging Materials
- Packaging Solutions
- Organic/M&A

Sales
- 2016: 3.4 BEUR
- 2021: 4.6 BEUR
- ~2030: ~1,150 MEUR

- Oulu 2 & Langerbrugge (ongoing feasibility study)
- De Jong acquisition
- Organic/M&A: ~1,000 MEUR
Packaging ~2030 ambition

- >60% sales increase vs 2021
- EBIT >2x vs 2021
- Highest industry margins
- Fully integrated board capacity with internal pulp
- Leader in sustainable packaging design and innovation
- 50% carbon footprint reduction
- 100% recyclable products (technically)
- Full adoption of Circular Design Guidelines (2025)
Biomaterials
Biomaterials division in brief

• Biomaterials division meets the growing demand for bio-based solutions to replace fossil-based and hazardous materials

• We use all fractions of biomass to develop new solutions

• Our pulp offering encompasses a wide variety of grades to meet the demands of board, paper, specialty paper, tissue and hygiene product producers, as well as materials from process side streams, such as tall oil and turpentine from biomass

• Our work to replace fossil-based materials includes novel applications such as Lignode and bio-based binders
Biomaterials key figures

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</thead>
<tbody>
<tr>
<td>Biomaterials</td>
<td>Operational ROOC &gt; 15%</td>
<td>27.1%</td>
</tr>
</tbody>
</table>
Biomaterials worldwide

<table>
<thead>
<tr>
<th>Grade</th>
<th>Capacity (kt/a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Softwood and fluff pulp</td>
<td>1,550</td>
</tr>
<tr>
<td>Hardwood pulp</td>
<td>1,325</td>
</tr>
<tr>
<td><strong>Total capacity</strong></td>
<td><strong>2,875</strong></td>
</tr>
</tbody>
</table>

Investor kit Q4 2022
Our products and sales mix form the foundation for biomaterial innovation

**Sales mix Q4 2022**
- Pulp
- Tissue
- Hygiene
- Packaging
- Specialties
- Other

**Pulp sales by end use Q4 2022**
- Paper
- Bleached kraft pulp
- Fluff pulp
- Unbleached kraft pulp
- Biochemicals

**Innovative biomaterials**
- Lignin
- Bio-binders

**Pulp**
Market size €45 billion, CAGR +2%

Investor kit Q4 2022
## Significant growth opportunity in biomaterials innovation

<table>
<thead>
<tr>
<th></th>
<th>€10 billion</th>
<th>€20 billion</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Market size</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Long-term EBITDA margin potential</strong></td>
<td>50%</td>
<td>40%</td>
</tr>
<tr>
<td><strong>CAGR</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anode material</td>
<td>+25-30% CAGR</td>
<td></td>
</tr>
<tr>
<td>Bio-binders</td>
<td>+3-4% CAGR</td>
<td></td>
</tr>
</tbody>
</table>
Reducing carbon footprint with bio-based binders

- High bonding strength and water resistance
- Replacing fossil-based chemicals

Market €20 billion
Current share <1%
Lignode replaces non-renewable graphite in batteries

- Anode material Lignode®
- Anode material on foil role
- Rolled into Lithium-ion cells
- Cells are stacked into battery pack

- Electric vehicles
- Stationary energy storage
- Other electric products
Higher performance and faster charging compared to pure graphite

<table>
<thead>
<tr>
<th>Properties</th>
<th>100% Lignode</th>
<th>Lignode/graphite mixtures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fast charging/discharging</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>Low temperature performance</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>Cycling stability</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>Energy density</td>
<td>- +</td>
<td></td>
</tr>
<tr>
<td>Sustainability</td>
<td>++</td>
<td>+</td>
</tr>
</tbody>
</table>
Lignode: We are accelerating the development and scale-up with customers and partners

- **Process industrialisation 2021-2023**
- **Commercial production build-up 2023-2025**
- **Production expansion 2025**
- **Customer testing 2022**
- **Customer qualifications 2023**
- **Product launches 2025**

**2020** → **2030**

**Significant sales potential with selected stakeholders in the battery supply chain**
Biomaterials ~2030 ambition

- €1bn sales in innovative biomaterials
- Reduced market pulp position
- Full scale-up of Lignode
- Leadership in European fluff
- 50% carbon footprint reduction
- Maintaining strong competitiveness
Wood Products
Wood Products division in brief

- Largest sawn wood producer in Europe and a leading provider of sustainable wood-based solutions for the construction industry globally
- The growing Building Solutions business offers building concepts to support low-carbon construction and eco-friendly designs
- Developing digital tools to simplify the design and construction of building projects with wood
- High demands with regard to safety, quality, design and sustainability
- The customers are mainly merchants and retailers, industrial integrators and construction companies
Wood Products key figures

<table>
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<td>53.1%</td>
<td>-7.5%</td>
</tr>
</tbody>
</table>
Climate change can be mitigated with wood construction

CO₂ savings for every m³ built with wood

-1 tonne CO₂
vs. concrete

-2.5 tonnes CO₂
vs. steel

We can **significantly cut emissions in the construction sector** by using renewable materials
Our two strategic pillars enable financial stability and resilience

Sales mix Q4 2022

Traditional wood products
- Classic sawn
- Classic planed
- Wooden industrial window and door components
- Pellets

3-4% annual market growth rate long-term
Market size: >€100 billion

Building Solutions
- Cross-laminated timber (CLT)
- Laminated Veneer Lumber (LVL)
- Construction beams
- Services and tools

>10% annual market growth rate long-term
Market size: >€1 billion for wooden multi-storey buildings
Our market position and sustainability megatrends support our profitable growth ambitions

Traditional wood products markets
Stora Enso’s market share (%)

- **4%** Europe
- **2%** Asia
- **>1%** North America
- **6%** Oceania
- **6%** MENA

Stora Enso’s global CLT market share 2022

- **13%**

Traditional wood products
- Largest supplier of sawn wood in Europe
- Global reach with ~40% sales in overseas markets

Building Solutions
- The world’s largest CLT producer
- One of the leaders in LVL in the European market
Leading provider of wood-based building solutions

- Close to strategic European markets
- Industrial infrastructure
- Local supply of raw material

**Annual capacity**

- Sawing 5.4 million m³
- Further processing 2.5 million m³
- CLT 410,000 m³*
- LVL 85,000 m³
- Pellets 485,000 t

*CLT site (120,000 m3) in Ždírec, Czech Republic, in the ramp-up phase
Traditional wood products: we have improved our profitability and competitiveness for profitable growth

1. Demand growth: megatrend for wooden buildings continues
2. Wood supply: competitive sourcing in Nordics and Central Europe
3. Efficiency: largest operational process efficiency programme completed with main improvements in safety, productivity and raw material efficiency
4. Integration benefits: fiber supply for building solutions and packaging materials

Opportunity for profitable growth: capacity increase
Building Solutions: accelerated profitable growth with solutions across the building lifecycle

Plan
Building concepts

Build
Prefabrication

Live
Digital building

Re-use
Recyclability
Prefabrication example: Fully-finished building elements to reduce manual, costly workload on the construction site

Commodity, off-the-self  Bespoke, delivered just in time
We will triple sales in Building Solutions

Sales mix
- Traditional wood products
- Building Solutions

New growth opportunity with wooden wind turbine towers
>20% margin on growth

Investor kit Q4 2022
Wood Products ~2030 ambition

- >40% sales increase*
- +75% operational EBITDA over the cycle*

40% share of Building Solutions

- ~25 wind turbine towers delivered

50% scope 3 carbon footprint reduction

Efficient asset footprint

*Compared to 2016-2021. Measured as standard deviation over a cycle
Forest
Forest division in brief

- The division creates value with sustainable forest management, competitive wood supply to Stora Enso’s production units, and innovation

- Our forests are the foundation for Stora Enso’s renewable offerings

- The division includes our Swedish forest assets and the 41% share of Tornator as well as wood supply operations in Finland, Sweden and the Baltics

- Stora Enso is one of the biggest private forest owners in the world
# Forest key figures

<table>
<thead>
<tr>
<th>Divisional strategic target</th>
<th>Q4/21</th>
<th>Q4/22</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest Operational ROCE &gt; 3.5%</td>
<td>3.6%</td>
<td>4.4%</td>
</tr>
</tbody>
</table>

**Forest key figures:**

- **Operational ROCE:**
  - Q4/21: 3.6%
  - Q4/22: 4.4%

**Forest key figures chart:**

- **Sales:**
  - Q4/21: 597
  - Q1/22: 626
  - Q2/22: 649
  - Q3/22: 561
  - Q4/22: 664

- **Operational EBIT and Operational ROCE:**
  - Q4/21: 48
  - Q1/22: 49
  - Q2/22: 47
  - Q3/22: 47
  - Q4/22: 62
We create value through our forest assets

~30% self-sufficiency of wood supply from own forest assets and long-term agreements

Secure tactical flexibility through wood sourcing

Operate the largest wood sourcing organisation in the Baltic Sea region

Increased harvesting to secure wood flows to Stora Enso sites

Fiber* 33% of total Group costs

*Includes wood, PIR, OCC and pulp
~30% self-sufficiency of wood supply from own forest assets and long-term agreements

Stora Enso controls approximately 30% of its wood row material consumption globally. Harvesting in own forests and sourcing from long-term agreements amounted to 10.6 million m3 in 2022. Wood deliveries to Stora Enso sites were 35.0 million m3 in 2022.
The forest presents an endless source of value

- Supports a strong balance sheet with increasing value
- Lowers financial and strategic risks
- Foundation for development of sustainable forest management
- Supports our growth strategy through cost efficient wood flows and resource efficiency
- Advances our innovation and R&D work
- Potential for additional revenue streams in renewable energy production (solar and wind)

Up to +15% increased harvesting potential in Sweden
We hold our forest assets close to our production to ensure flexibility and a low carbon footprint

• **Enables further control** of our wood supply

• **Establishes a resilience** to changes in the market environment

• **Secures availability** and lowers wood costs for the Group

• **Provides tactical flexibility** in wood supply

• **Minimises** the logistical **carbon footprint** and lowers transportation cost

Stora Enso forest areas in Sweden and Tornator forest areas in Finland

- Board, pulp and paper production sites
- Sawmills
We use all parts of each harvested tree ensuring optimal use
Only growing forests remove CO$_2$

Carbon sequestration capacity of growing stock

- Year 10–50: Peak CO$_2$ absorption
- Year 70–90: Typical harvesting age
- Year 100: Forests decay and release carbon

Carbon sequestration capacity (tCO$_2$/ha/yr)

- Age of growing stock:
  - 0–30: Carbon sequestration capacity increases
  - 30–90: Carbon sequestration capacity decreases
  - 90+: Carbon sequestration capacity remains low as forests decay and release carbon.
Biodiversity actions for 2030 – own forests as a development platform

| New biodiversity programme for our own forests | Modelling, research and knowledge sharing |
| Science-based indicators to track progress | Attractive services for forest owners |
| Precision forestry for granular data | Online reporting started in 2022 |

Our ambition for 2050

Net positive impact on biodiversity within our own forests and plantations through active biodiversity management
Precision forestry enables a more and efficient forest management.
Active land management provides new revenue streams

**Active landowner**
- Selected land sales
- Land swaps to optimise the land holdings

**Wind power**
- Land leasing
- Expansion potential

**Other revenue streams**
- Hunting licences and fishing rights
- Gravel sales

**Future potential**
- Carbon credits
- Solar power
Wind power opportunities are emerging

Our ambition is to develop and significantly increase our involvement in wind energy.

The total potential for wind power production on Stora Enso’s land in Sweden is estimated to 75 TWh.

~30% of this potential can be realised long term.

Our ambition is to have 5-10 TWh of wind power production in place by 2030 (~5% of Sweden’s total electricity demand).
Paper

Discontinued as of 1 January 2023
Exiting the paper business enables investments in key strategic segments

Divestments

• Hylte site to Sweden Timber for an EV of ~€18m, completion expected in H1/2023
• Maxau site to Schwarz Group for an EV of ~€210m, completion expected in H1/2023
• Nymölla site to Sylvamo for an EV of ~€150m, completed on 2 January 2023
• The divestment process for the Anjala site was discontinued, the site is retained in the Packaging Materials division and continues with paper production
• Ongoing feasibility study for a potential conversion at the retained Langerbrugge site
• Anjala and Langerbrugge will be reported part of Packaging Materials as of 1 January 2023
• Maxau and Hylte paper sites are reported in Segment Other until the completion of the divestments
Paper key figures

<table>
<thead>
<tr>
<th>Divisional strategic target</th>
<th>Q4/21</th>
<th>Q4/22</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper Cash flow after investing activities to sales &gt;7%</td>
<td>-2.9%</td>
<td>-0.7%</td>
</tr>
</tbody>
</table>
Paper capacity

<table>
<thead>
<tr>
<th>Grade</th>
<th>Capacity (1,000 t)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newsprint and book paper</td>
<td>835</td>
</tr>
<tr>
<td>Uncoated Magazine (SC)</td>
<td>155</td>
</tr>
<tr>
<td><strong>Paper total</strong></td>
<td><strong>990</strong></td>
</tr>
</tbody>
</table>

Anjala and Langerbrugge (990kt capacity in total) will be reported part of Packaging Materials as of 1 January 2023.

*Divested to Sweden Timber for an EV of ~€18m, completion expected in H1/2023
**Divested to Schwarz Group for an EV of ~€210m, completion expected in H1/2023
***Divested to Sylvamo for an EV of ~€150m, completed on 2 January 2023
Group’s financial performance, dividend policy, ownership and top management
We are protecting our margins by building a less cyclical business

Growing in three focus areas in renewable materials

High self-sufficiency of wood and energy

Reduce our market pulp position significantly

Divesting Paper

Developing new revenue streams
Stora Enso continues to deliver strong cash flow

- Cash flow from operations increased to €1,873 (€1,752) million in 2022
- Cash flow after investing activities was €1,162 (1,101) million in 2022
We have the balance sheet to grow through both capital expenditure and acquisitions

- Long-term financial target: Net debt to operational EBITDA <2.0x
- In 2022, the net debt to operational EBITDA ratio improved to 0.7x
- Strong balance sheet enables higher capex for 2023
- Growth opportunities to accelerate growth through selected M&A
Energy self-sufficiency is expected to increase in 2023

Energy self-sufficiency excl. JVs (FY2023e)

- Total energy: 75%
- Fuels: 74%
- Electricity: 79%

Group
OL3 impact for 2023
We drive shareholder value through a focused and disciplined capital allocation

Allocating capital for sustainable profitable growth

Strong cash flow generation

Returning capital to shareholders

Organic growth
CAPEX at or below depreciation over the cycle

M&A
Selective M&A to support growth in both Packaging and Wood Products

Dividends
To distribute 50% of EPS excluding fair valuation over the cycle
Higher capex estimate mainly due to growth investments in consumer board.

Capex includes the capitalised leasing contracts according to IFRS 16 Leases standard from 2019 onwards.

Average capex split for 2013–2023 depending on investment decisions.
Dividend was increased to an all time high of €0.60 per share.
Cost structure 2022
% of costs

- Logistics and commissions: 33%
- Fiber: 12%
- Chemicals and fillers: 7%
- Energy: 5%
- Material: 13%
- Personnel: 11%
- Depreciation: 9%
- Other: 10%
Strong liquidity position

- Liquidity at the end of 2022:
  - €1,917m cash and cash equivalents
  - €700m committed revolving credit facility fully undrawn
  - €200m committed bilateral back-up funding facilities fully undrawn
  - €200m committed credit facilities fully undrawn
  - €1,050m statutory pension premium loans available
- No financial covenants on Stora Enso Oyj’s debt
- Net debt to operational EBITDA for the last 12 months at 0.7x and net debt to equity 15%
Maturity profile at the end of 2022

Committed credit facilities are fully undrawn and mature in 2023 and 2027 (€900m in total). A €100m undrawn bank loan matures in 2025 and another €100m undrawn bank loan matures in 2026.
Ownership Distribution
as of 31 December 2022

<table>
<thead>
<tr>
<th>Ownership Category</th>
<th>% of shares</th>
<th>% of votes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solidium Oy*</td>
<td>10.7%</td>
<td>27.3%</td>
</tr>
<tr>
<td>FAM AB</td>
<td>10.2%</td>
<td>27.3%</td>
</tr>
<tr>
<td>Social Insurance Institution of Finland (KELA)</td>
<td>3.0%</td>
<td>10.0%</td>
</tr>
<tr>
<td>Finnish institutions (excl. Solidium and KELA)</td>
<td>9.8%</td>
<td>7.7%</td>
</tr>
<tr>
<td>Swedish institutions (excl. FAM)</td>
<td>1.9%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Finnish private shareholders</td>
<td>3.9%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Swedish private shareholders</td>
<td>3.1%</td>
<td>2.3%</td>
</tr>
<tr>
<td>ADR holders</td>
<td>1.7%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Under nominee names (non-Finnish/non-Swedish shareholders)</td>
<td>55.6%</td>
<td>21.3%</td>
</tr>
</tbody>
</table>

* Entirely owned by the Finnish State
## Major Shareholders

### as of 31 December 2022

<table>
<thead>
<tr>
<th>By voting power</th>
<th>A shares</th>
<th>R shares</th>
<th>% of shares</th>
<th>% of votes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Solidium Oy*</td>
<td>62,655,036</td>
<td>21,792,540</td>
<td>10.7</td>
<td>27.3</td>
</tr>
<tr>
<td>2 FAM AB**</td>
<td>63,123,386</td>
<td>17,000,000</td>
<td>10.2</td>
<td>27.3</td>
</tr>
<tr>
<td>3 Social Insurance Institution of Finland (KELA)</td>
<td>23,825,086</td>
<td>0</td>
<td>3.0</td>
<td>10.0</td>
</tr>
<tr>
<td>4 Ilmarinen Mutual Pension Insurance Company</td>
<td>4,172,492</td>
<td>14,900,000</td>
<td>2.4</td>
<td>2.4</td>
</tr>
<tr>
<td>5 Varma Mutual Pension Insurance Company</td>
<td>5,163,018</td>
<td>1,140,874</td>
<td>0.8</td>
<td>2.2</td>
</tr>
<tr>
<td>6 MP-Bolagen i Vetlanda AB**</td>
<td>4,885,000</td>
<td>1,000,000</td>
<td>0.7</td>
<td>2.1</td>
</tr>
<tr>
<td>7 Elo Mutual Pension Insurance Company</td>
<td>2,000,000</td>
<td>7,601,000</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>8 Bergslaget's Healthcare Foundation</td>
<td>626,269</td>
<td>1,609,483</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>9 SEB Investment management</td>
<td>0</td>
<td>6,976,453</td>
<td>0.9</td>
<td>0.3</td>
</tr>
<tr>
<td>10 The State Pension Fund</td>
<td>0</td>
<td>5,000,000</td>
<td>0.6</td>
<td>0.2</td>
</tr>
<tr>
<td>11 The Society of Swedish Literature in Finland</td>
<td>0</td>
<td>3,000,000</td>
<td>0.4</td>
<td>0.1</td>
</tr>
<tr>
<td>12 Avanza Pension Insurance</td>
<td>146,285</td>
<td>1,268,398</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>13 Unionen (Swedish trade union)</td>
<td>0</td>
<td>2,612,750</td>
<td>0.3</td>
<td>0.1</td>
</tr>
<tr>
<td>14 Afa Insurance</td>
<td>0</td>
<td>2,381,676</td>
<td>0.3</td>
<td>0.1</td>
</tr>
<tr>
<td>15 SEB AB, Luxembourg Branch</td>
<td>2,177</td>
<td>1,785,231</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>16 Nordea Pro Finland Fund</td>
<td>0</td>
<td>1,678,317</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>17 Investment Fund Seligson &amp; Co OMX Helsinki 25</td>
<td>0</td>
<td>1,512,742</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>18 Danske Invest Finnish Equity Fund</td>
<td>0</td>
<td>1,375,000</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>19 SEB-Stiftelsen, Skand enskilda</td>
<td>0</td>
<td>1,250,000</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>20 Länsförsäkringar fondvärvaltning AB</td>
<td>0</td>
<td>1,049,259</td>
<td>0.1</td>
<td>0.0</td>
</tr>
</tbody>
</table>

**20 largest total**

|                  | 166,598,749 | 94,933,723 | 33.1 | 74.2 |

*Entirely owned by the Finnish State. **As confirmed to Stora Enso.

List has been compiled by the company, based upon shareholder information from Euroclear Finland Oy and Euroclear Sweden AB share registers and a database managed by Citibank, N.A. (as the company's ADR agent bank). This information includes only direct registered holdings, thus certain holdings (which may be substantial) of ordinary shares and ADRs held in nominee or brokerage accounts can not be included. The list is therefore incomplete.
**Sponsored ADR Programme**

Stora Enso has a sponsored Level I ADR programme in the US. The ADRs trade on the premier tier of Over-The-Counter (“OTC”) market. Details are as follows:

<table>
<thead>
<tr>
<th>Ticker Symbol</th>
<th>SEOAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUSIP</td>
<td>86210M106</td>
</tr>
<tr>
<td>Ratio</td>
<td>1 ADR : 1 Ordinary Shares</td>
</tr>
<tr>
<td>ADR depositary</td>
<td>Citibank</td>
</tr>
</tbody>
</table>

Share price information: www.citi.com/DR or www.otcqx.com

Contact information for Stora Enso ADR holders:
Citibank Shareholder Services
Computershare
P.O. Box 43077
Providence, Rhode Island 02940-3077
Email: citibank@shareholders-online.com

Direct dial: (781) 575-4555
Group Leadership Team

President and CEO
Annica Bresky

CFO, Acting Head of Paper
Seppo Parvi

Chief Strategy and Innovation Officer
Tobias Bååman

Packaging Solutions
David Ekberg

Biomaterials
Johanna Hagelberg

Brand and Communication
René Hansen

Packaging Materials
Hannu Kasurinen

HR
Katarina Kravi

Forest
Per Lyrvall

Sustainability
Annette Stube

Wood Products
Lars Vökel

Sourcing & Logistics
Minna Björkman
Board of Directors

Antti Mäkinen
Chair

Håkan Buskhe
Vice Chair

Elisabet Fleuriot

Astrid Hermann

Helena Hedblom

Kari Jordan

Christiane Kuehne

Richard Nilsson

Hans Sohlström

89
Investor kit Q4 2022

THE RENEWABLE MATERIALS COMPANY
Forest assets and fair valuation
Stora Enso’s global forest assets’ fair values and valuation methodology by region

Group forest assets fair value at €8.3 billion or €10.57 per share in Q4 2022

All figures total forest assets including biological assets and forest land*

Group forest assets
Biological assets: €5.6 billion
Forest land*: €2.7 billion

99% certified wood from own forests

*including leased land

**Table:**

<table>
<thead>
<tr>
<th>Region</th>
<th>Fair Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweden</td>
<td>€6.1 billion</td>
</tr>
<tr>
<td></td>
<td>(Market transaction-based fair value)</td>
</tr>
<tr>
<td></td>
<td>(Q4 22)</td>
</tr>
<tr>
<td>Tornator (41%)</td>
<td>€1.3 billion</td>
</tr>
<tr>
<td></td>
<td>(Market transaction-based fair value)</td>
</tr>
<tr>
<td></td>
<td>(Q4 22)</td>
</tr>
<tr>
<td>Montes del Plata (50%)</td>
<td>€494m</td>
</tr>
<tr>
<td></td>
<td>(DCF) (Q4 22)</td>
</tr>
<tr>
<td>Veracel (50%)</td>
<td>€134m</td>
</tr>
<tr>
<td></td>
<td>(DCF) (Q4 22)</td>
</tr>
<tr>
<td>Guangxi</td>
<td>€362m</td>
</tr>
<tr>
<td></td>
<td>(DCF) (Q4 22)</td>
</tr>
</tbody>
</table>
We are a leader in sustainable forest management across one of the world’s largest private forest estates

~30% self-sufficiency of wood supply from own forest assets and long-term agreements

Swedish forests
1,389,000 ha
of forest land

Tornator
301,000 ha
in Finland, Estonia & Romania

Guangxi*,
73,000 ha
Southern China (leased)
of forest land

Veracel
113,000 ha
Brazil
of forest land

Montes del Plata
138,000 ha
Uruguay
of forest land

*Ongoing divestment process
Biannual market transaction-based fair valuation in Sweden and Finland

Group forest assets
BEUR

<table>
<thead>
<tr>
<th></th>
<th>Q4 2021</th>
<th>Q4 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plantations</td>
<td>6.0</td>
<td>6.1</td>
</tr>
<tr>
<td>Tornator, Finland</td>
<td>1.0</td>
<td>1.3</td>
</tr>
<tr>
<td>Sweden</td>
<td>1.0</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Sweden and Finland
- Market transactions from our forest regions
- Volume weighted three year average transactions
- Standing stock and price data of the traded forest
- Biannual valuation process

Plantations
- DCF method
- Forest land at historical cost
Market transaction-based fair valuation applied for Tornator

Tornator forest assets (41% ownership)

- Tornator fair value up by €265m q-o-q due to change in the fair valuation method from DCF to market transaction-based
- Volume weighted three year average forest property transactions from Finland
- Bi-annual fair valuation process
Market transaction-based forest property prices in Sweden

Source: Ludvig & Co 26 January 2023 report, based on nominal prices

Source: Ludvig & Co 26 January 2023 report, based on nominal prices
Annual harvesting represented 79% of the forest growth in 2022

Estimated annual forest growth
- 2020: 13.5 million m³
- 2021: 13.2 million m³
- 2022: 13.6 million m³

Annual harvesting
- 2020: 9.4 million m³
- 2021: 9.9 million m³
- 2022: 10.7 million m³
Increasing standing forest stock

Total standing stock

- Sweden
- Tornator (41%)
- Guangxi
- MdP (50%)
- Veracel (50%)

2020: 196.0 million m³
2021: 207.1 million m³
2022: 208.1 million m³
Financial results

Q4 2022

Delivering the best FY financial performance in 22 years despite Q4 market challenges

31 January 2023
Delivering the best FY financial performance in 22 years despite Q4 market challenges

- Biomaterials delivered a quarterly all-time high result, containerboard and sawn wood experienced continued slowdown
- Reshaping for future growth to drive outperformance over the cycle
  - Completed the De Jong acquisition in January 2023
  - Completed the majority of paper sites divestments and dissolved the Paper division
  - Started a process to divest the consumer packaging site and forestry operations in Beihai, China
  - Investment decision in cost-leading consumer board line at the Oulu site, Finland
  - Partnering with Polestar to contribute to their Polestar 0 project of a climate neutral car for 2030 with Lignode
- The Board proposes an all-time high dividend of €0.60 per share
Delivered the strongest FY financial performance since 2000

- Sales increased by +15% YoY
- OpEBIT +24% YoY
- OpROCE excl. Forest 20.9%, above long-term target of >13%
Market-driven slowdown and higher cost levels impacted sales and profit in the back half of 2022

- Sales increased by +5% YoY
- Sales excluding Paper +5% YoY
- OpEBIT -16.7% YoY
- OpROCE excl. Forest 13.2%, above long-term target of >13%
Continued strong performance with similar trend YoY in H2
Development comparison H2/2021 vs H2/2022

- Maintenance costs impact on EBIT:
  - H2/2021: €314m
  - H2/2022: €330m
  - Q3/2021: €169m
  - Q3/2022: €150m
  - Q4/2021: €146m
  - Q4/2022: €180m
Completed De Jong Packaging Group acquisition to grow market share in Western European markets

Integration process started

- **€1* billion**
  - Sales est 2022

- **€114* million**
  - EBITDA est 2022

- Capacity increase by ~1,200 million m² to more than 2,000 million m²
- **€30 million**
  - Average annual synergies over the cycle after three years
- **€40 million**
  - Additional annual EBITDA estimated by 2025 from ongoing expansions projects

Excellent fit with a possible conversion at the Langerbrugge site in Belgium

* Numbers communicated in the related press release on 8 September 2022
Exiting the paper business enables investments in key strategic segments

Divestments for a total EV of €378 million

• Nymölla site to Sylvamo, completed in January 2023
• Maxau site to Schwarz Group and Hylte site to Sweden Timber, completions expected in H1/2023
• The divestment process for the Anjala site was discontinued, the site is retained in Stora Enso and continues with paper production
• Ongoing feasibility study for a potential conversion at the retained Langerbrugge site
Sales process for divestment of the Beihai site has been initiated to allocate capital for growth in other core sites

- Divestment would include both industrial site and forestry operations
  - Beihai site annual production capacity: 250kt mechanical pulp and 550kt consumer board
  - 73k ha leased eucalyptus plantations
  - Stora Enso’s ownership is approximately 80%
- Capital and resources will be allocated for growth in other existing sites such as the Oulu site in Finland
- Existing and new customers in China and other Asian markets will continue to be served from Stora Enso’s other global sites
- No committed timeline for completion
Recent partnering and developments to accelerate long-term growth

• Biomaterials Innovations
  - Partnership with Polestar to contribute to their Polestar 0 project of a climate neutral car for 2030 with Lignode
  - Progressing with the feasibility study for the first industrial scale production of Lignode
  - Monitoring the development of battery technologies within wood-based materials

• Renewable Packaging
  - Moving ahead according to plan with the ~€1bn investment in consumer board in Oulu, Finland

• Sustainable Building Solutions
  - Launched a new low carbon wood construction solution, Sylva, prefab and custom-made for more efficient use of material
All long-term Group level financial targets were exceeded in 2022

### Group long-term financial targets

<table>
<thead>
<tr>
<th></th>
<th>Q4 21</th>
<th>Q4 22</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dividend*</td>
<td>-</td>
<td>-</td>
<td>0.55</td>
<td>0.60**</td>
</tr>
<tr>
<td><strong>To distribute 50% of EPS excluding fair valuation over the cycle</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Growth YoY</td>
<td>&gt; 5%</td>
<td>39%</td>
<td>29%</td>
<td>17%</td>
</tr>
<tr>
<td>Net debt to operational EBITDA</td>
<td>&lt; 2.0x</td>
<td>0.7</td>
<td>1.1</td>
<td>0.7</td>
</tr>
<tr>
<td>Net debt to equity</td>
<td>&lt; 60%</td>
<td>22%</td>
<td>22%</td>
<td>15%</td>
</tr>
<tr>
<td>Operational ROCE excl. Forest</td>
<td>&gt; 13%</td>
<td>13.2%</td>
<td>17.8%</td>
<td>20.9%</td>
</tr>
</tbody>
</table>

### Divisional long-term financial targets

<table>
<thead>
<tr>
<th>Division</th>
<th>Q4 21</th>
<th>Q4 22</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packaging Materials</td>
<td>16.8%</td>
<td>3.6%</td>
<td>18.0%</td>
<td>18.2%</td>
</tr>
<tr>
<td>Packaging Solutions</td>
<td>19.4%</td>
<td>-1.4%</td>
<td>10.8%</td>
<td>-0.7%</td>
</tr>
<tr>
<td>Biomaterials</td>
<td>27.1%</td>
<td>35.0%</td>
<td>20.8%</td>
<td>25.8%</td>
</tr>
<tr>
<td>Wood Products</td>
<td>53.1%</td>
<td>-7.5%</td>
<td>59.4%</td>
<td>44.2%</td>
</tr>
<tr>
<td>Forest</td>
<td>3.6%</td>
<td>4.4%</td>
<td>5.1%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Paper</td>
<td>-2.9%</td>
<td>-0.7%</td>
<td>-4.5%</td>
<td>0.9%</td>
</tr>
</tbody>
</table>

* Annual dividend. ** Dividend proposal
Higher prices were offset by increased variable costs
Maintenance costs €34 million higher year-on-year

- Energy: -€51m
- Logistics: -€107m
- Chemicals and fillers: -€91m
- Fixed costs: -€85m
- Other variable costs: -€54m

MEUR

<table>
<thead>
<tr>
<th>Q4 2021</th>
<th>Sales prices &amp; mix</th>
<th>Volume</th>
<th>Net FX</th>
<th>Fiber</th>
<th>Other variable &amp; fixed costs</th>
<th>Depreciation</th>
<th>Associates &amp; other</th>
<th>Closed units</th>
<th>Q4 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEUR</td>
<td>426</td>
<td>302</td>
<td>-72</td>
<td>73</td>
<td>36</td>
<td>-388</td>
<td>13</td>
<td>-31</td>
<td>355</td>
</tr>
<tr>
<td>%</td>
<td>15.7%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12.4%</td>
</tr>
</tbody>
</table>

Investor kit Q4 2022

THE RENEWABLE MATERIALS COMPANY
Packaging Materials

Price increases to mitigate cost inflation continues in consumer board
The containerboard market demand remained weak

- Sales +6% YoY, driven by higher board prices
- Consumer board demand remained stable, price increases implemented to mitigate variable cost escalation
- Continued weak demand in containerboard markets

- OpEBIT -€102m YoY
- Increased short-term operating costs due to annual maintenance shutdowns at four large sites, and inflationary pressures
- Margin squeeze due to escalated variable costs and lower volumes OpROOC at 3.6%, long-term target >20%
Packaging Solutions
Sales and profitability were impacted by the exit from Russian operations and high inflationary pressures

- Sales -16% YoY
- Lower sales mainly due to the divestment of the Russian units
- Higher sales prices in the corrugated packaging operations despite softer market conditions

- OpEBIT -€13m YoY
- Negatively impacted by the exit from Russia
- Higher costs related to investments in growing the new businesses
- OpROOC at -1.4%, long-term target >15%
Biomaterials

All-time high quarterly sales and profitability reached through record high pricing and effective operational performance

- Sales +32% YoY, all-time high quarter
- The record high sales were driven by strong prices and deliveries, supported by good performance in by-product sales and effective operational performance

- OpEBIT +49% YoY, all-time high quarter
- Higher sales prices and positive FX impact fully offset higher costs
- OpROOC at 35%, clearly above the long-term target of >15%
Wood Products
Rapid market decline in sawn wood with continued stability in Building Solutions

- Sales -7% YoY
- The construction market was impacted by market slowdown with fewer building permits and projects
- Lower sales mainly impacted by lower prices in sawn wood and the exit from the Russian operations
- The stable demand in Building Solutions continued

- OpEBIT -€103m YoY
- Lower sales prices and increased costs for logistics, electricity and raw materials
- OpROOC at -7.5%, long-term target >20%
Forest

Wood demand and prices remained on a high level

- Sales +11% YoY driven by increased wood demand and higher prices
- Tighter wood markets both in Finland and Sweden mitigated by flexible sourcing

- OpEBIT +30% YoY
  - Supported by efficient operational performance
  - Positive impact from land sales in Sweden of €10m
  - OpROCE at 4.4%, above long-term target of >3.5% despite the higher fair value of the Nordic forest assets
Paper
Delivered significantly improved profitability due to business turnaround after restructuring

- Sales +9% YoY
- Higher sales prices for Stora Enso’s products
- Volumes impacted by scheduled maintenance shutdowns during the quarter

- OpEBIT +€59m YoY
- Higher paper prices more than offset higher variable costs
- Cash flow to sales after investments -0.7%, impacted by restructuring provision payouts and transaction costs related to the announced divestments (long-term target >7%)
Market transaction-based fair valuation applied for Tornator

- Fair value of €8.3 billion equivalent to €10.52 per share
- Change in the fair valuation method from DCF to market transaction-based in Finland resulted in a €265m positive impact q-o-q
- Positive impact from higher market transaction-based forest property prices in Sweden was largely offset by negative FX SEK/EUR
- Higher WACCs for plantations decreased fair values slightly

**Group forest assets**

<table>
<thead>
<tr>
<th></th>
<th>Q122</th>
<th>Q222</th>
<th>Q322</th>
<th>Q422</th>
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</thead>
<tbody>
<tr>
<td>€ billion</td>
<td>8.0</td>
<td>8.2</td>
<td>8.1</td>
<td>8.3</td>
</tr>
<tr>
<td>Biological assets</td>
<td>5.5</td>
<td>5.3</td>
<td>5.3</td>
<td>5.6</td>
</tr>
<tr>
<td>Forest land*</td>
<td>2.5</td>
<td>2.9</td>
<td>2.8</td>
<td>2.7</td>
</tr>
</tbody>
</table>

*Including leased land
Energy self-sufficiency is expected to increase in 2023

Energy self-sufficiency excl. JVs (FY2023e)

- Total energy: 75%
- Fuels: 74%
- Electricity: 79%

Group
OL3 impact for 2023
Higher capex estimate mainly due to growth investments in consumer board

The majority of the increase in 2023 relates to the consumer board investment in Oulu, Finland

Capex for 2019-2022 and estimate for 2023 include the capitalised leasing contracts according to IFRS 16 Leases standard

- Biological capex
- Strategic capex
- Maintenance and development capex
- Capex estimate for 2023
- Depreciation and depletion of capitalised silviculture costs
Dividend was increased to an all-time high of €0.60 per share

Target: 50% of EPS excluding fair valuation over the cycle

*Board proposal
Changes as of 1 January 2023

- The Paper division is discontinued
- The Maxau and Hylte paper sites are reported in Segment Other until completion of the divestments
- The Langerbrugge and Anjala sites, retained in Stora Enso, are reported as part of Packaging Materials
- The New Business units transferred from Packaging Solutions to Segment Other
- Restated figures shall be issued prior to the Q1/2023 reporting (Q1 report publication date 25 April 2023)
Annual guidance: the full-year 2023 operational EBIT is expected to be lower than for the full-year 2022 (€1,891m)

- Market conditions and inflationary pressures are expected to be more challenging in 2023 than in 2022.
- To manage market volatility, measures like pricing, flexibility in product mix, capacity, inventory, sourcing and logistics, and reinforced cost control are in place.
- Stora Enso benefits from its self-sufficiency in energy of 72% as well as hedging, and in wood of ~30%.
- Stora Enso’s extensive changes in the past three years have reshaped the Company to be financially, operationally and strategically in a stronger position for future growth.
The overall demand for consumer board is expected to remain stable while the overall containerboard demand is expected to remain weak.

Demand for corrugated packaging is expected to weaken in Europe.

Pulp demand is expected to be on par with the previous year.

The demand for sawn wood is expected to be significantly weaker especially in Europe with the overseas markets remaining stable.

Pulpwood demand is expected to remain stable, while demand for sawlogs is expected to decrease.
Delivering the best FY financial performance in 22 years despite Q4 market challenges

• Our performance in 2022 demonstrates the strength of our leading market positions and our ability to be proactive and agile
• Quarterly all-time high results in Biomaterials, with continued slowdown in containerboard and sawn wood
• Investing in organic and acquisitive growth, and entering partnerships, all to drive outperformance over the cycle
• The Board proposes an all-time high dividend of €0.60 per share