



Norske Skog

Q4 2021 presentation

04 February 2022

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Sustainable and innovative industry

- Global industrial company focusing on **publication paper, packaging paper, energy and bio products**
- Transitioning into markets with **strong growth outlook** and **higher margins**
- Takeover of **waste-to-energy facility from Valmet Q2 2022** improving green energy mix
- Becoming a leading independent European **recycled containerboard company in 2023**
- Promising biochemicals and materials projects with **CEBINA, CEBICO and Circa**
- Portfolio of industrial sites foundation for **further business development**


2

1) Norske Skog is the largest shareholder with ~26% ownership position in Circa;
 2) Installed capacity for biofuel and waste from recycled paper of 230 MW.
 Energy mainly used internally in the publication paper production process



Bio products

| | | |
|---|---|---|
|  <p>circa </p> <p>1,000 tonnes of biochemicals capacity¹</p> <p>Q3 2023</p> |  <p>CEBINA</p> <p>100-500 tonnes of CEBINA capacity (pilot)</p> |  <p>CEBICO</p> <p>300 tonnes of CEBICO capacity (pilot)</p> |
|---|---|---|

Energy

| | | |
|---|---|--|
|  <p>Waste-to-energy plant</p> <p>+400 GWh of waste-based energy capacity</p> <p>Q2 2022</p> | <p>Biogas</p> <p>~28 GWh of biogas energy capacity</p> | <p>Green bio-mass energy</p> <p>~1,000 GWh of biomass energy capacity²</p> |
|---|---|--|

Packaging paper

| | |
|---|---|
|   <p>STRATO</p> <p>760k tonnes of containerboard capacity</p> <p>Q4 2022</p> | <p>Skogn interliner</p> <p>~200k tonnes of interliner capacity</p> |
|---|---|

Publication paper

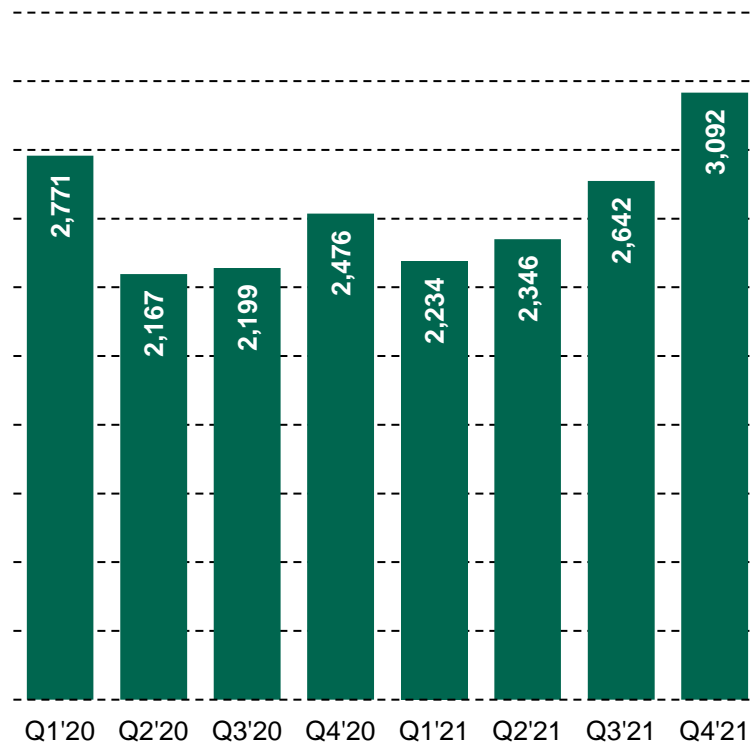
| | | |
|---|---|--|
|  <p>NOR News</p> <p>1,350k tonnes of newsprint capacity</p> |  <p>NOR Cote</p> <p>400k tonnes of LWC capacity</p> |  <p>NOR SC</p> <p>360k tonnes of SC capacity</p> |
|---|---|--|

 Under construction **Date** Estimated start-up / takeover date

Earnings normalising as operating environment remains highly challenging

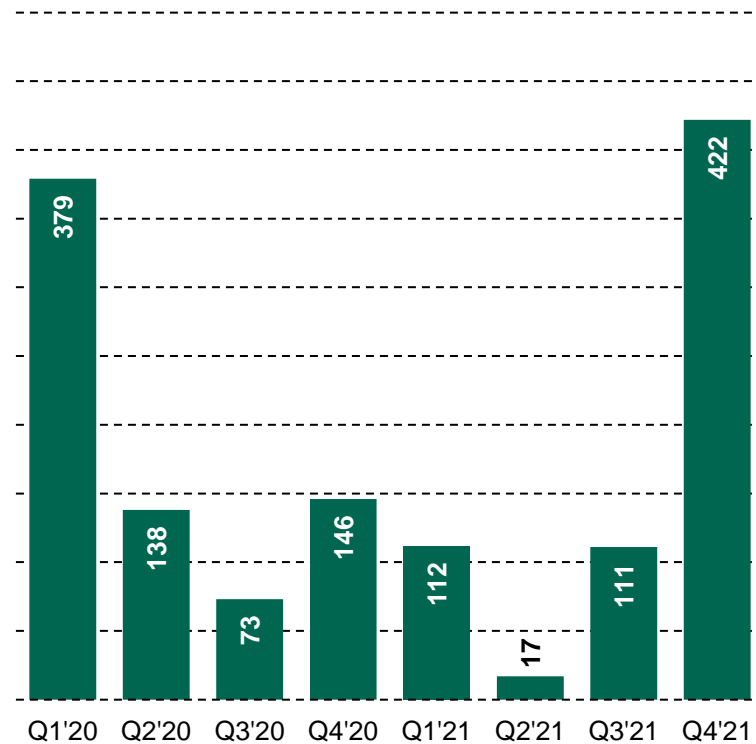
Revenue

NOKm



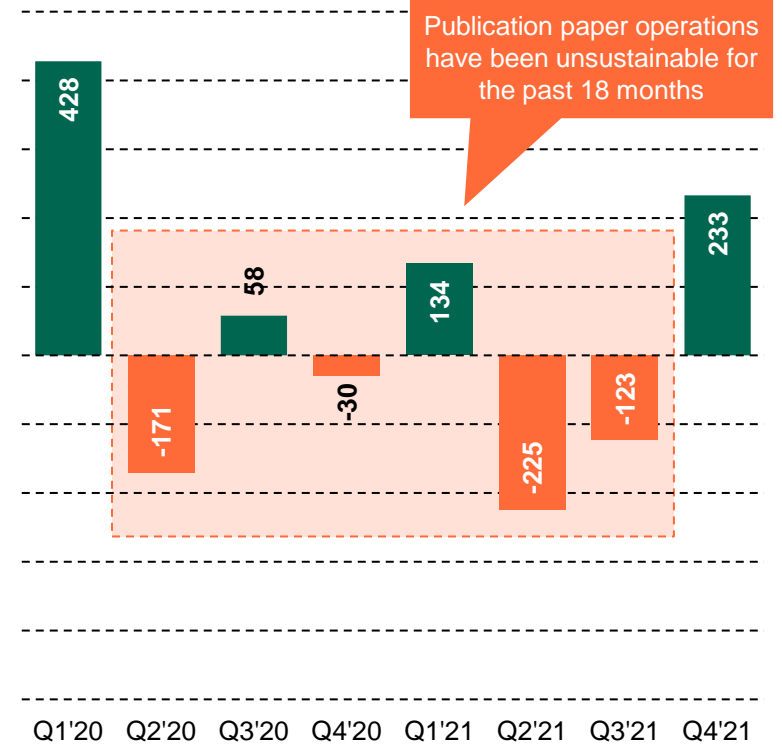
EBITDA

NOKm



Cash earnings¹

NOKm



Fourth quarter in brief

Necessary price increases for all product grades realised in Q4 2021 and into 2022

- Publication paper market tightening following significant capacity closures, further closures announced in 2022 and 2023
- Price increases addressing continued and unprecedented increases in energy and raw material prices

EBITDA of NOK 422m in the quarter

- EBITDA improvement from previous quarter with margins normalising towards the >10% area
- Continued strong negative earnings pressure from energy and raw material costs

Sale of CO₂ allowances

- All allowances for 2021 received, the full net surplus sold in the quarter leading to a positive cash impact
- CO₂ compensation for 2021 expected to be paid during H1 2022

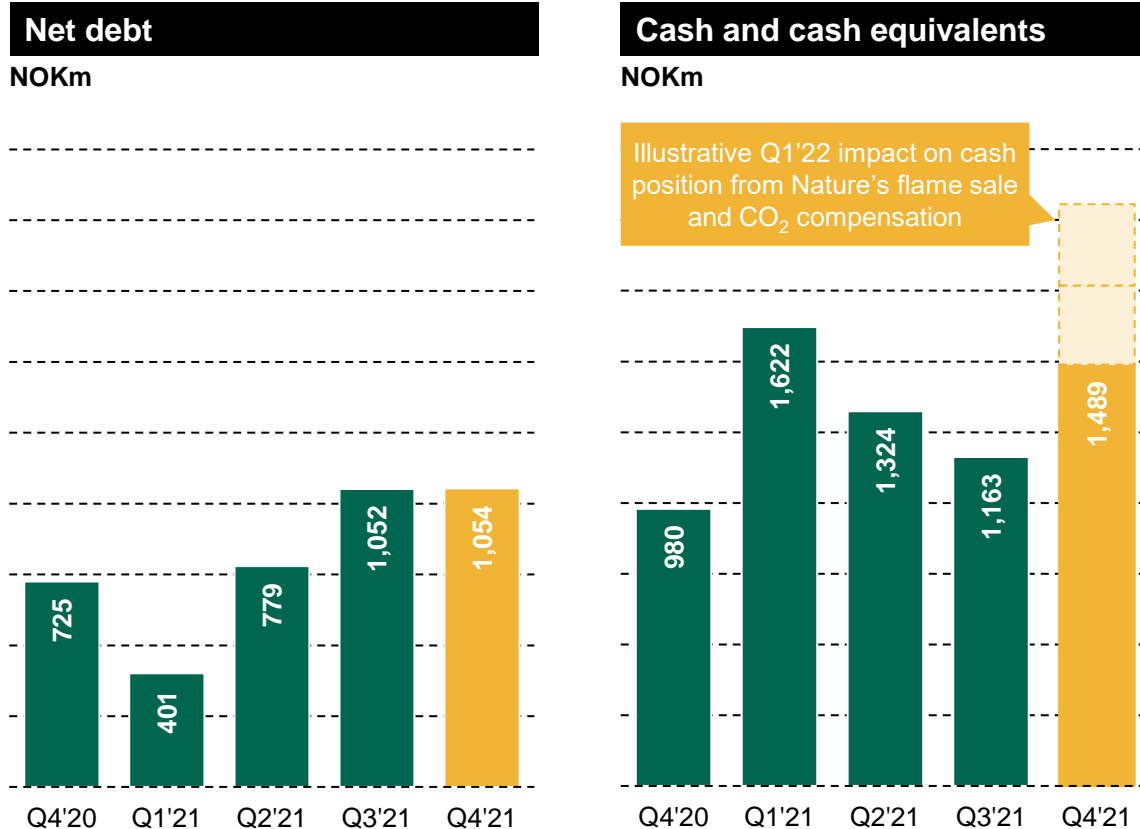
Entered into credit facilities to fully finance packaging paper projects

- Attractive terms for EUR 265m debt financing with average maturity towards the end of 2030
- Capex being incurred and debt facilities being drawn for both projects

Entered into agreement to sell Nature's Flame pellets facility following end of quarter

- Signed agreement to sell New Zealand pellets facility to Talley's for a consideration of NZD ~47.8m
- Cash proceeds of NZD ~47.8m and book value gain of NOK 150-200m expected during Q1 2022

Liquidity headroom to execute strategic growth projects



Total liquidity sources of EUR ~490m

- Cash balance of NOK 1,489m (EUR ~149m)
- Proceeds of NZD ~47.8m (EUR ~28m) from Nature's Flame sale in Q1'22
- 2021 CO₂ compensation of NOK ~290m (EUR ~29m) expected paid in H1'22
- Undrawn strategic project¹ debt facilities of EUR ~255m
- Undrawn RCF of EUR 31m
- Excluding future cash earnings²

Remaining strategic project¹ capex of EUR ~335m

5 1) Includes waste-to-energy project at the Bruck industrial site and packaging paper projects at the Bruck and Golbey industrial sites; 2) Cash earnings defined as cash flow from operations less maintenance capex

Segment financials for Q4 2021

Segment financials

| NOKm | Q4 2021 | Q3 2021 | Q4 2020 | 2021 | 2020 |
|---------------------------|---------|---------|---------|-------|-------|
| Europe | | | | | |
| Total operating income | 2,648 | 2,183 | 1,899 | 8,412 | 7,412 |
| EBITDA | 395 | 113 | 171 | 628 | 659 |
| EBITDA margin | 14.9% | 5.2% | 9.0% | 7.5% | 8.9% |
| Production (1 000 tonnes) | 428 | 428 | 382 | 1,628 | 1,468 |
| Deliveries (1 000 tonnes) | 427 | 433 | 403 | 1,645 | 1,482 |
| Production / capacity | 96% | 96% | 80% | 91% | 77% |
| Australasia | | | | | |
| Total operating income | 395 | 426 | 526 | 1,792 | 2,106 |
| EBITDA | 46 | 0 | -13 | 44 | 106 |
| EBITDA margin | 11.6% | 0.0% | -2.5% | 2.5% | 5.0% |
| Production (1 000 tonnes) | 62 | 62 | 94 | 292 | 332 |
| Deliveries (1 000 tonnes) | 62 | 68 | 97 | 308 | 343 |
| Production / capacity | 87% | 87% | 87% | 79% | 76% |
| Other activities | | | | | |
| Total operating income | 71 | 61 | 68 | 228 | 204 |
| EBITDA | -19 | -2 | -12 | -11 | -29 |

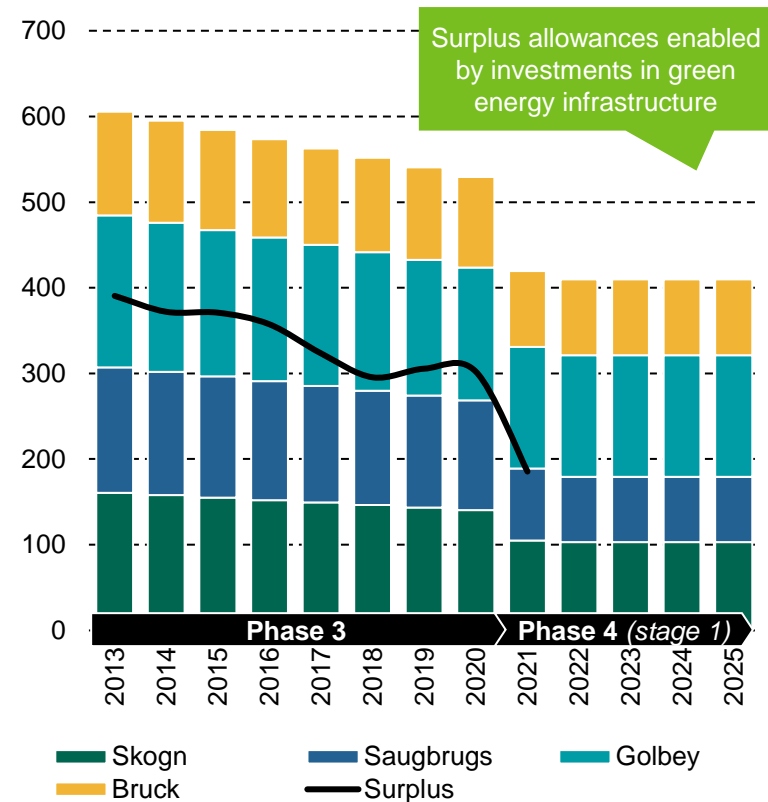
- Utilisation of 96% (equivalent to full utilisation)
- Realised prices in the quarter up +20% to previous quarter
- Continued high raw material prices (energy and recovered paper)

- Utilisation of 87%
- Boyer is the only domestic publication paper supplier
- Publication paper price increases end of 2021

Historical and ongoing investments in green energy enables low CO₂ footprint and emission allowance surplus

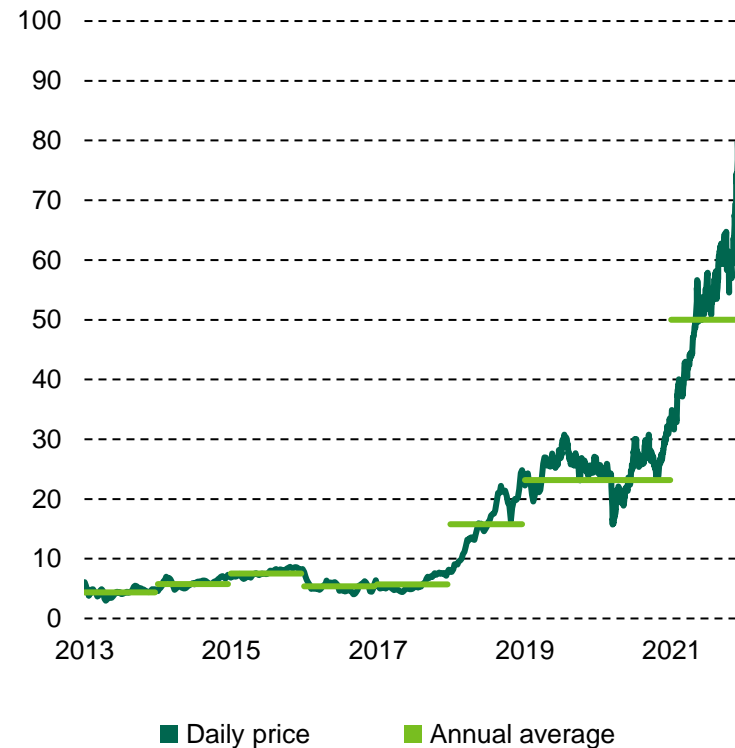
Allowance surplus due to green energy mix

Allocated allowances and net surplus, thousand allowances



CO₂ prices reflecting the green shift

Price per allowance, EUR / allowance

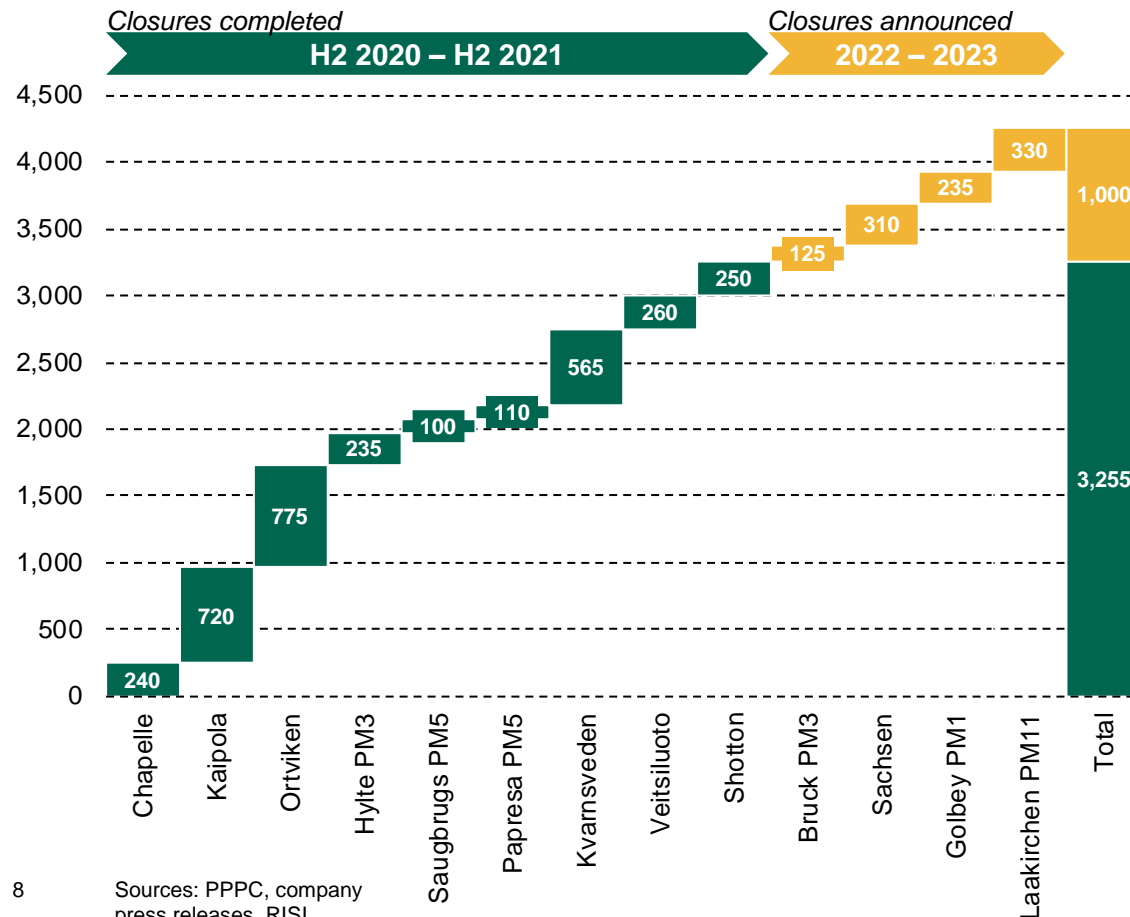


- Net allowance surplus for 2021 sold during Q4 2021, allowances for 2022 expected received in Q1 2022
- Indication to receive gross ~410k allowances per year in period 2022-2025
- Annual fossil CO₂ emissions of ~220k tonnes, to be reduced with ~150k tonnes from waste-to-energy plant (takeover from Valmet in Q2 2022)
- Allowance sale income booked quarterly based on annual surplus, cash proceeds received upon sale
- CO₂ cost compensation booked quarterly, cash proceeds received the year after booking

Publication paper market tightening as COVID-19 restrictions ease and significant capacity exits the market

Publication paper capacity closures since H2 2020

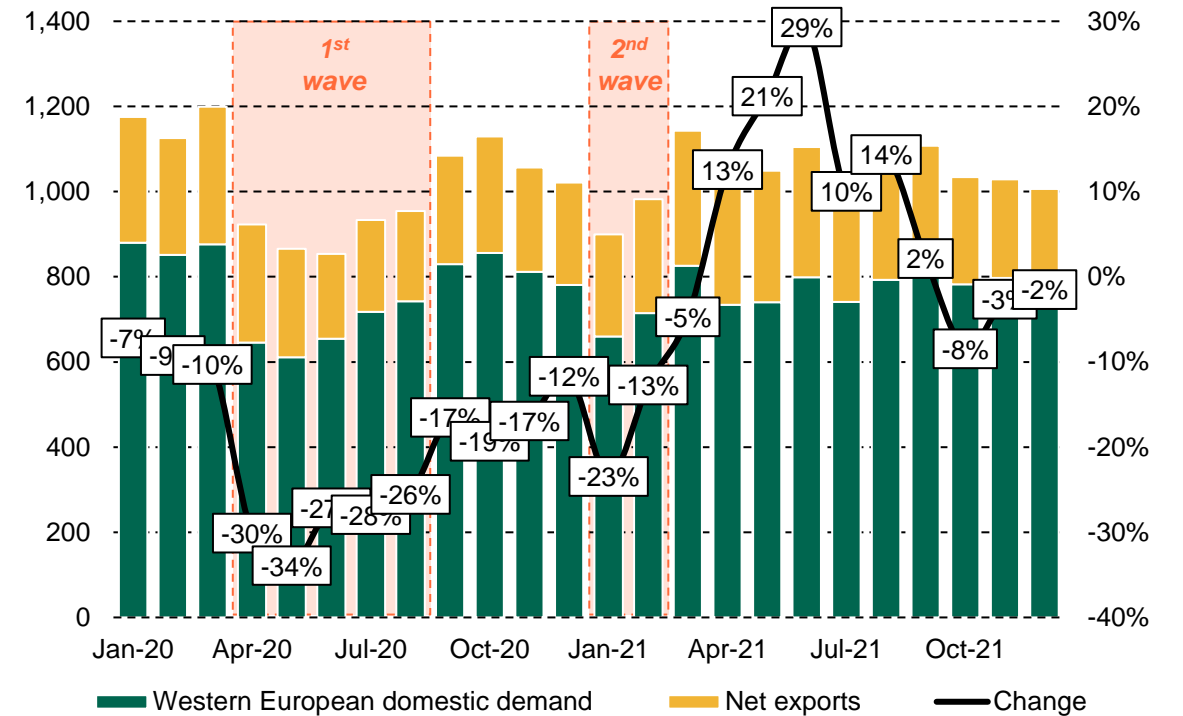
Capacity closures in Western Europe, thousand tonnes



Demand stabilising as COVID-19 restrictions ease

Monthly publication paper demand Western Europe, thousand tonnes

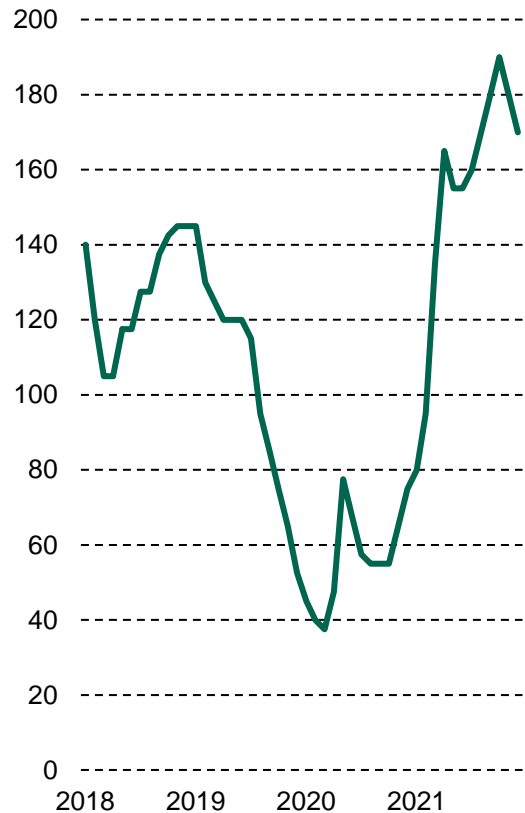
Change vs same month previous year



Fibre and energy costs have squeezed industry margins to unsustainable levels driving necessary price increases

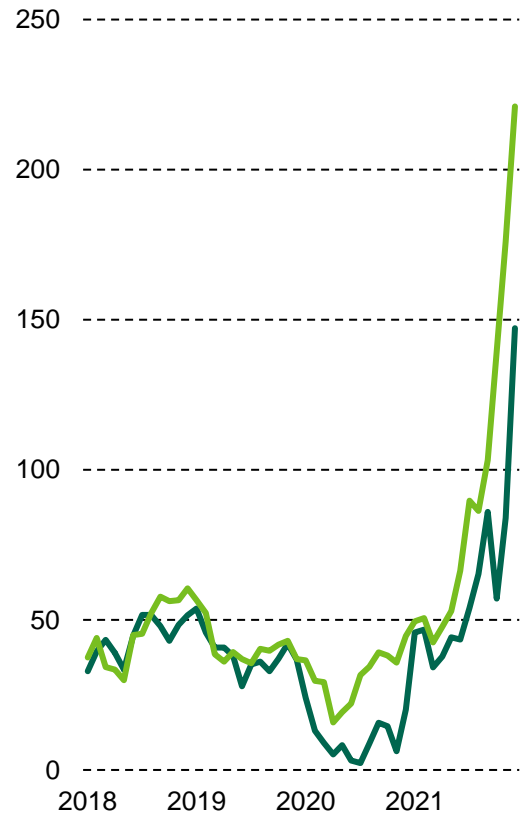
Recovered paper (RCP) price¹

EUR per tonne



Electricity prices

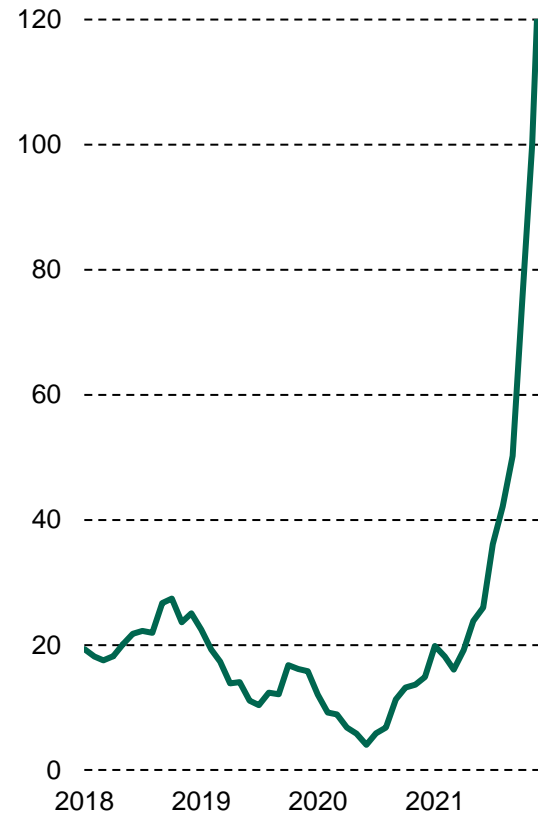
EUR per MWh



■ Nordics ■ Germany

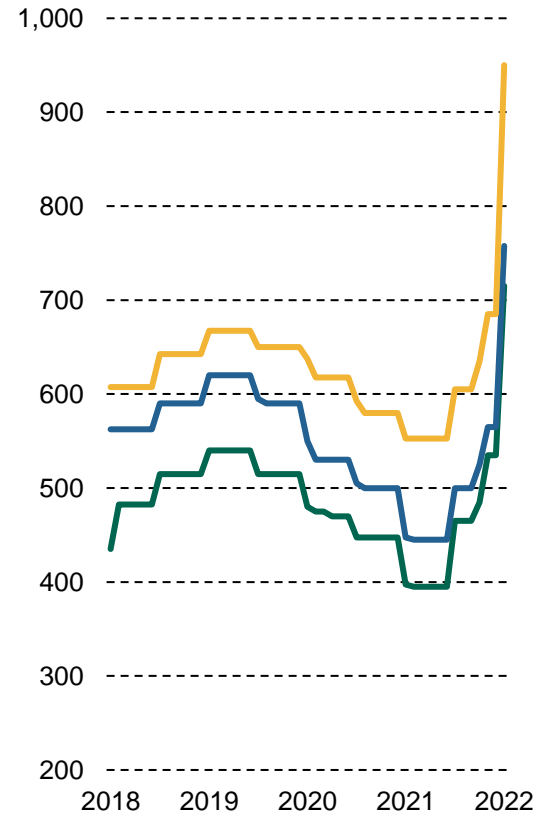
Gas prices²

EUR per MWh



Paper prices Germany

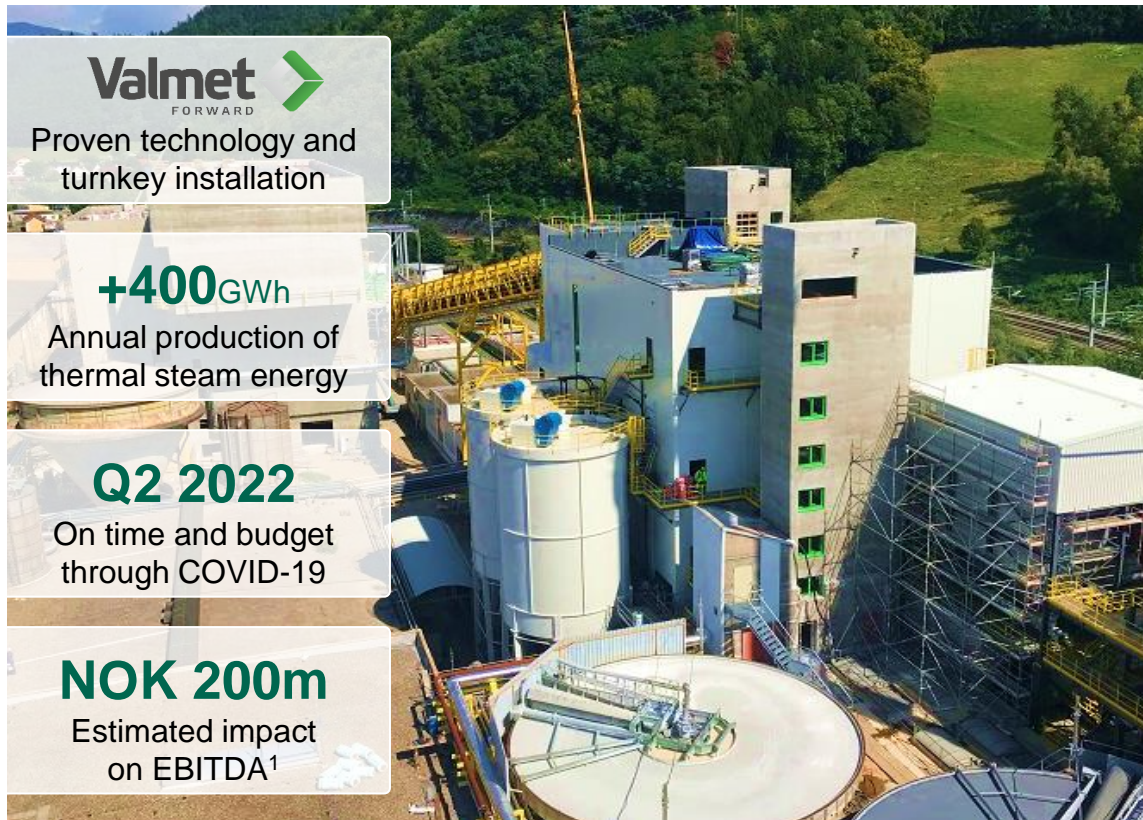
EUR per tonne



■ News 45g ■ SC rotoogr. 56g
■ LWC offset 60g

Bruck waste-to-energy facility in commissioning and on track for takeover from Valmet in two months

Waste-to-energy plant close to completion in Bruck, Austria



Gate fees

- Revenue: Gate fees for 160kt of waste (RDF²)
- Operating costs: Staffing, maintenance, etc.
- Share of EBITDA impact: NOK ~100m annually

Energy

- Reduces annual gas consumption by ~0.7 TWh
- Increases electricity consumption by ~0.2 TWh

CO₂

- Reduces annual CO₂ emissions by 150k tonnes
- Similar increase in net emission allowance surplus

Capital

- Invested EUR 59m to date of EUR 72m investment
- Drawn EUR 45m to date of EUR 54m loan facility

On time and on budget for entry into the containerboard market

Containerboard projects in progress

Site preparations and equipment orders underway

Invested EUR ~30m as of Q4 2021

Project investment of EUR 350m (large share on contract)

EUR 265m debt financing

ECA¹-backed debt financing enables highly competitive interest rates

Q4 2022 first production

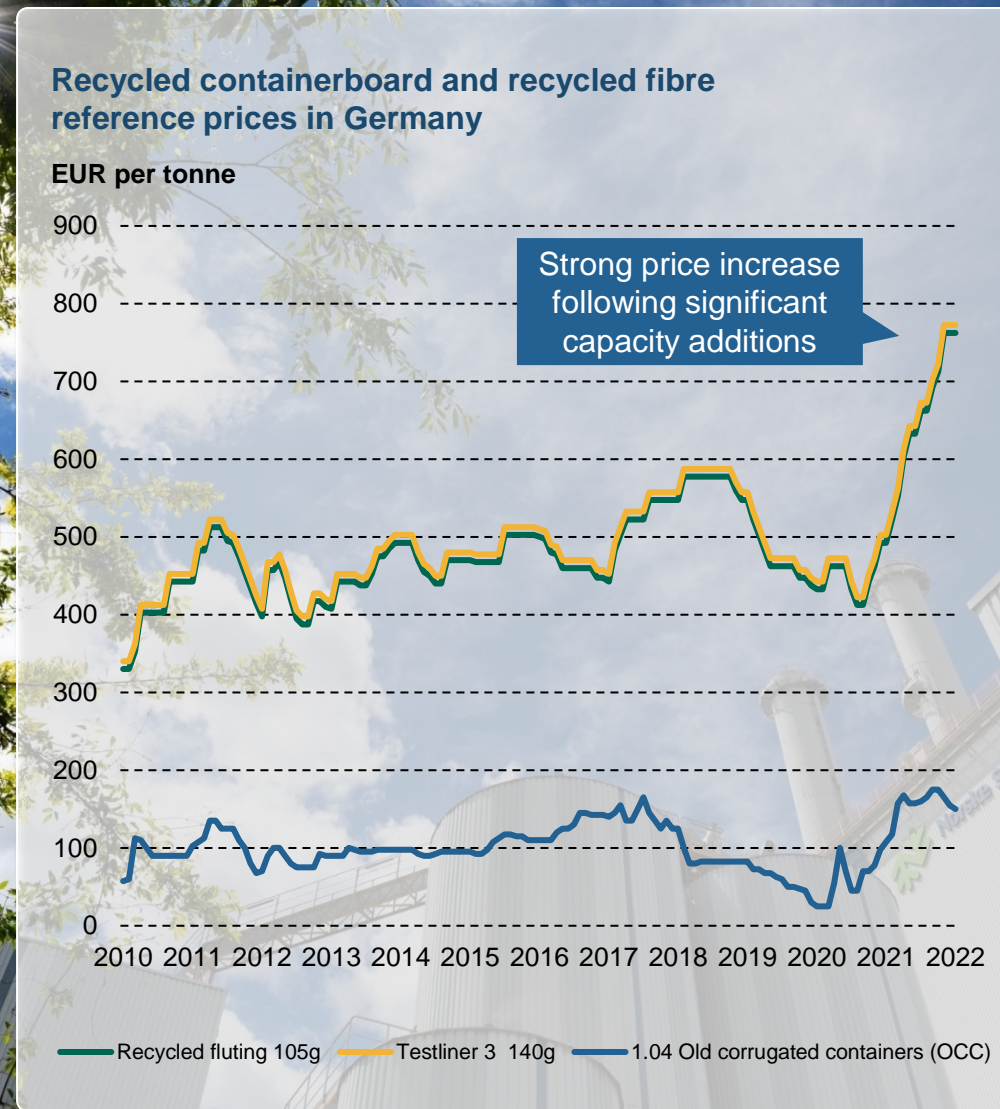
Stepwise introduction with Bruck in Q4 2022 and Golbey in Q4 2023

760,000 tonnes

Recycled containerboard production capacity

Expected EBITDA of EUR 70-80m

Based on historical trend prices and full utilisation in 2025-26



Packaging projects on track to enter high growth market



Norske Skog Golbey – France

Paper Machine 1 (PM1)

- Today, 235k tonnes newsprint capacity
- Convert to 550k tonnes containerboard
- Stop newsprint production Q2 2023
- Start containerboard production Q4 2023
- Capex estimate of EUR ~250m



Paper Machine 2 (PM2)

- 330k tonnes newsprint capacity
- Ongoing production during PM1 conversion
- Strong candidate for future conversion



Norske Skog Bruck – Austria

Paper Machine 3 (PM3)

- Today, 125k tonnes newsprint capacity
- Convert to 210k tonnes containerboard
- Stop newsprint production Q3 2022
- Start containerboard production Q4 2022
- Capex estimate of EUR ~100m



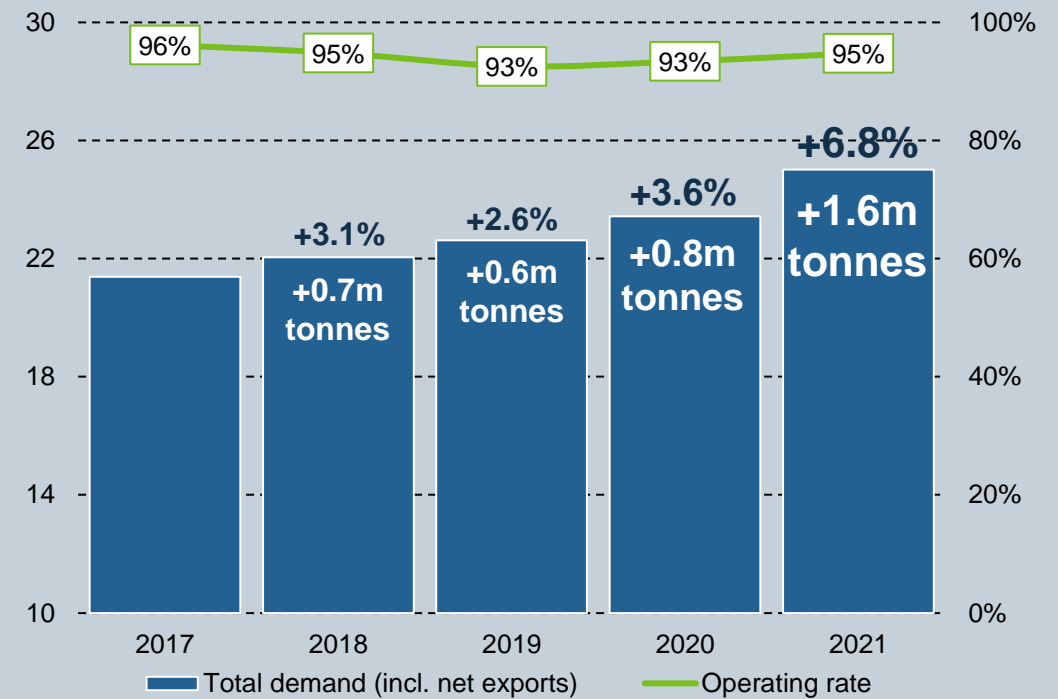
Paper Machine 4 (PM4)

- 265k tonnes LWC magazine capacity
- Ongoing production during PM3 conversion
- Strong candidate for future conversion

Strong recycled containerboard demand growth

Apparent consumption and net exports
Western Europe, million tonnes

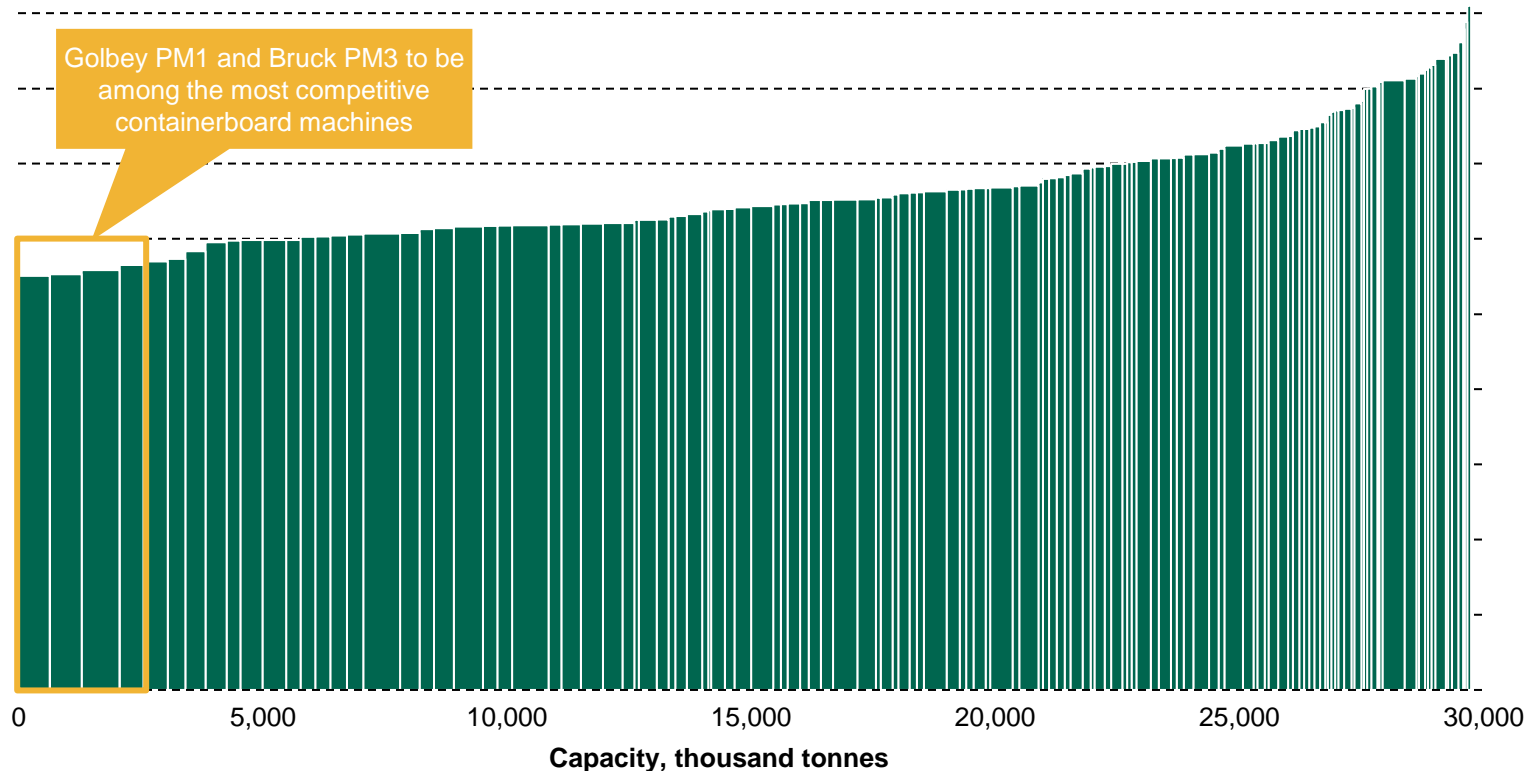
Operating rate Western
Europe, million tonnes



Projects chosen on basis of first quartile cash cost position enabled by fundamental properties of the machines

Illustrative cash cost curve delivered Frankfurt for recycled containerboard machines Europe¹

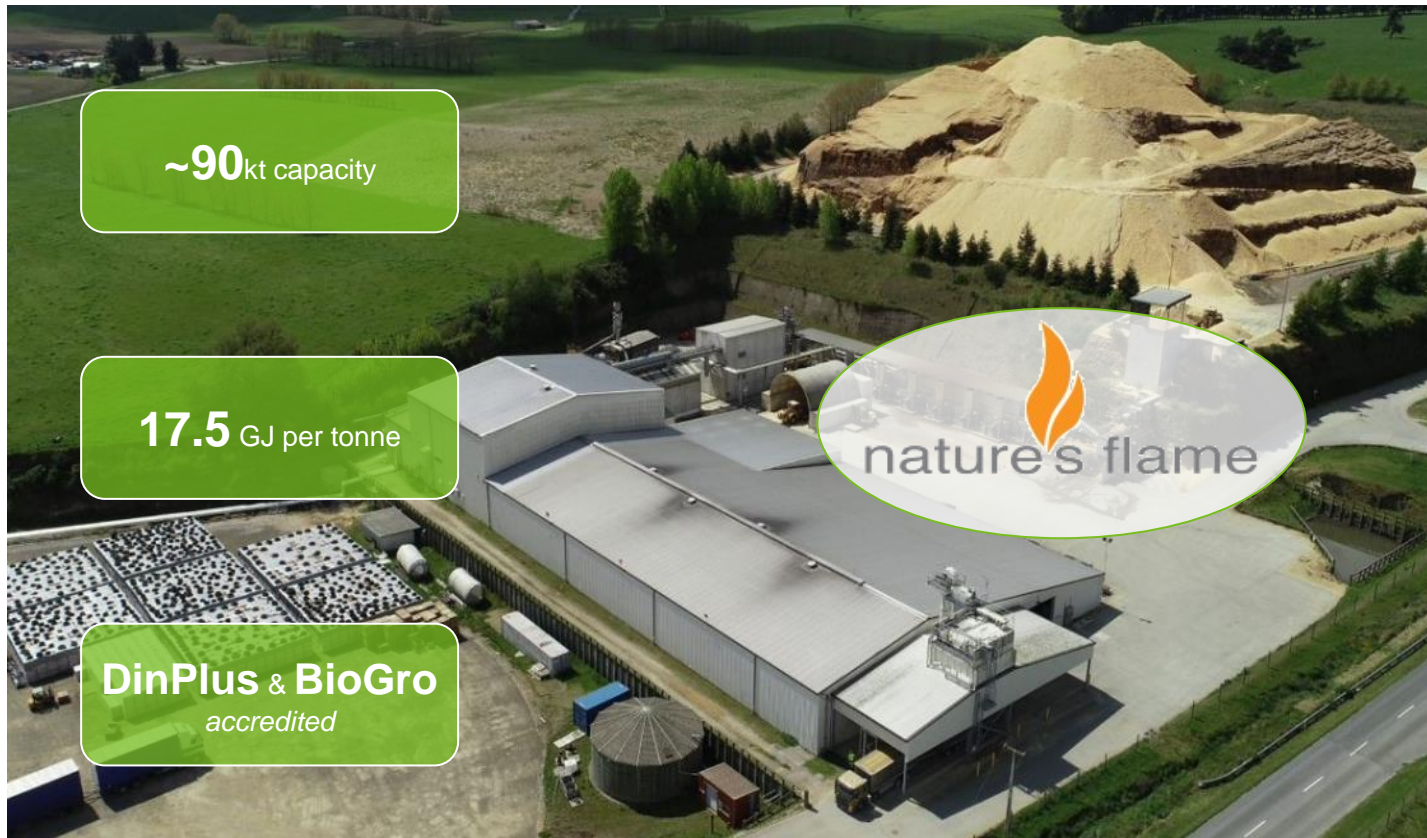
EUR per tonne



- ✓ Large industrial sites with **scale advantage** and established presence in raw materials markets
- ✓ Top brownfield opportunities in Europe, with machine speed and trim that enable **cost-leadership position**
- ✓ Centrally located in Europe enables low inbound and outbound **transportation costs**
- ✓ Biomass boiler in Golbey² and waste-to-energy boiler in Bruck secure sustainable and **competitive steam supply**

Production of high quality and sustainable wood pellets to continue under new and local ownership

Nature's Flame state-of-the-art wood pellet production facility in Taupo, New Zealand



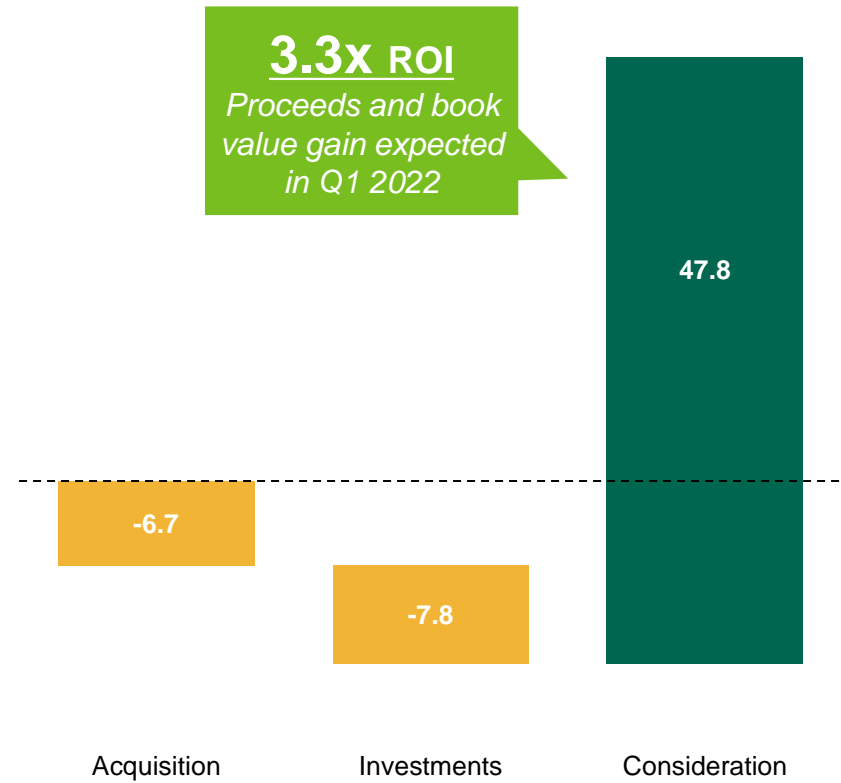
~90kt capacity

17.5 GJ per tonne

DinPlus & BioGro
accredited

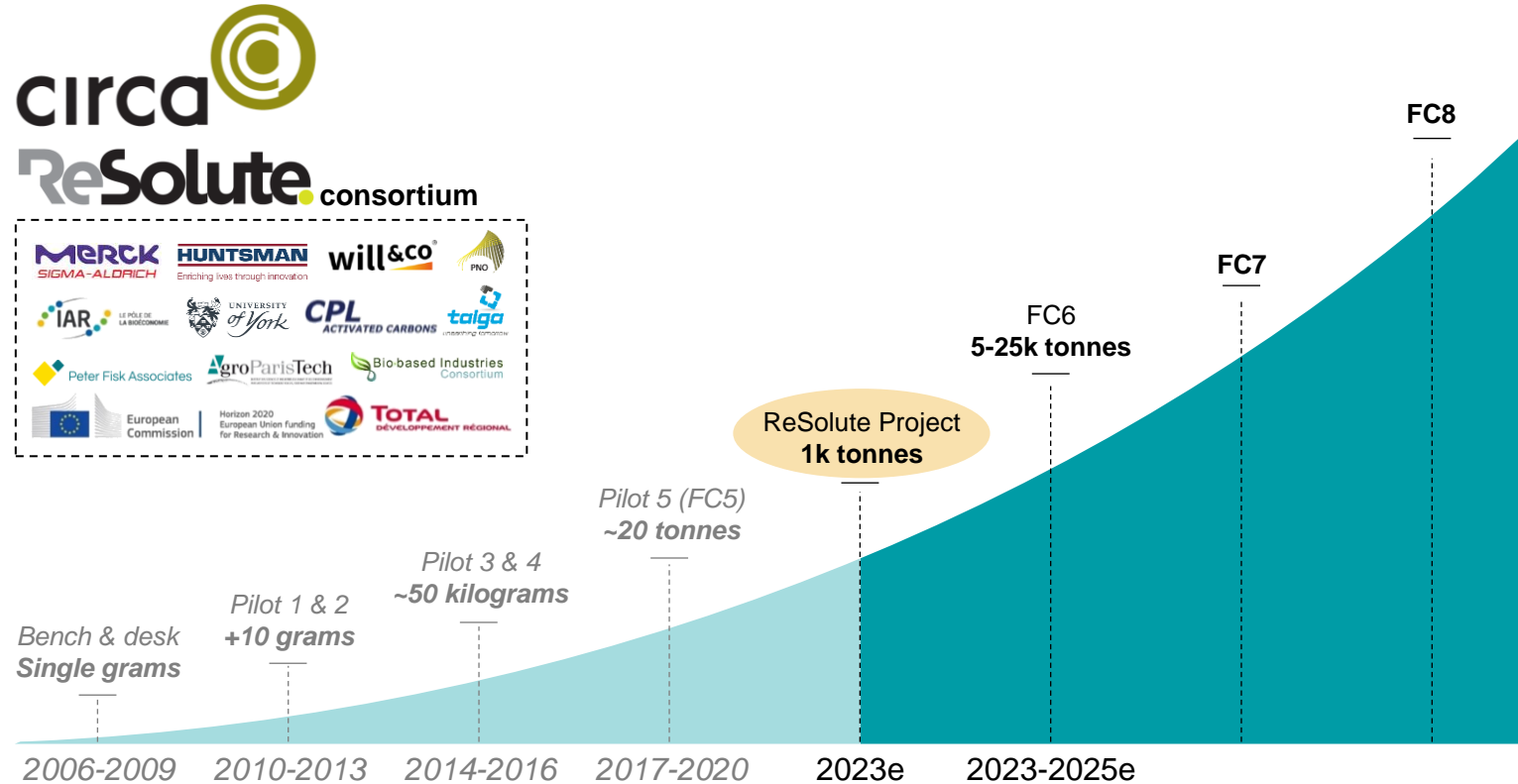
Entered into agreement to sell Nature's Flame

NZDm



Grant of EUR 8.2m under the France Relance programme, de-risking the ReSolute project

Unique opportunity to become a leading provider of sustainable and non-toxic solvents

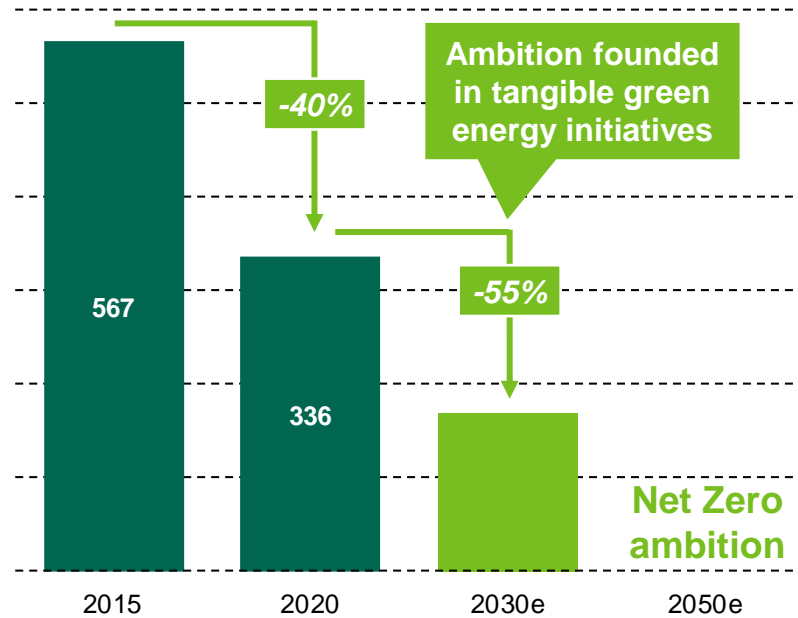


- Significantly de-risked financing for ReSolute with France Relance grant of EUR 8.2m
- Seek to establish strong supplier partnerships to enable and de-risk future growth journey
- High interest and several ongoing vendor dialogues regarding reactor and equipment orders
- Investigate on site conversion of biochar to energy for ReSolute production process (proof-of-concept)
- Norske Skog owns ~26% of Circa and will remain a strategic and long-term supporter of its ambition to deliver sustainable biochemicals at scale

Reducing the environmental impact is at the forefront of all business decisions

Carbon footprint development and ambition

Kg CO₂ direct and indirect (scope 1 and 2) emissions per tonne produced¹



CO₂ intensity significantly below the EU ETS² benchmark in 2020



A- Excellent reporting in line with best practice. Good description of material issues and relevant results. Clear strategy and specific, quantifiable targets.



CSR reporting applying the GRI³ guidelines since 2003

Highlighted green initiatives

- ✓ New energy efficiency initiatives introduced during 2021⁴
- ✓ Waste-to-energy facility reducing CO₂ footprint by 150k tonnes, takeover Q2 2022
- ✓ New Golbey biomass boiler⁵ from Q2 2024, producing green steam and electricity from sludge and waste wood
- ✓ Increasing use of rail transport for fresh fibres in Norway, reducing road traffic

1) Scope 1 includes direct emissions from stationary fuel combustion, transportation and mobile sources. Scope 2 includes indirect emissions from steam and power imports; 2) ETS = Emission Trading Scheme, Norske Skog is a net receiver of carbon emission allowances, indicating that Norske Skog is better than the industry emission intensity benchmark; 3) GRI = Global Reporting Initiative; 4) The NEXT and Thermanator energy efficiency projects announced at the Norske Skog Saugbrugs mill in March 2020 have come on stream in 2021 to further improve the energy efficiency of Norske Skog. The projects are supported by the NOx Fund and Enova; 5) Being developed in partnership with Pearl Infrastructure Capital and Véoia. Norske Skog to hold 10% of the equity in the development company, Green Valley Energie

Outlook

Publication paper markets

- Improving operating rates in the industry
- Considerable paper price increases in Q4 2021 and into 2022
- Continued high prices for energy, recycled fibre and other input factors
- Remain a reliable supplier of all publication paper grades

Strategic shift into new markets

- Continued commercialisation of CEBINA and CEBICO
- Bruck waste-to-energy facility takeover in Q2 2022
- Containerboard production to start in Q4 2022



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