



Norske Skog

Q2 2021 presentation

16 July 2021



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Sustainable and innovative industry

- Leading publication paper producer with **five industrial sites globally**
- Ongoing transition into **higher growth** and **higher value** markets
- Becoming a leading independent European **recycled containerboard company in 2023**
- Packaging market **growth and margin outlook strengthened** since announcement
- **High return waste-to-energy project** improving green energy mix in Q2 2022
- Promising biochemicals and materials projects **spearheaded by Circa**
- Industrial sites portfolio provide foundation for **further industrial development**



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

Second quarter in brief

Final investment decision made for Golbey conversion to containerboard

- Golbey containerboard production with start-up in Q4 2023 following Bruck in Q4 2022
- Export credit agency backed financing progressing to plan

EBITDA of NOK 17m at low point before cyclical upturn

- Cost increases in second quarter precede price increases impacting results negatively

Costs and tight publication paper markets driving price increases in H2 2021

- Considerable price increase for all product grades in H2 2021
- Additional capacity cuts announced in Q2 2021, further strengthening outlook for H2 2021 and into 2022

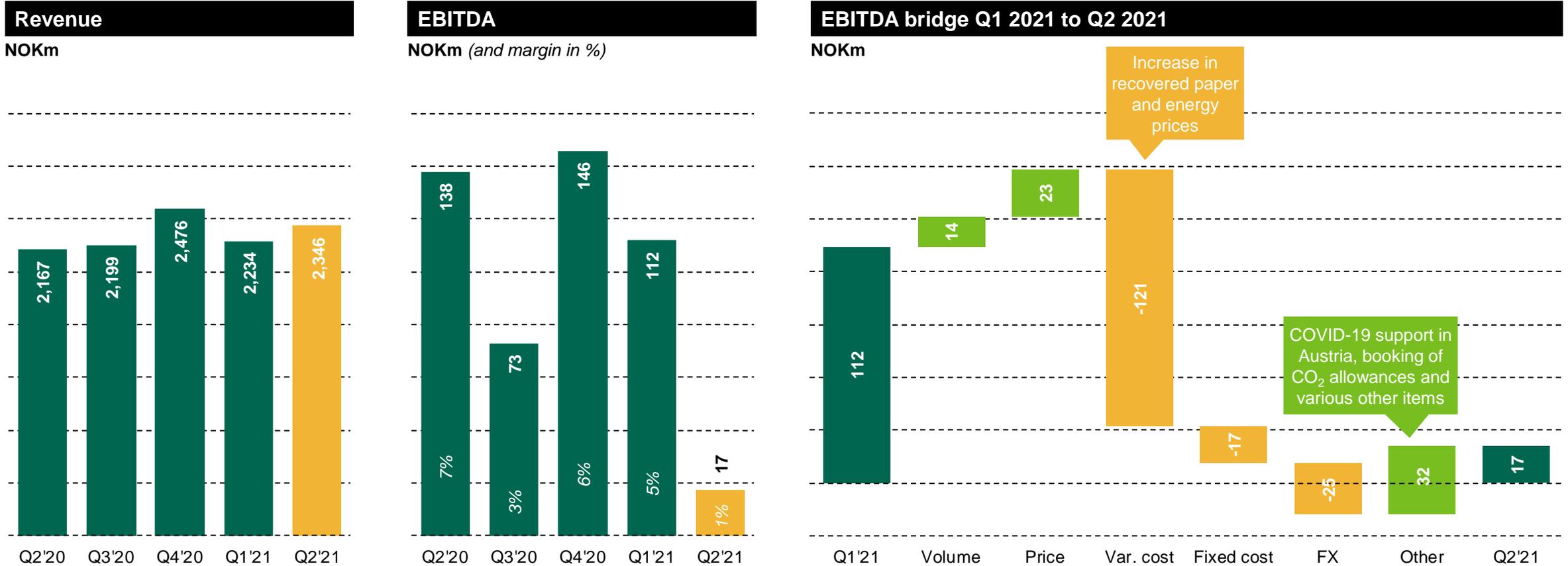
Closure of Tasman

- Tasman ceased production on 30 June, restructuring cost of NOK 160m and non-cash loss of NOK 95m from mark-to-market revaluations
- Asset sales process expected to be completed and settled in H2 2021

Pursuing the ambition to become net CO₂ negative through new technology

- Partnership with Ocean GeoLoop to achieve CO₂ reductions and explore commercial opportunities

Cyclically low EBITDA in challenging price and cost environment



Segment financials for Q2 2021

Segment financials

NOKm	Q2 2021	Q1 2021	Q2 2020	YTD 2021	YTD 2020
Europe					
Total operating income	1,872	1,711	1,655	3,582	3,786
EBITDA	14	106	75	120	404
EBITDA margin	0.8%	6.2%	4.5%	3.4%	10.7%
Production (1 000 tonnes)	381	392	334	773	745
Deliveries (1 000 tonnes)	403	382	322	785	718
Production / capacity (%)	85%	88%	70%	87%	78%
Australasia					
Total operating income	482	489	513	971	1,133
EBITDA	7	-8	63	-1	126
EBITDA margin	1.4%	-1.7%	12.3%	-0.2%	11.1%
Production (1 000 tonnes)	79	89	70	168	162
Deliveries (1 000 tonnes)	87	90	67	177	167
Production / capacity (%)	69%	79%	65%	74%	75%
Other activities					
Total operating income	36	60	38	96	86
EBITDA	-4	14	0	10	-14

- Utilisation of 85% (some downtime due to recovered paper availability)
- Realised prices in the quarter similar to previous quarter
- Significant increase in raw material prices (recovered paper and energy)

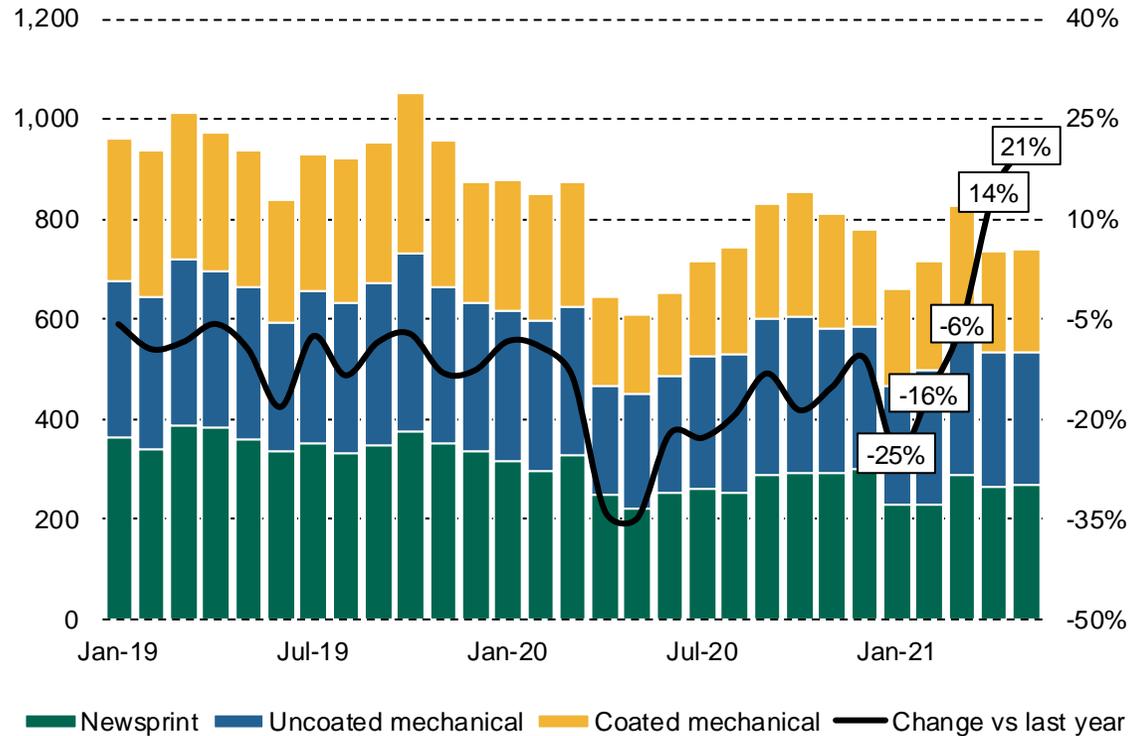
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- Utilisation 69% (includes limited production from Tasman)
 - Tasman closed on 30 June 2021, asset sales process being completed
 - Boyer to become only domestic publication paper supplier

Western European producers closing capacity to adjust to post COVID-19 demand environment

Western European publication paper demand down ~2.1m tonnes in 2020

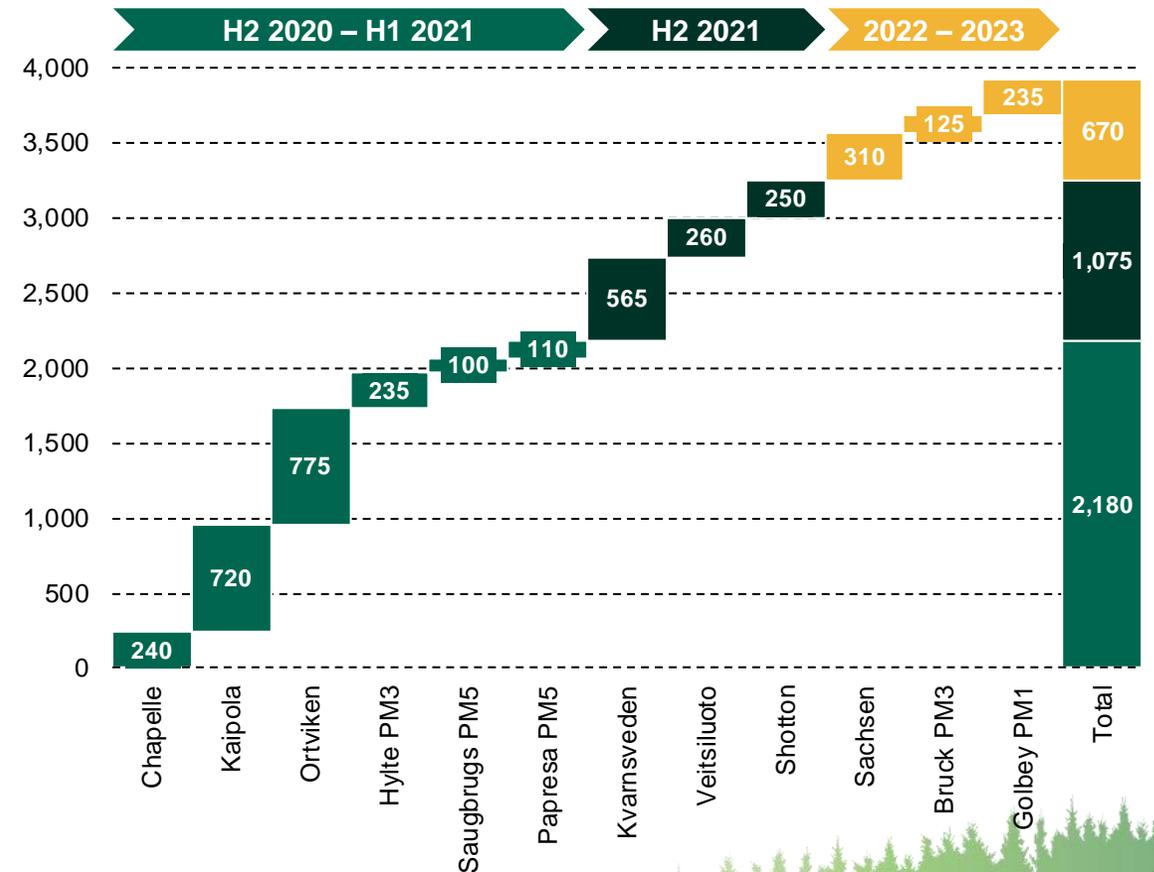
Monthly publication paper demand
Western Europe, thousand tonnes

Change vs same
month last year



Publication paper closures of ~3.3m tonnes (H2 2020 to H2 2021)

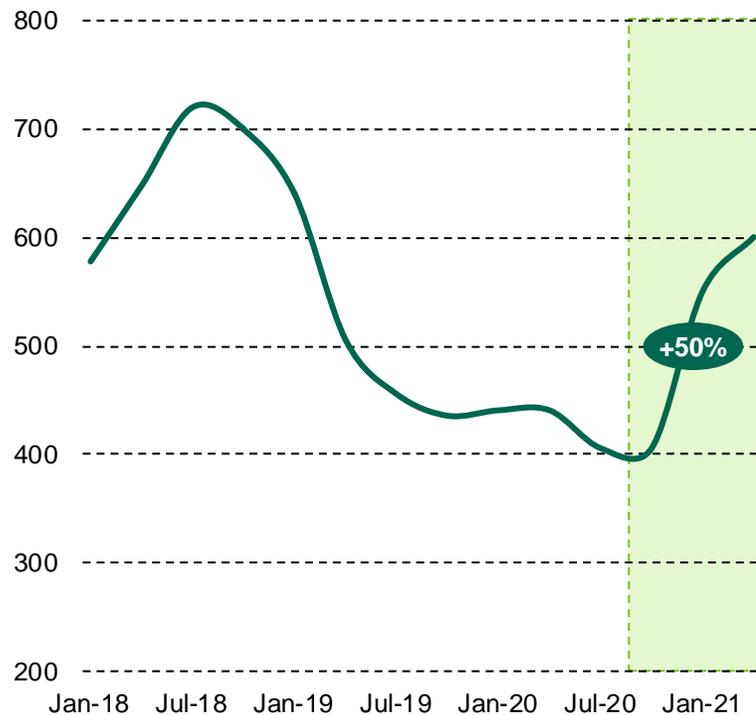
Capacity closures in Western Europe,
thousand tonnes



European publication paper prices following price development seen in Asian and US export markets

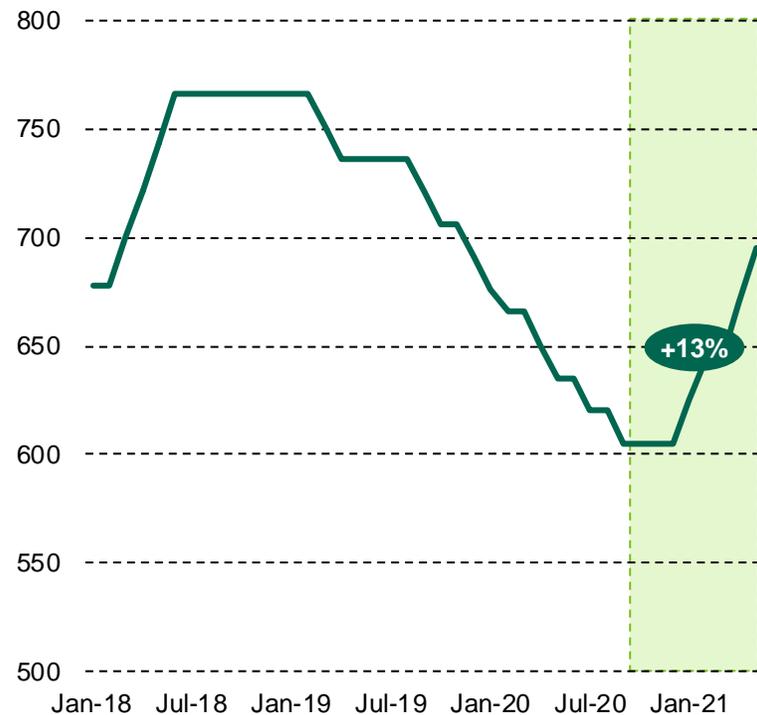
Newsprint 45g CIF Hong Kong

USD per tonne



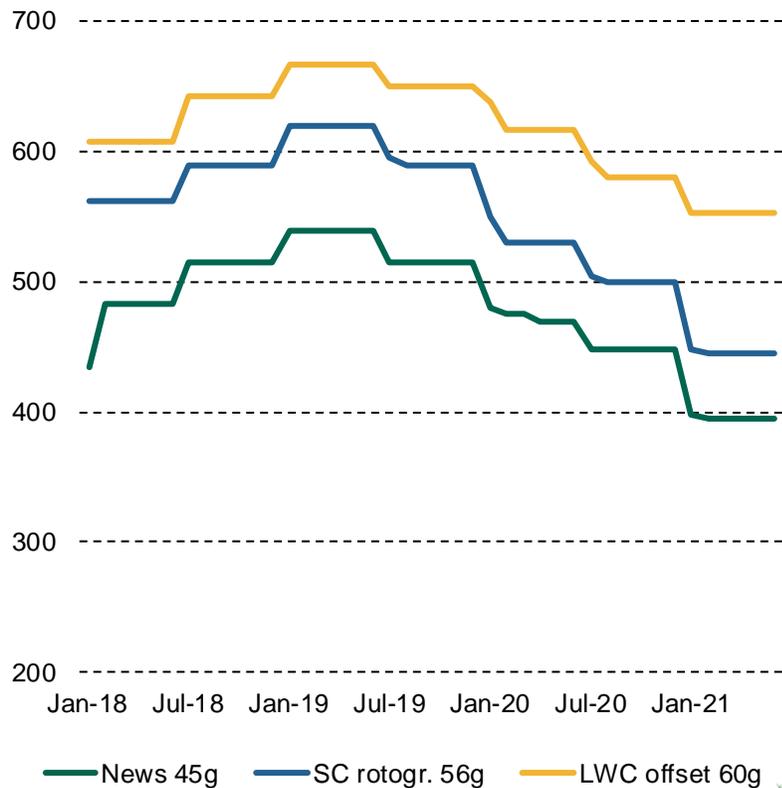
Newsprint 45g US East

USD per tonne



Publication paper prices Germany

EUR per tonne



Price increases necessary to counter margin contraction driven by significant increases in raw materials prices

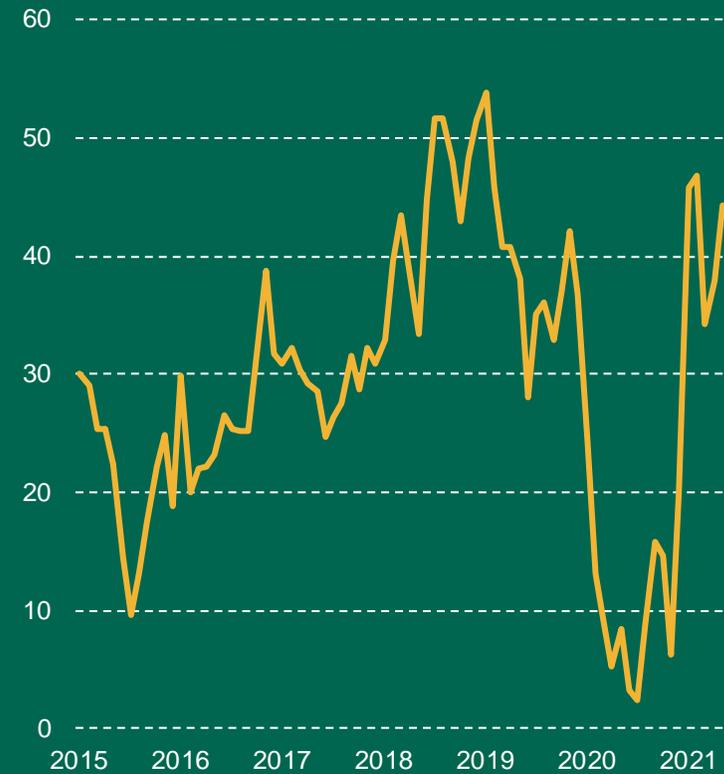
Recovered paper (RCP) prices¹

EUR per tonne



Energy prices²

EUR per MWh



Kraft pulp (NBSK) prices³

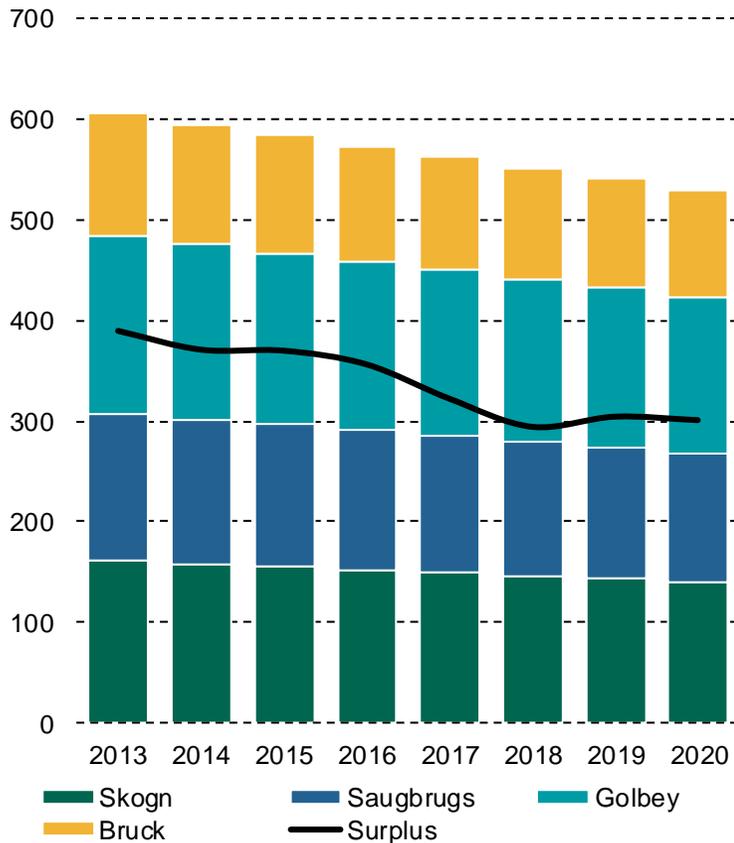
USD per tonne



Industry low CO₂ footprint enabling annual CO₂ emission allowance surplus

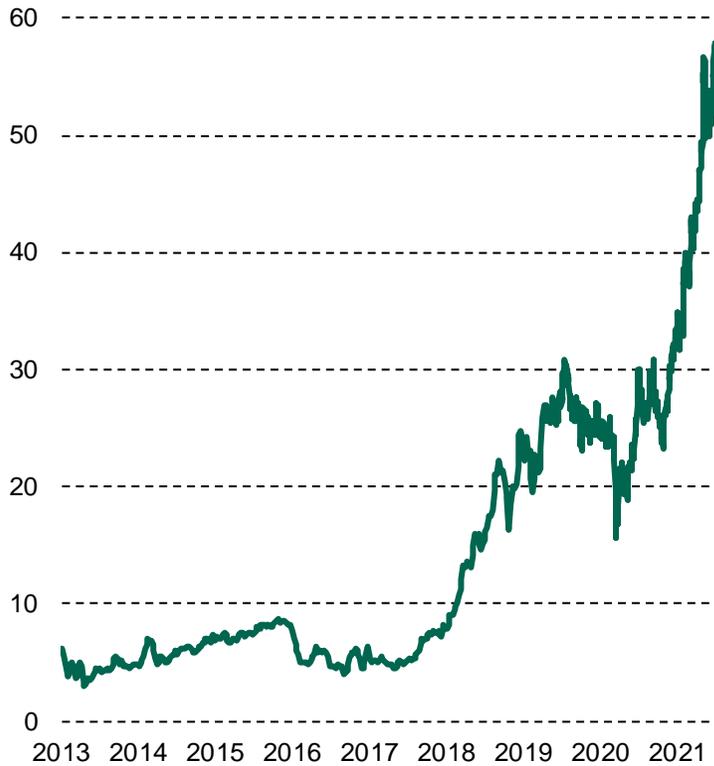
Total allocated emission allowances

Thousand allowances



Emission allowance price

EUR per allowance



- Industry low CO₂ footprint basis for annual emission allowance surplus
- Waste-to-energy plant at Bruck will reduce CO₂ footprint with 150k tonnes annually, start H1 2022
- Allowance sale income booked each quarter in 2021, but expected to be received in H2 2021
- Cost compensation booked each quarter in 2021, but cash proceeds to be received in H1 2022

Renewable packaging

Moving forward with the containerboard business

Final Investment Decisions

Golbey and Bruck investments approved by the board of directors

EUR 350m

Project investment

EUR ~245m debt financing

ECA¹-backed debt financing of ~70%, subject to final documentation

Q4 2022 first production

Stepwise commercial introduction

760 000 tonnes

Recycled containerboard production capacity



Introducing STRATO recycled containerboards



 STRATO|Liner

 STRATO|Fluting

- **Lightweight and strong** fluting and testliner board
- Inevitably circular from **100% recycled fibre (OCC)**
- Supporting e-commerce with **sustainable packaging**
- **Replacing plastic** where and when possible
- Production capacity of **760 000 tonnes in 2023**
- Annual European **demand growth +600 000 tonnes¹**

Source: External industry consultant (third-party)

1) European demand of ~26m tonnes with annual growth rate of 2-3%

Establishing a leading independent European containerboard business



Norske Skog Golbey – France

- PM1 (FID completed)** ✓
- 235k tonnes newsprint capacity
 - Convert to 550k tonnes containerboard
 - Start-up in Q4 2023
 - Capex estimate of EUR ~250m

- PM2 (future candidate)**
- 330k tonnes newsprint capacity
 - Ongoing production during PM1 conversion
 - Strong candidate for future conversion
 - Feasibility studies concluded

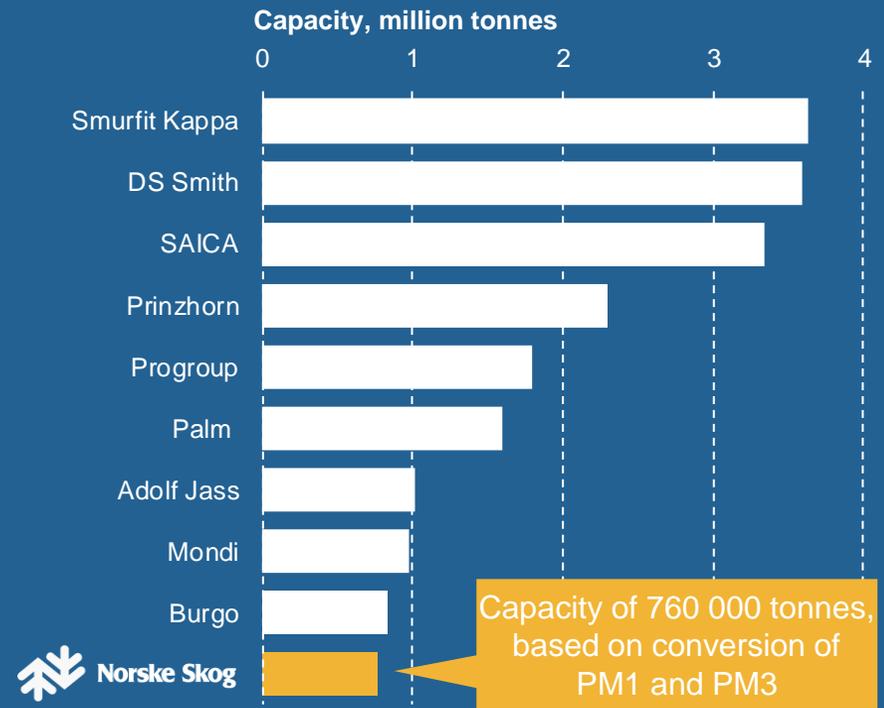


Norske Skog Bruck – Austria

- PM3 (FID completed)** ✓
- 125k tonnes newsprint capacity
 - Convert to 210k tonnes containerboard
 - Start-up in Q4 2022
 - Capex estimate of EUR ~100m

- PM4 (future candidate)**
- 265k tonnes LWC magazine capacity
 - Ongoing production during PM3 conversion
 - Strong candidate for future conversion
 - Feasibility studies concluded

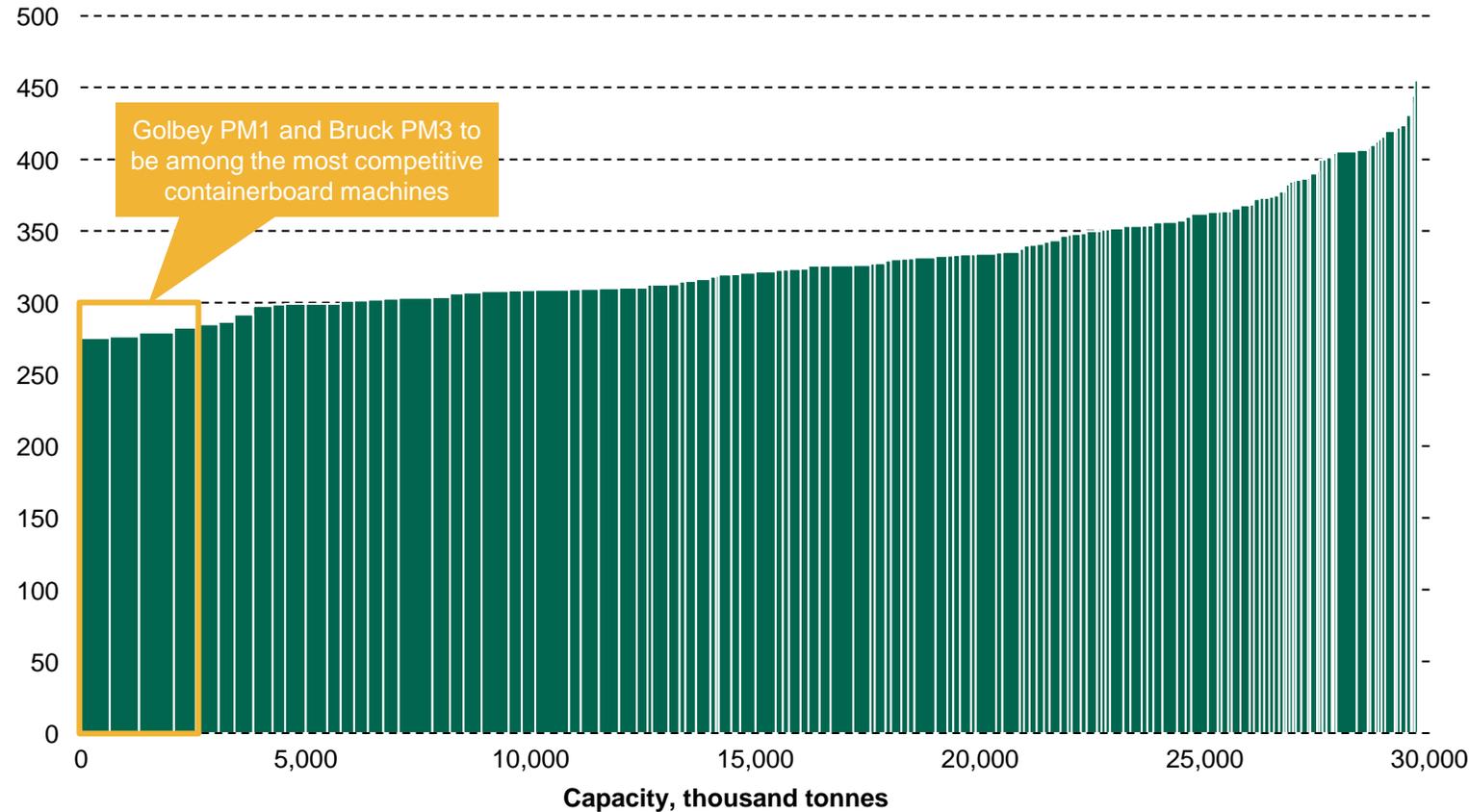
Top 10 recycled containerboard suppliers in Europe



Norske Skog will enter the recycled containerboard market with first-quartile capacity

Cash cost delivered Frankfurt for all recycled containerboard machines in Europe¹

EUR per tonne

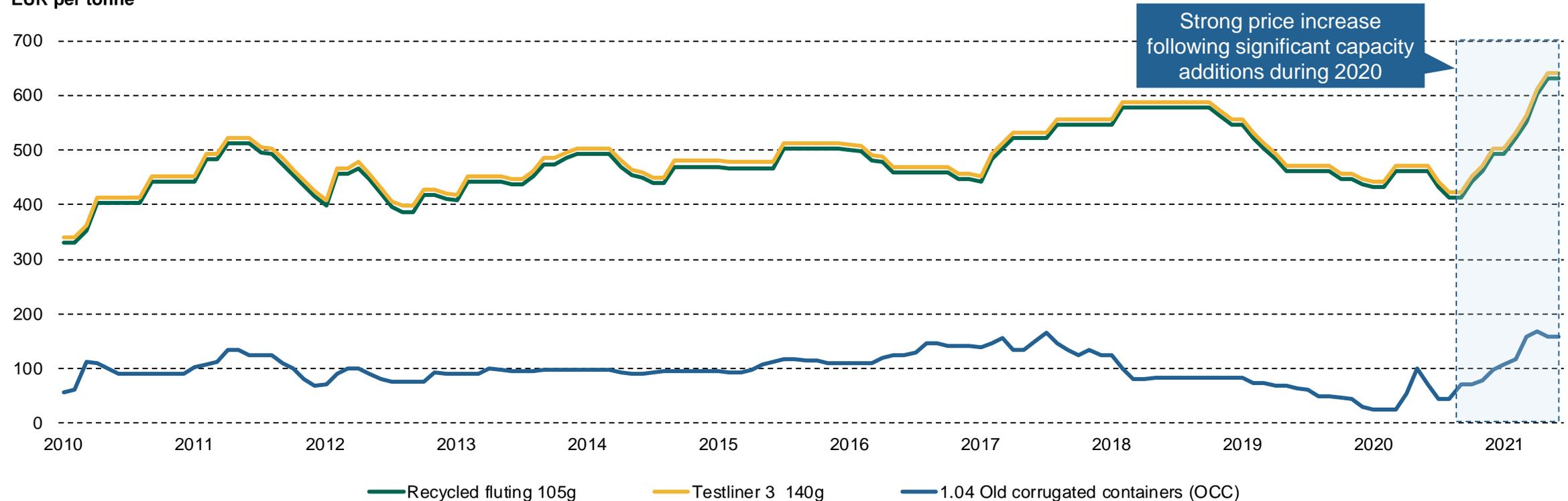


- Centrally located in continental Europe
- Established presence in recycled fibre markets
- Among the top brownfield opportunities in Europe
- Large industrial sites with scale advantages
- Boilers secure sustainable and competitive steam supply
- Machine specifications enable cost-leadership position

Strong outlook for the containerboard market

Recycled containerboard (fluting and testliner) and recycled fibre (OCC) reference prices in Germany

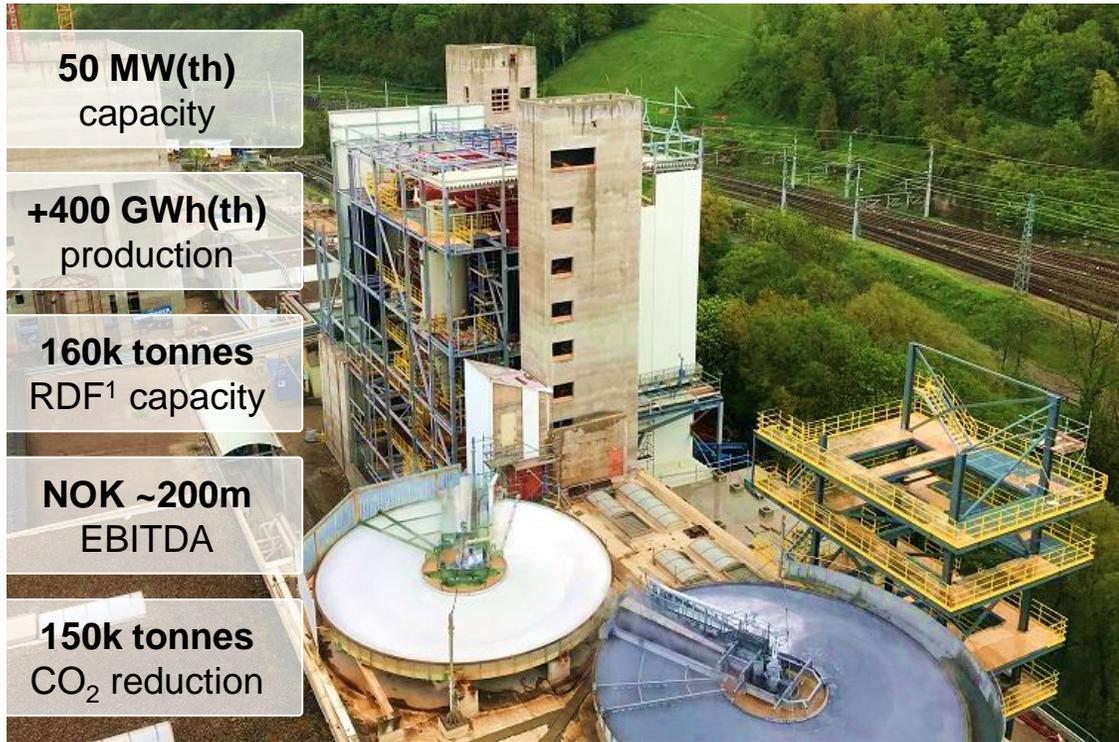
EUR per tonne



Energy, biochemicals & materials

On schedule for start-up in nine months of +400 GWh sustainable energy production

Waste-to-energy plant being installed in Bruck, Austria



50 MW(th)
capacity

+400 GWh(th)
production

160k tonnes
RDF¹ capacity

NOK ~200m
EBITDA

150k tonnes
CO₂ reduction

- **Increasing landfill and waste exports restriction** drive demand for waste offtake
- Few viable alternatives for waste that cannot be reused, recycled or recovered
- **Huge positive environmental impact** by diverting RDF¹ from landfills
- Basis for increasing **need for further waste-to-energy (WtE) capacity** in Europe
- WtE plant with proven technology turnkey installation contract from Valmet
- Will replace current gas consumption with **energy produced from regional RDF¹**
- RDF¹ to be sourced from within 200km from 10-15 customers
- **Revenue generation from gate fees and electricity production**
- EUR 72m investment of which EUR ~38m invested as of Q2 2021
- EUR ~24m of EUR 54m in local debt drawn as of Q2 2021

EU Green Deal: Circular Economy Action Plan

Reduce landfill to a maximum of 10 % of municipal waste generated by 2030

Norske Skog partnering with Ocean GeoLoop to support further development of highly promising CCS / CCU technologies



- ✓ Captures close to 100% of CO₂ from flue gas
- ✓ No use of harmful chemicals to capture CO₂
- ✓ Lower capex to build than other solutions
- ✓ Lower energy to operate than other solutions

- In Norway, Norske Skog is **close to reaching zero fossil CO₂ emissions**
- To explore the **opportunity of becoming net negative**, Norske Skog partners with Ocean GeoLoop and its disruptive CCS / CCU technologies
- The technologies have been built on **decades of research, lab tests and prototypes**, and has been verified by a reputable third-party
- **Norske Skog Skogn's Fiborgtangen** will be the main piloting arena, initially for a pilot of industrial scale
- Further ambition to develop **economically viable models for capture of biogenic CO₂**, which has received less attention than fossil emissions
- Norske Skog will hold ~2% of Ocean GeoLoop, and will join its board

Reviewing 30,000 tonnes expansion of sustainable pellets production

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



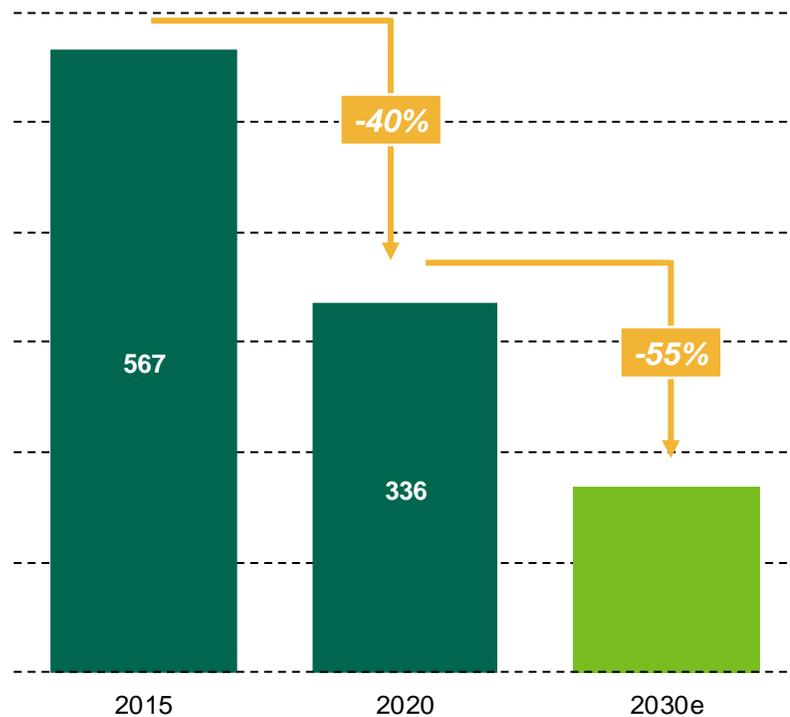
- NZD ~45m invested in state-of-the-art facility
- NOK ~30-35m EBITDA contribution
- Acquired by Norske Skog in July 2015
- FSC certified fibre supply
- Renewable geo-thermal energy supply
- DinPlus certification for premium pellets
- BioGro New Zealand organic certification
- Fonterra offtake agreement for 50,000 tonnes
- Current production around 90,000 tonnes¹
- Capacity expansion study of 30,000 tonnes expected to be completed during H2 2021



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



- ✓ Industry low CO₂ intensity under the EU ETS² in 2020
- ✓ New energy efficiency initiatives being introduced in 2021³
- ✓ Waste-to-energy boiler reducing CO₂ footprint with 150 000 tonnes from H1 2022
- ✓ Reduced electricity consumption and steam from new biomass boiler in Golbey following conversion project
- ✓ Detailed 2020 CSR report issued applying the Global Reporting Initiative Guidelines

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 among the top 10% of producers employing the Best Available Techniques from a sustainability and environmental perspective; ³) The NEXT and Thermanator energy efficiency projects announced at the Norske Skog Saugbrugs mill in March 2020 will come on stream in 2021 and further improve the energy efficiency of Norske Skog, the projects are supported by the NOx Fund and Enova

Outlook

Publication paper markets

- Improving operating rates in the industry
- Considerable paper price increases in H2 2021
- Continued high prices for recycled fibre and other input factors
- Remain a reliable supplier of all publication paper grades

Strategic shift into new markets

- Enter into international sales arrangements for CEBINA in H2 2021
- Semi-industrial CEBICO pilot of 300 tonnes starting in Q4 2021
- Bruck boiler start-up Q2 2022, expected EBITDA of NOK ~200m
- First containerboard production to start in Q4 2022



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