



**Norske Skog**

Q4 2020 presentation

4 February 2021

[www.norskeskog.com](http://www.norskeskog.com)

# Fourth quarter in brief

## **Q4 2020 EBITDA of NOK 146 million up from NOK 73 million in the previous quarter**

- Improvement resulting from increased sales volume and favourable cost development
- Europe contributing NOK 171 million up from NOK 84 million in the previous quarter, with Australasia remaining marginally EBITDA negative

## **Maintaining a robust balance sheet with net interest-bearing debt of NOK 725 million**

- Cash position of NOK 980 million and cash flow from operations of NOK 73 million in the quarter
- Following the quarter, Norske Skog announced successfully raising NOK 400 million in equity to finance upcoming growth projects

## **Green growth projects seeing significant traction and progressing according to plan**

- On track for containerboard production start-up in 2023 as e-commerce and sustainability drive demand to outpace 2020 supply additions
- Circa<sup>1</sup> contemplating Q1 2021 capital raise to finance the world's first large scale production facility for multiple high value biochemicals

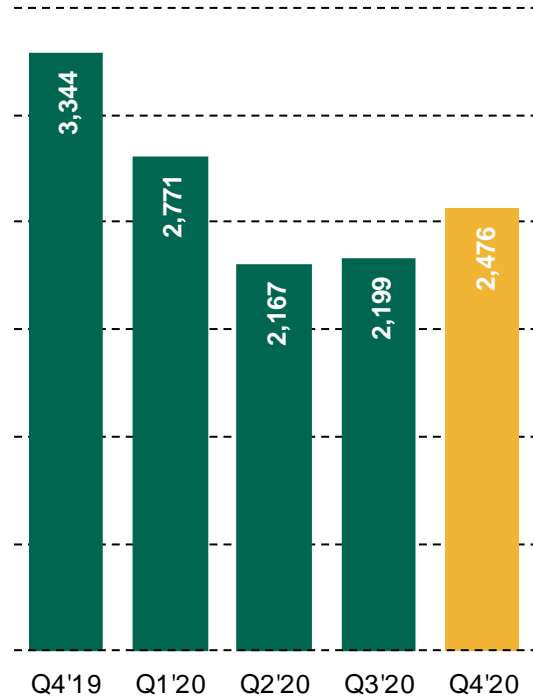
## **Production capacity in Australasia and Europe adjusted to match supply demand**

## **Impairment charge of NOK 258 million in the quarter due to COVID-19 market impact**

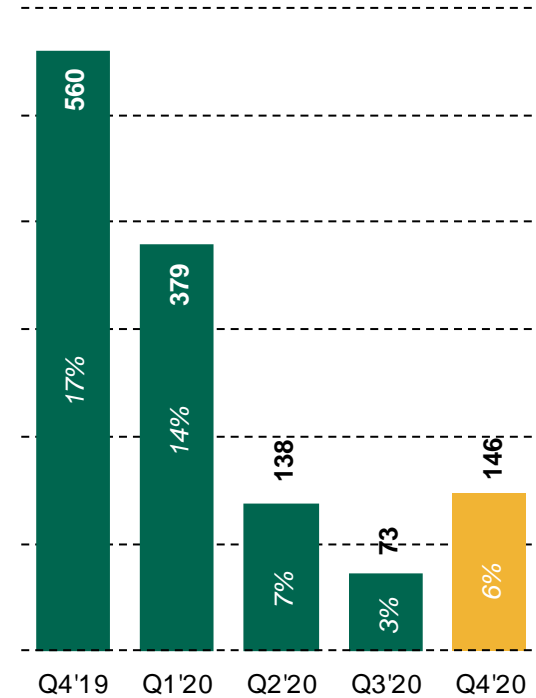
- Impairment in Australasia of NOK 96 million and in Europe of NOK 161 million

# EBITDA improving in Q4 2020 vs Q3 2020

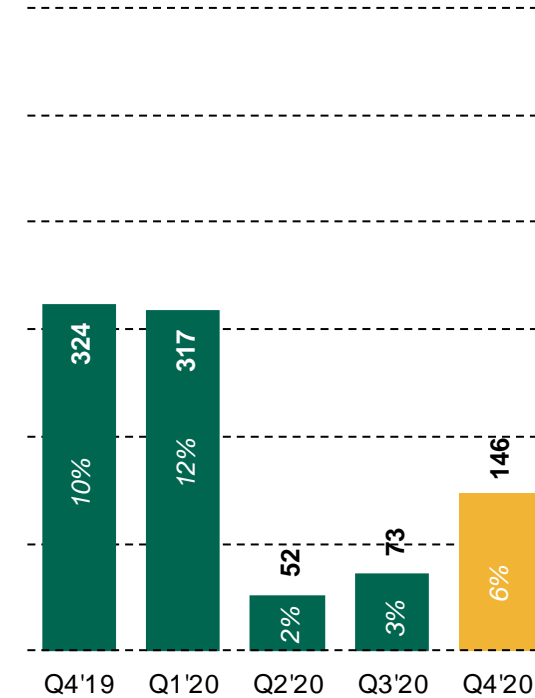
**Revenue**  
NOKm



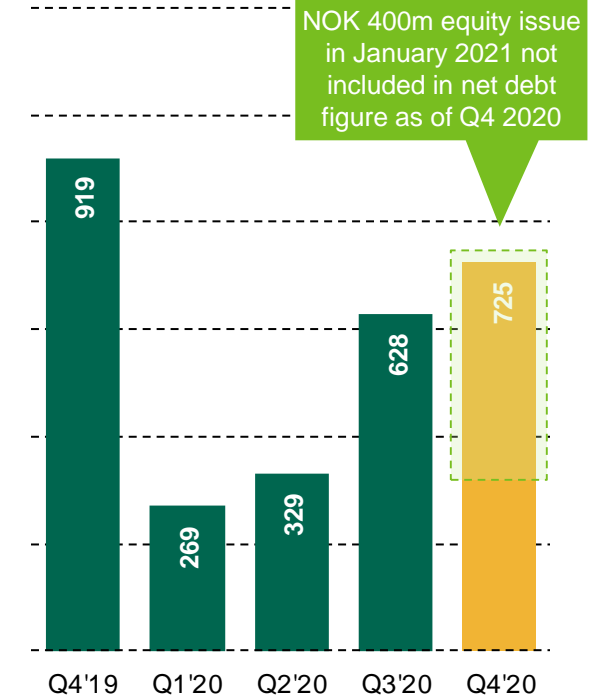
**EBITDA**  
NOKm (and margin in %)



**Underlying EBITDA**  
NOKm (and margin in %)



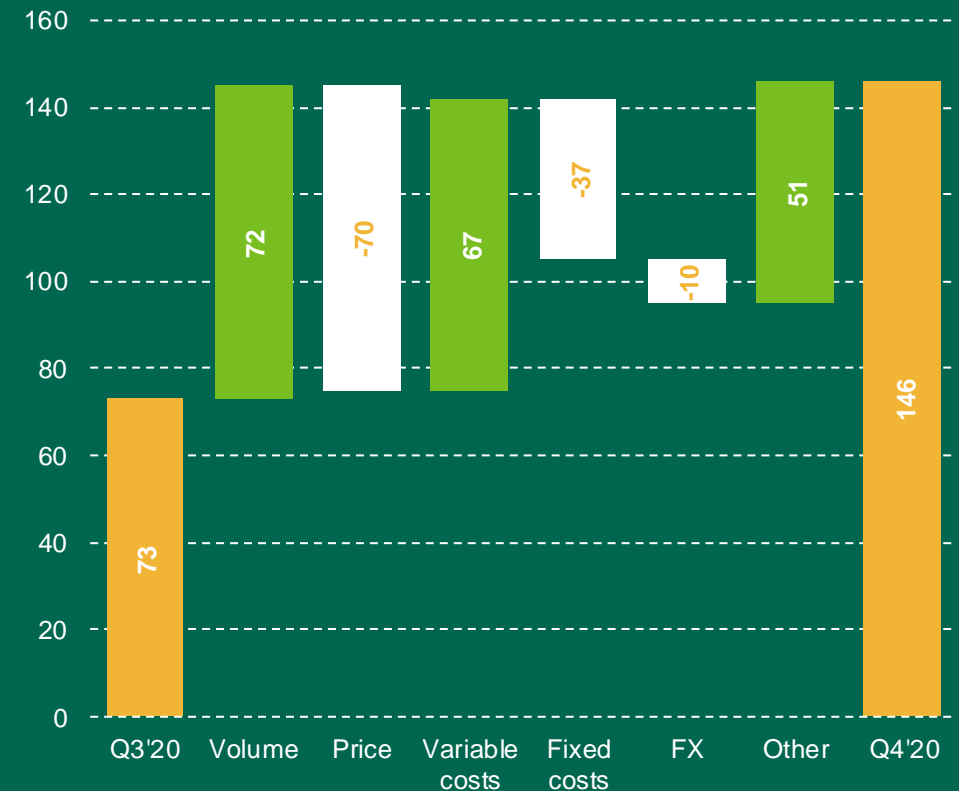
**Net interest-bearing debt**  
NOKm



# Underlying EBITDA growth driven by better volumes and variable costs

- Volumes continue to recover from low point in May 2020, utilisation of 81% in the quarter (prior to capacity reductions<sup>1</sup>)
- Prices weakening towards the end of the quarter, coupled with unfavourable development in geographic and product grade mix
- Lower variable costs mainly resulting from reduced energy prices, wood prices and recovered paper prices
- Increase in fixed costs mainly a result of reduction in government COVID-19 support in Australasia received in Q3 2020
- Other relates to Nature's Flame operations, COVID-19 support arrangements and energy arrangements in Golbey

EBITDA bridge Q3 2020 to Q4 2020, NOKm

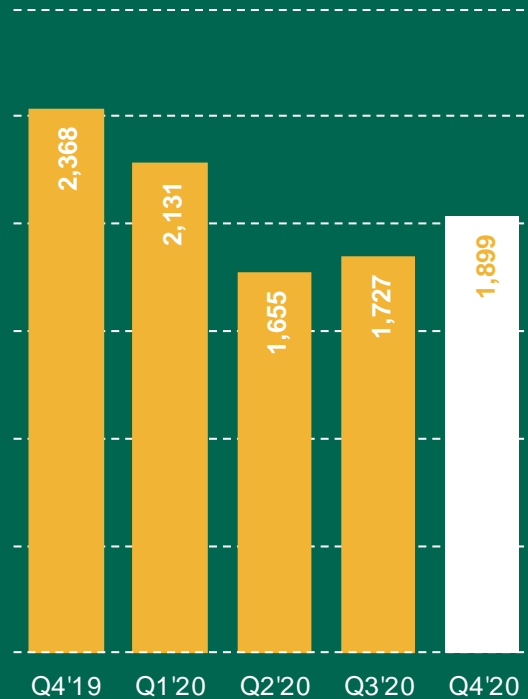


4 1) Saugbrugs PM5 ceased production of SC magazine paper (capacity of 100,000 tonnes) in Q4 2020 and Tasman ceased newsprint production (capacity of 150,000 tonnes) in favour of converting grade paper in Q4 2020

# Significant EBITDA improvement in Europe

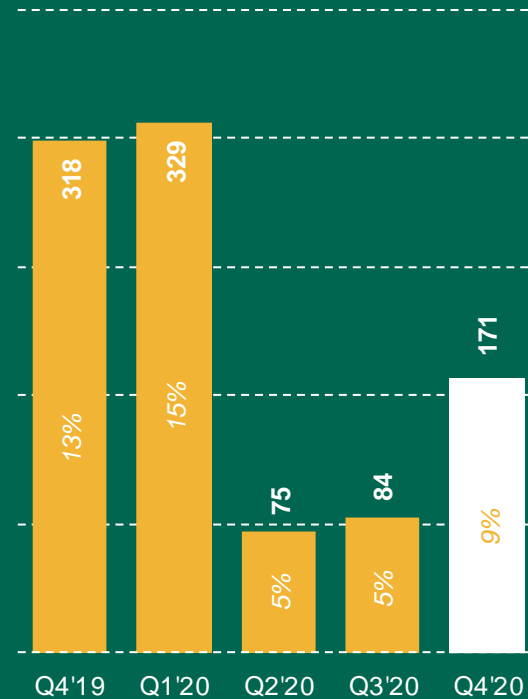
## Europe – Revenue

NOKm



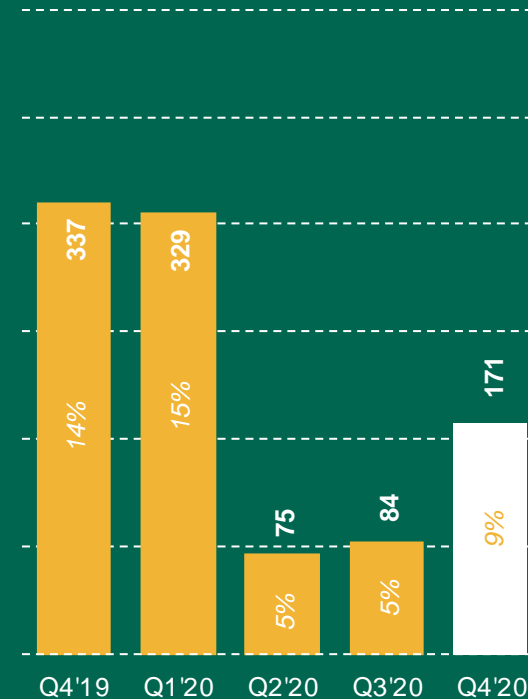
## Europe – EBITDA

NOKm (and margin in %)



## Europe – Underlying EBITDA

NOKm (and margin in %)

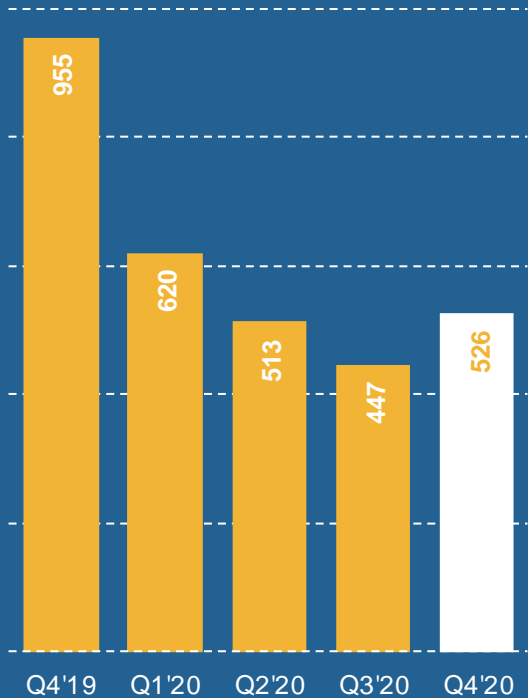


- Newsprint, SC and LWC demand in Europe decreased by 22%, 13% and 22%, respectively through November
- Volume improvements, with utilisation of 80% up from 72%<sup>1</sup>
- Realised prices somewhat lower in the quarter due to a weak market end of year and unfavourable geographic and product mix
- Favourable raw material prices

# Quarterly financials for Australasia

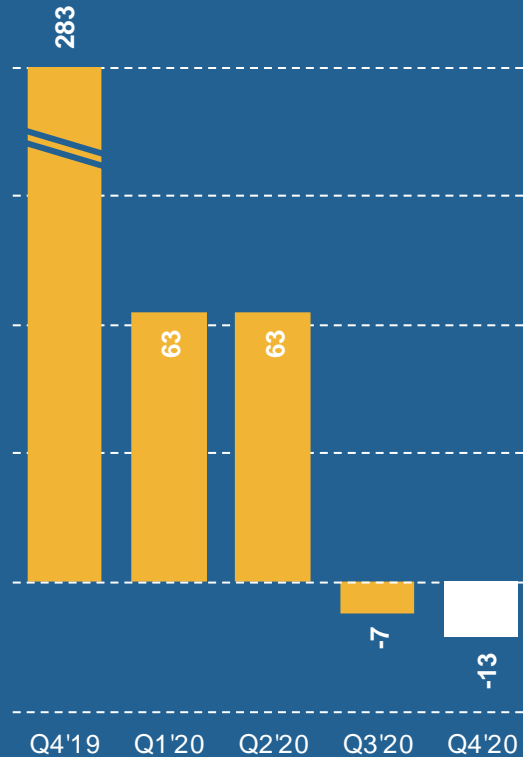
## Australasia – Revenue

NOKm



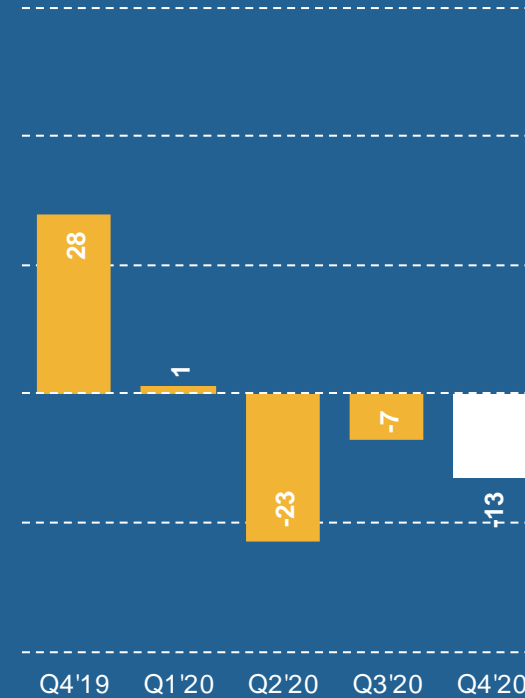
## Australasia – EBITDA

NOKm



## Australasia – Underlying EBITDA

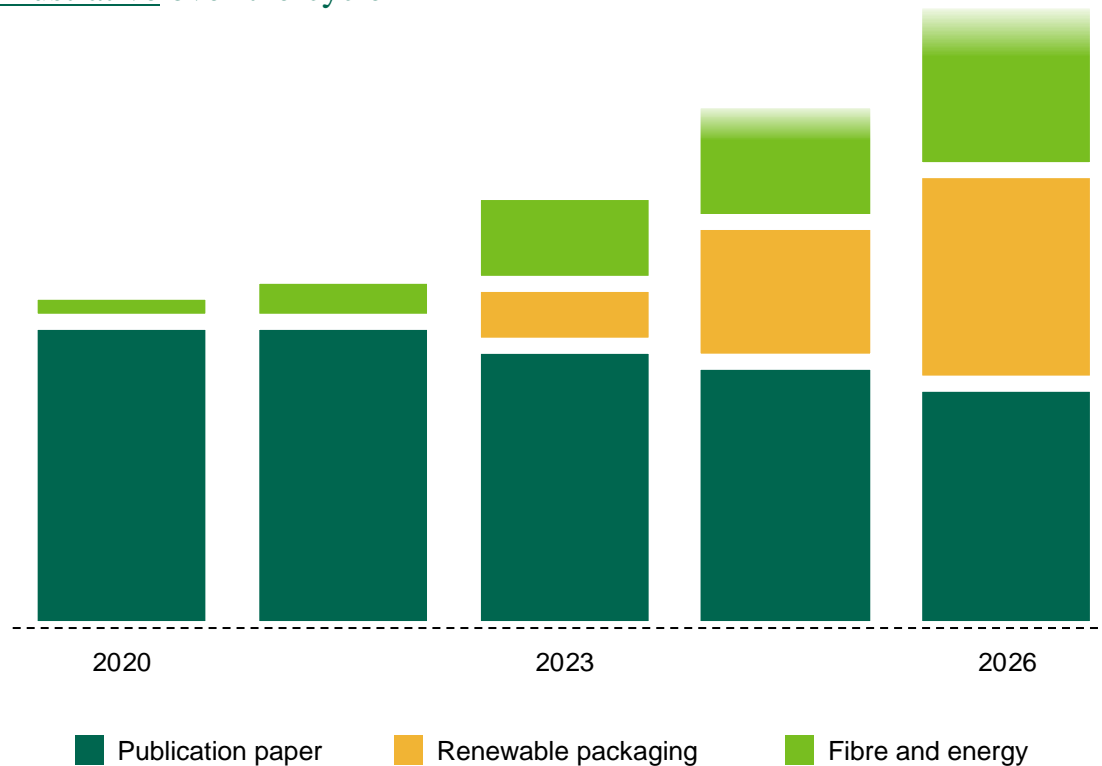
NOKm



- Newsprint and magazine paper demand declined by 22% and 26% through December 2020
- Volume improvements, with utilisation of 87% up from 69%<sup>1</sup>
- Favourable development in variable costs
- Reduction in government support driving reduction in EBITDA

# Corporate strategy

Illustrative over-the-cycle EBITDA



**Diversify and innovate within fibre and energy**

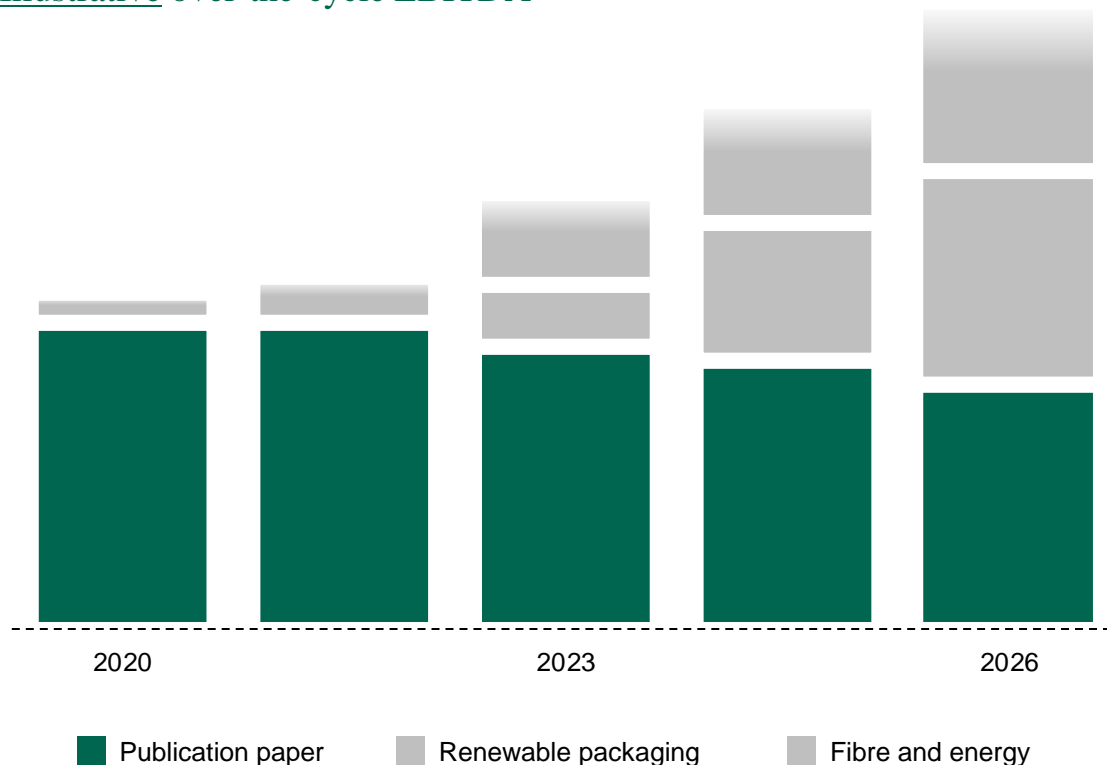
**Become a leading producer of renewable packaging**

**Improve and optimise publication paper cash flows**



# Publication paper will continue to generate significant cash flows as strategic focus shifts towards growth projects

## Illustrative over-the-cycle EBITDA



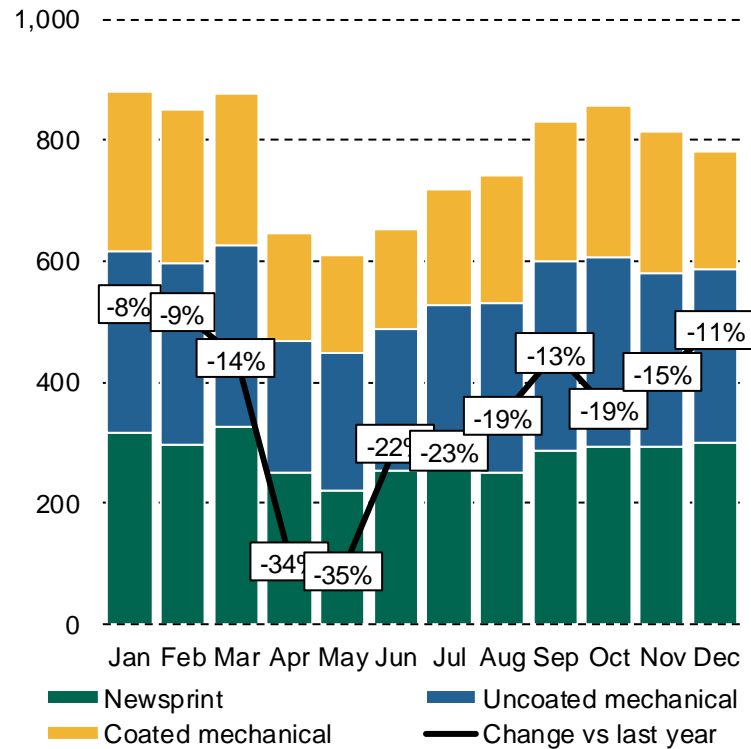
- Remain a producer of all publication paper grades
- Publication paper capacity of ~2.1m tonnes<sup>1</sup>
- Five paper mills with 11 paper machines combined<sup>2</sup>
- Over-the-cycle publication paper EBITDA of NOK 1,000m



# Expected price recovery in H2 2021 as market rebalances following industry reaction to COVID-19

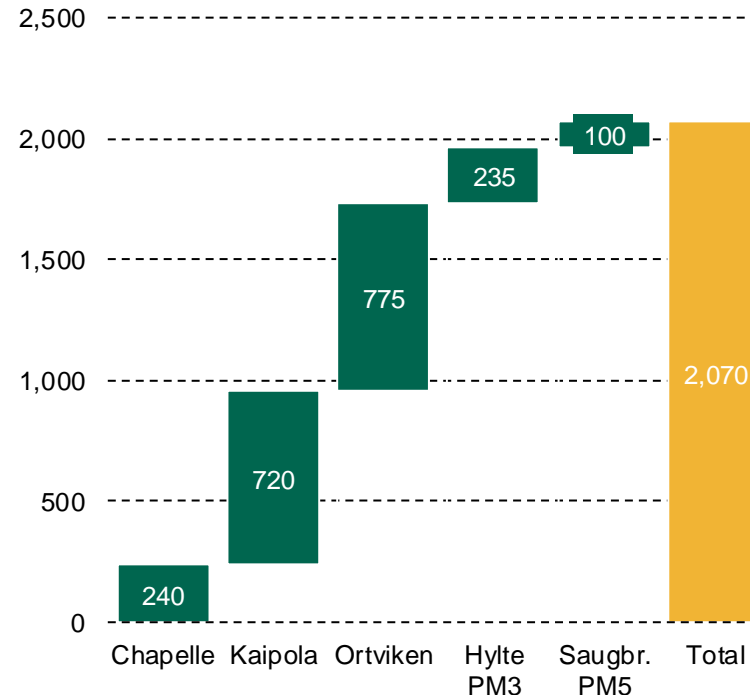
## Demand down ~18% (~2.1m tonnes) in 2020

Monthly publication paper demand Western Europe in 2020, thousand tonnes



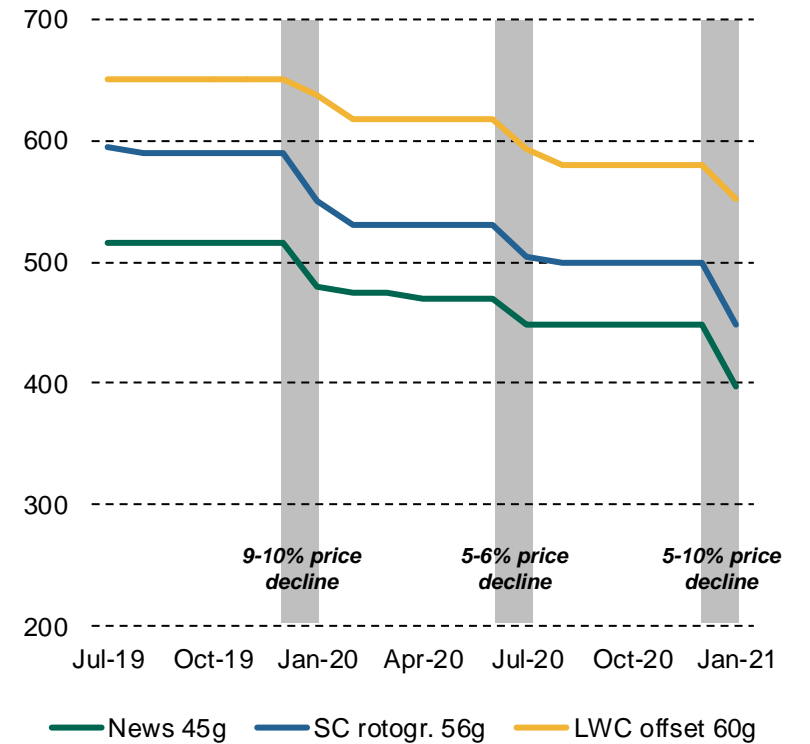
## Offset by capacity closures of ~2.1m tonnes

Capacity closures in Western Europe, thousand tonnes



## Market recovery expected H2 2021

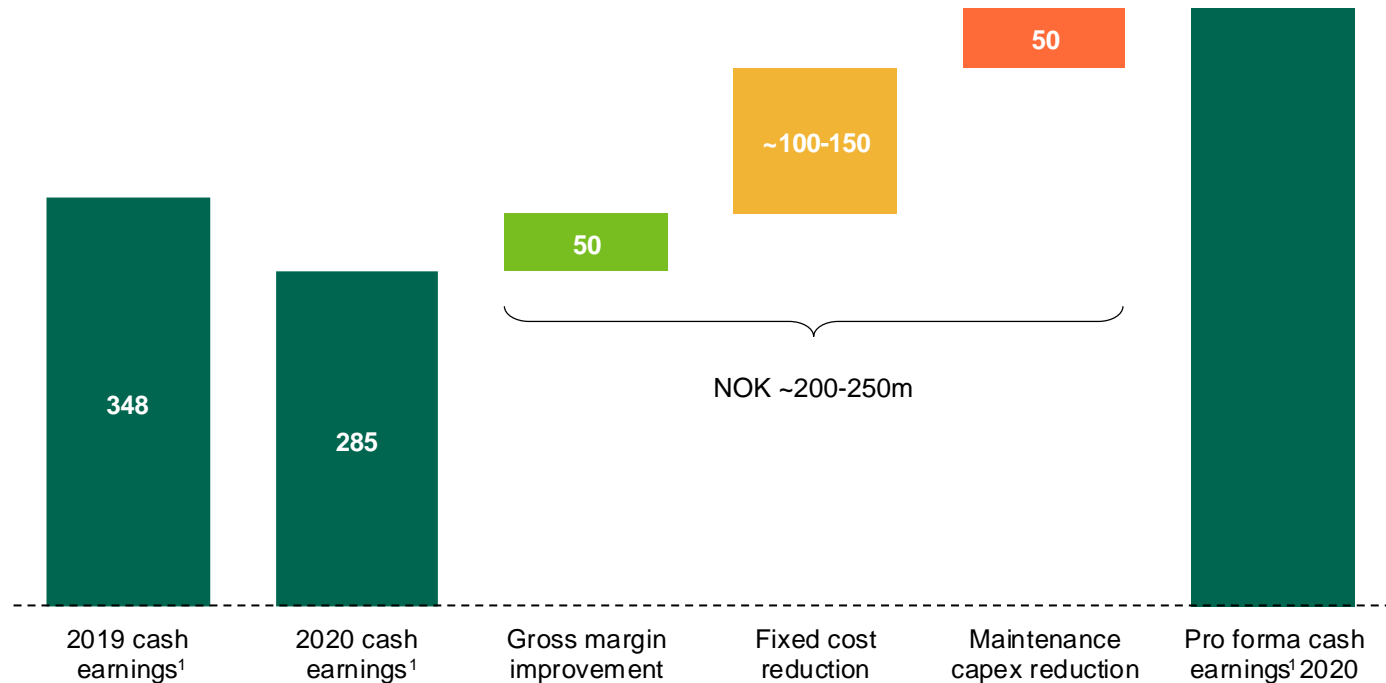
Monthly publication paper reference prices in Germany, EUR per tonne



# Active cash conversion management initiatives in 2021

## Cash conversion initiatives in 2021 of NOK ~200-250m

NOKm



### Gross margin improvement

- Efficiency investment at Saugbrugs<sup>1</sup> and optimisation of Australasian operations with repositioning of Tasman into production of conversion paper grades
- Favourable variable unit costs (energy and fibre) seen in 2020 unlikely to persist in an economic recovery

### Fixed cost reduction

- Fixed cost reduction of NOK ~100-150m following closure of Saugbrugs PM5 and company wide cost reduction programme
- Sales volume down ~460,000 tonnes in 2020, resulting in a negative margin impact expected to be mitigated as sales volumes rebound

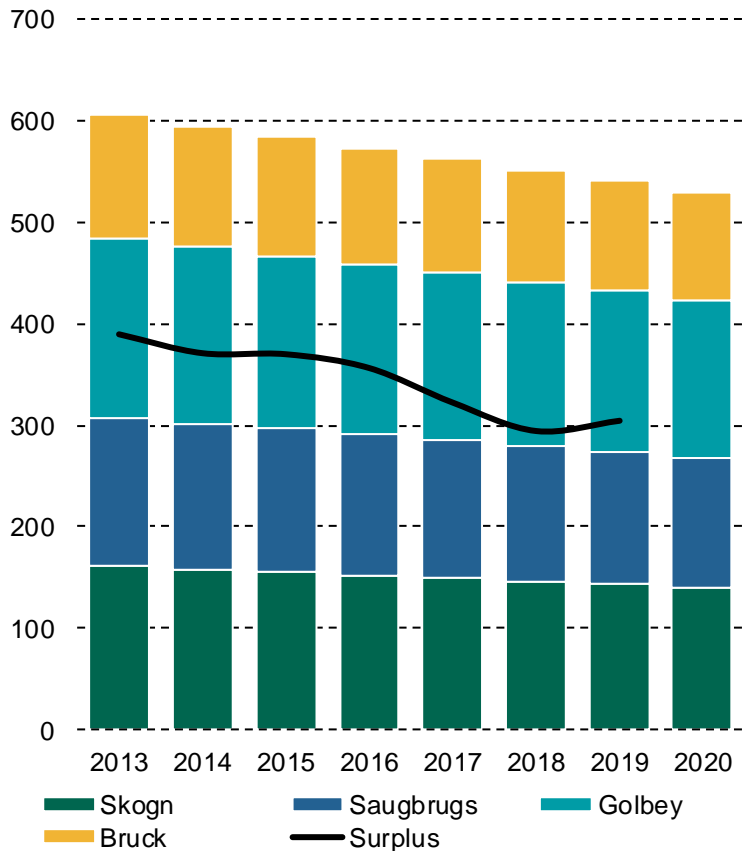
### Maintenance capex reduction

- Annual maintenance capex revised from NOK 175-225m to NOK 150m reflecting capacity adjustments and cash conversion focus

# Industry low CO<sub>2</sub> footprint enabling annual CO<sub>2</sub> emission allowance surplus

## Total allocated emission allowances

Thousand allowances



## Emission allowance price

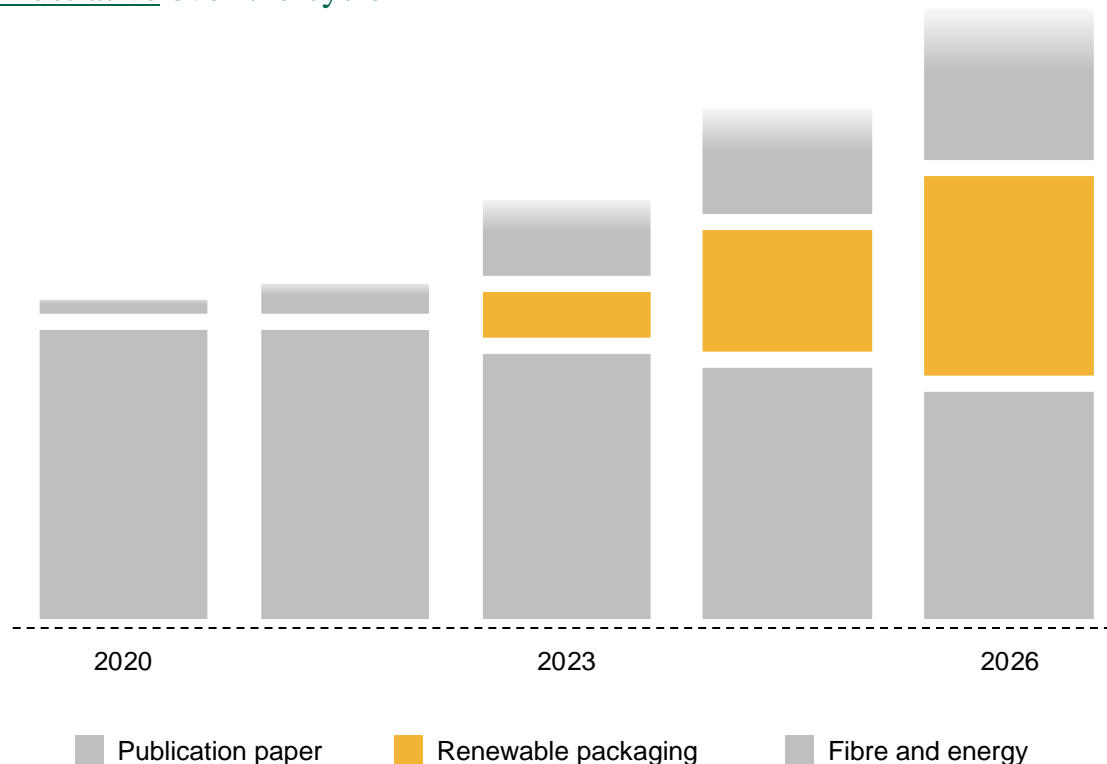
EUR per allowance



- Leading environmental profile enabled by sustainable energy mix
- Industry low CO<sub>2</sub> footprint basis for annual emission allowance surplus
- Waste-to-energy plant at Bruck will reduce CO<sub>2</sub> footprint with 150k tonnes annually, start H1 2022
- Surplus allowances can be sold in the market, recent pricing of EUR +30 per allowance
- Cost compensation received to cover increase in energy prices resulting from the EU ETS<sup>1</sup>
- 2020 emission allowance sales of NOK ~80-85m and cost compensation of NOK ~300-350m<sup>2</sup>

# Norske Skog to become a leading European renewable packaging player

## Illustrative over-the-cycle EBITDA

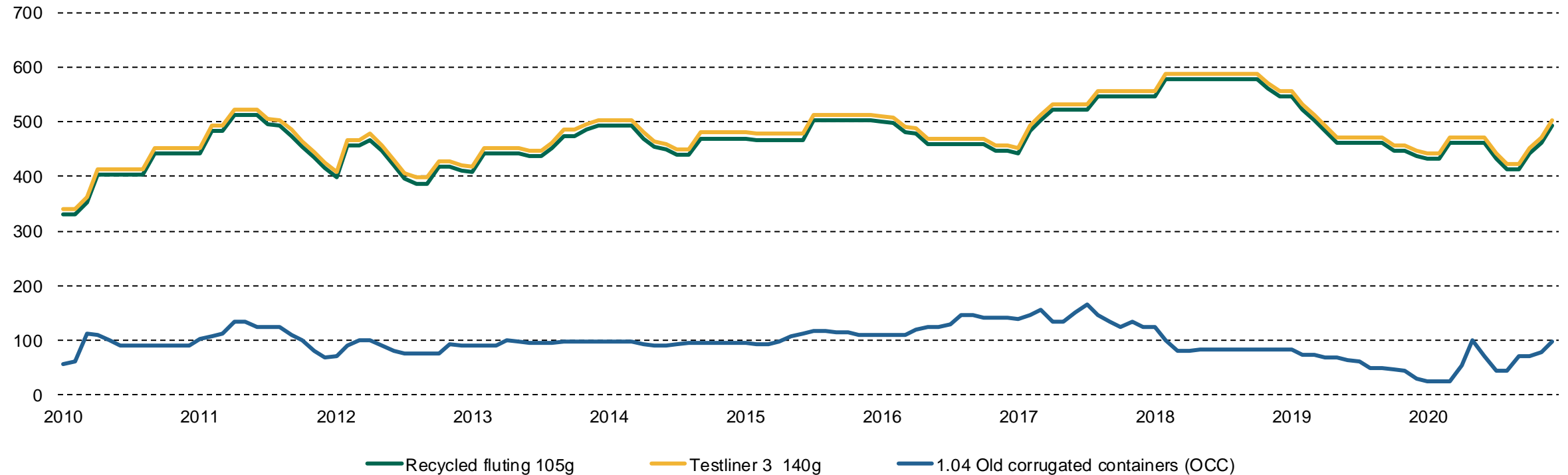


- Containerboard projects in Bruck and Golbey
- Replace newsprint with 765,000 tonnes of containerboard<sup>1</sup>
- Annual European demand growth +600,000 tonnes<sup>2</sup>
- Enable recyclable logistics for e-commerce boom
- Capitalise on packaging moving away from plastics
- Financing commitment from banks expected Q1 2021
- Expected EBITDA of NOK ~700-800m from 2025-26

# Strong price development within renewable containerboard

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

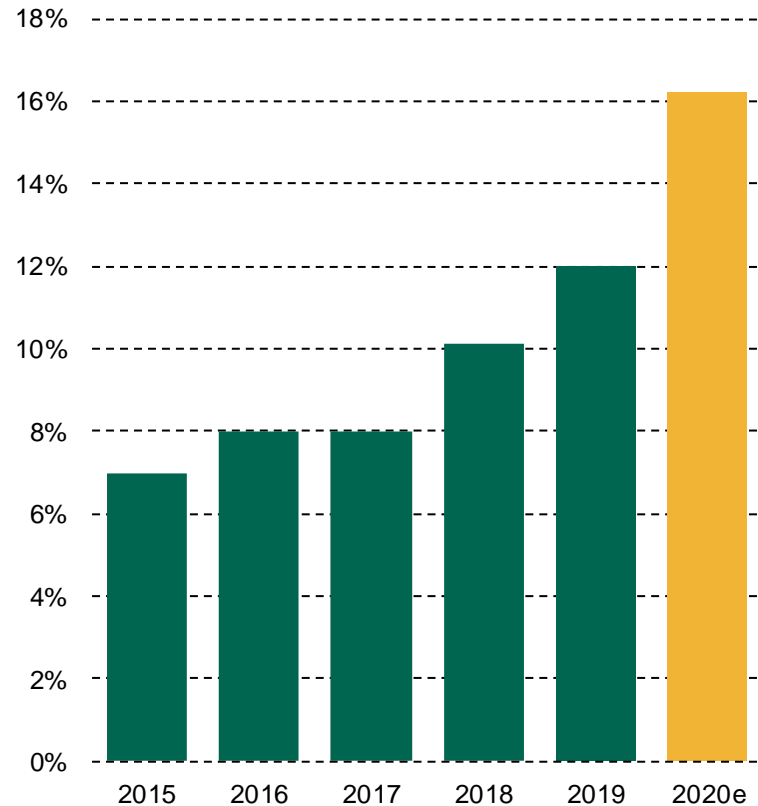
EUR per tonne



# Industry trends favouring sustainable and light weight packaging

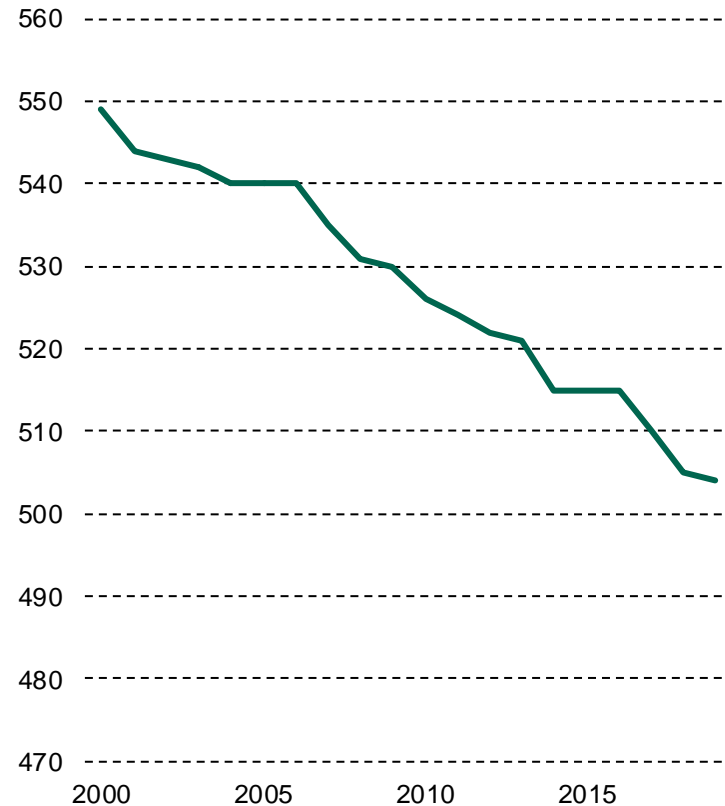
## European e-commerce boom

E-commerce share of retail sales in Western Europe



## High demand for light weight board in Europe

Avg. weight of corrugated board<sup>1</sup>, grams per square metre



*“By 2025 we will halve the amount of virgin plastic we use in our packaging”*



*“Our commitment is that 100% of our packaging is recyclable or reusable by 2025”*



*“Target to design our packaging to minimize waste and eliminate single-use plastics by 2023”*



*“Goal of ensuring that all plastic packaging is reusable or recyclable in a cost-effective manner by 2030”*

# Norske Skog will be a containerboard producer in 2023

## Norske Skog Golbey – France



### PM1

- 235k tonnes newsprint capacity
- Convert to 555k tonnes containerboard
- Capex estimate of EUR ~250m

### PM2

- 330k tonnes newsprint capacity
- Strong candidate for future conversion
- Feasibility studies concluded

## Norske Skog Bruck – Austria



### PM3

- 125k tonnes newsprint capacity
- Convert to 210k tonnes containerboard
- Capex estimate of EUR ~100m

### PM4

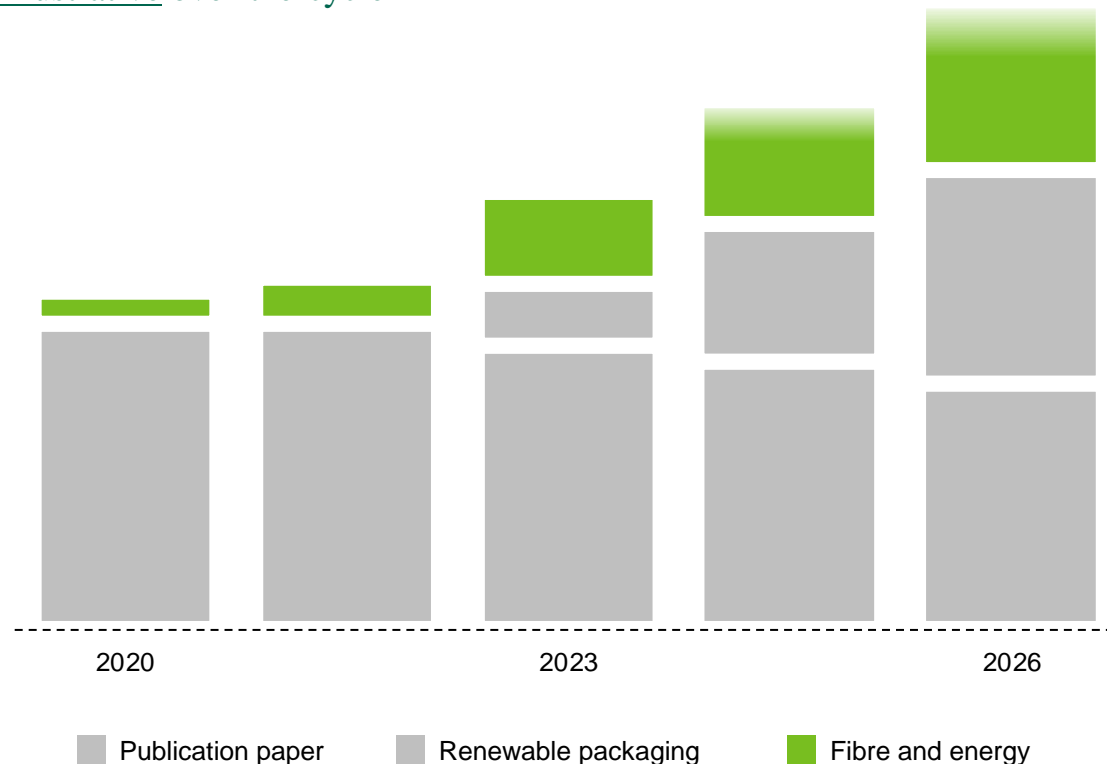
- 265k tonnes LWC magazine capacity
- Strong candidate for future conversion
- Feasibility studies concluded

## Containerboard projects will unlock a growing and high-margin market solidifying future cash flow generation

- ✓ Strong process and project competence locally at the mills
- ✓ Leading competence on pulp & paper highly relevant in packaging
  - *Similar production process as for publication paper*
- ✓ In-house personnel with experience from previous and similar projects
- ✓ Working with multiple experienced and best-in-class suppliers
  - *Specialised and competitive suppliers with strong reputations*
  - *The same suppliers into containerboard and publication paper*
  - *Targeting the best solutions from the most experienced suppliers*
- ✓ Support from experienced technical consultants
  - *Engineering and design services also covering delivery interfaces*
- ✓ Extensive commercial work initiated to place new volume in market
  - *Experienced personnel have been hired and consultants engaged*

# Norske Skog's promising portfolio of fibre and energy projects enable diversification and innovation opportunities

## Illustrative over-the-cycle EBITDA

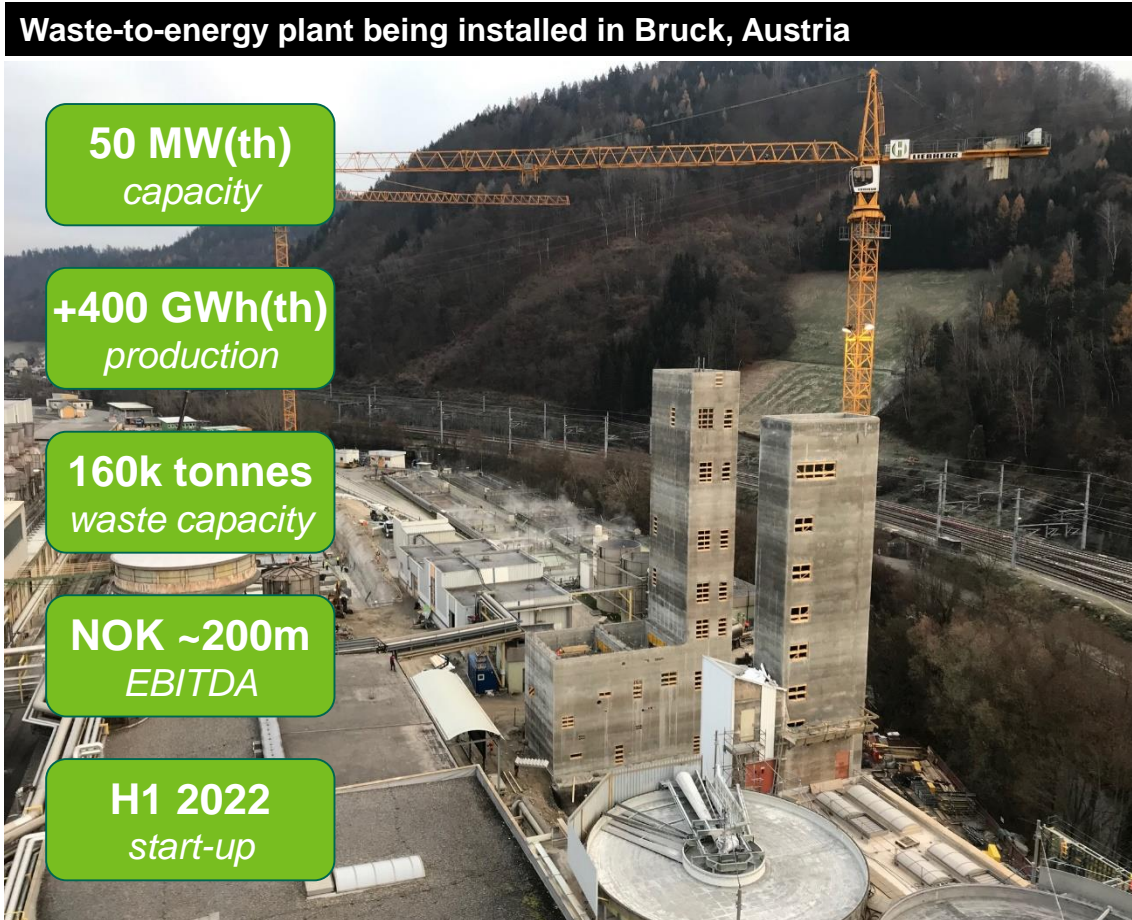


- **Waste-to-energy plant:** Sustainable energy production of +400 GWh(th) and EBITDA of NOK ~200m, start-up in H1 2022
- **Pellets:** Producing 85,000 tonnes of renewable energy pellets in New Zealand with annual EBITDA of NOK ~30-35m
- **Circa<sup>1</sup>:** Biochemicals company planning a 1,000 tonnes plant in France with EUR ~12m EU grant (ReSolute<sup>2</sup>), start-up Q1 2023
- **CEBINA:** First commercial sales in Q4 2020 and ambition to secure international distribution agreement in 2021
- **Bio Composites:** Decision on installation of pilot taken in Q4 2020 to enable further commercial development and qualification testing



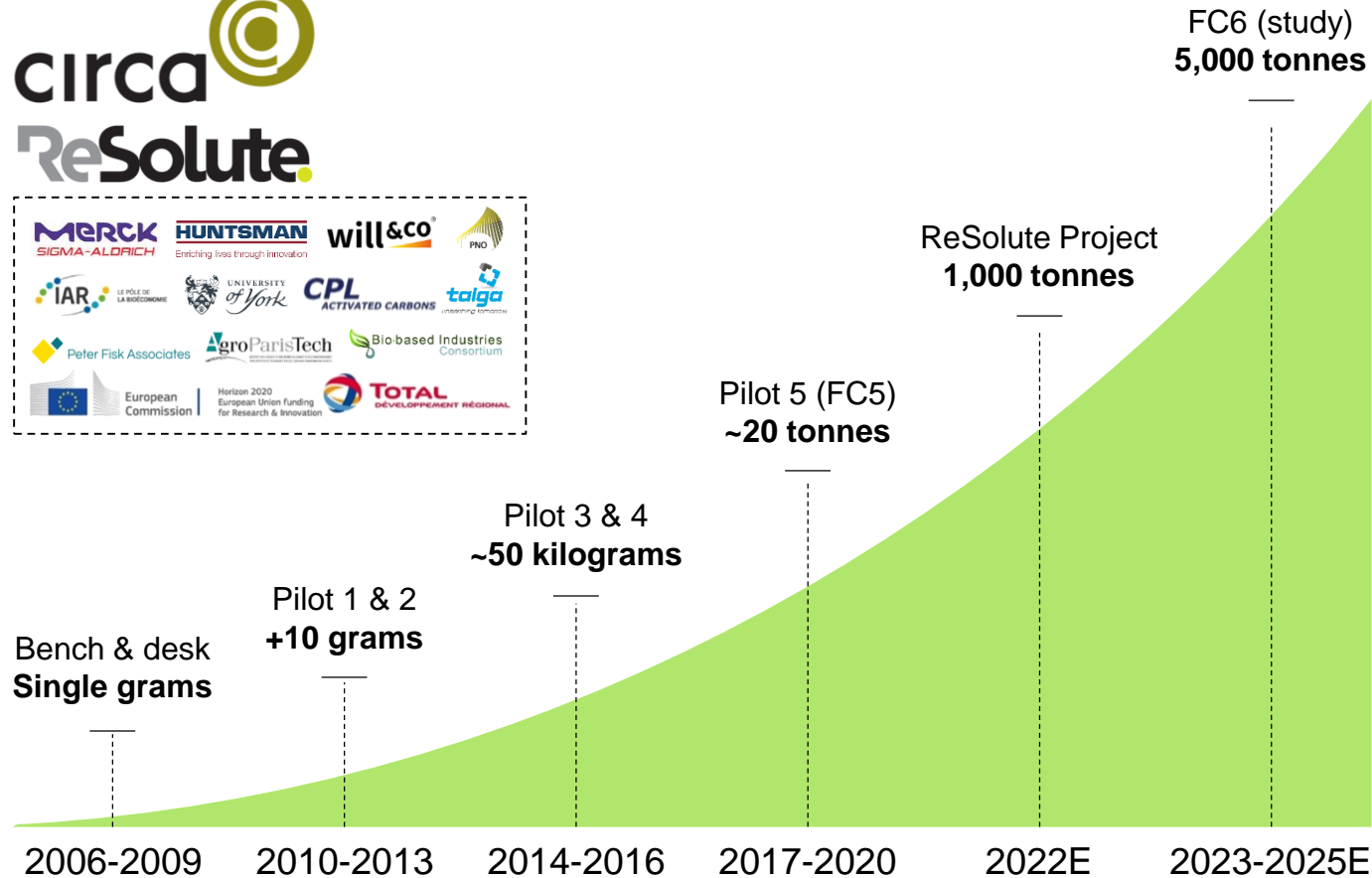
# Waste-to-energy plant

## 50 MW(th) of sustainable energy capacity being installed in Bruck



- Progressing according to plan with start-up expected in H1 2022
- Proven technology from Valmet with a turnkey installation contract
- Replace gas consumption with energy produced from regional waste
- Significant demand for waste offtake in Austria and surrounding areas
- Increasing landfill regulation to further drive demand for waste offtake
- Reducing the CO<sub>2</sub> footprint of the Bruck mill with 150,000 tonnes
- Revenue generation from waste gate fees and electricity production
- Expected EBITDA contribution of NOK ~200m
- EUR 72m investment of which EUR ~22m invested as of Q4 2020
- EUR ~10m of EUR 54m in local debt drawn as of Q4 2020

## Produces and sells valuable biochemicals with patented technology



- Circa<sup>1</sup> targets the bioeconomy ambition of replacing fossil and toxic chemicals with biochemicals
- Built on +50 years of biochemical research and more than 10 years of technology verification
- Unique ability to produce large amounts of the platform chemical LGO<sup>2</sup> using its patented Furacell<sup>TM</sup> process
- LGO is used to derive (among other) Cyrene<sup>TM</sup>, a biobased solvent replacing toxic and fossil solvents NMP and DMF
- Such solvents are essential for the production of medicines, electronics, agrochemicals and more
- More than 1,000 tests with researchers and companies, and currently selling through Merck KGaA and directly
- Recent EU Horizon2020 grant of EUR ~12m to support a 1,000 tonnes plant in France for the production of LGO and Cyrene<sup>TM</sup>
- Contemplated capital raise (IPO) during Q1 2021 to raise the remaining funding required for construction of the plant



## Proof of concept following first commercial sales in Q4 2020

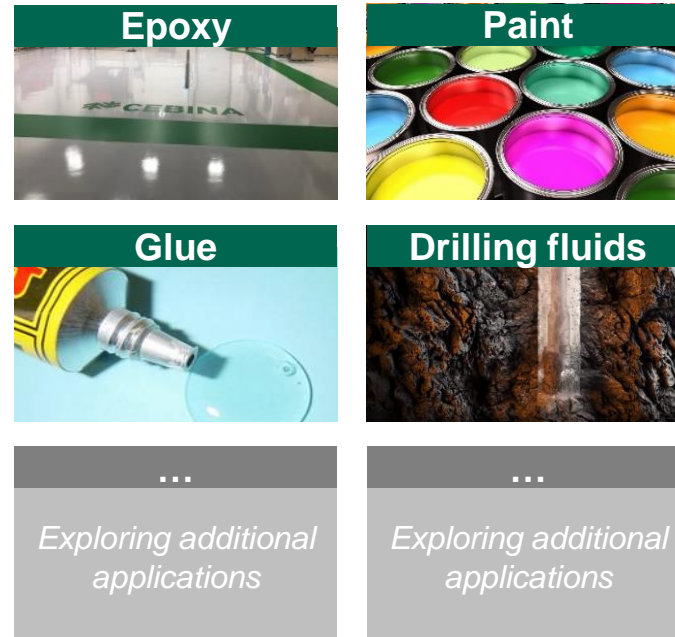
CEBINA is an environmentally friendly input factor relevant in a range of applications



Produced from renewable fibre and hydro energy

CEBINA product portfolio comprises among other:

- CEBINA MB
- CEBINA 4%
- CEBINA 20%



- CEBINA developed by Norske Skog since 2006
- Originally developed as strength enhancer in paper
- Qualities relevant in a wide range of other applications
- Significant commercial work during 2019 and 2020
- Collaboration with technical partners and customers
- First commercial sales in Q4 2020 (proof of concept)
- Target international distribution agreement in 2021
- Pilot plant with capacity of up to 500 tonnes
- Reviewing capacity upscaling opportunities



# Outlook

## **Clear priorities in the short term**

- Focus on cash conversion
- Reposition Australasian operations
- Maintain a robust balance sheet

## **Execute on strategy in the long term**


- Become a leading producer of renewable packaging
- Develop and commercialise fibre and energy projects
- Remain a producer of all publication paper grades

**Contemplated CMD on hold until further clarity on COVID-19 restrictions**

# Appendix

# World-class assets and fibre competence enable unique green growth opportunities

**Saugbrugs, Norway**



★ Explore fibre and energy projects

**Capacity, tonnes**  
 PM4: 100,000 SC  
 PM6: 260,000 SC  
 Pilot: Up to 500 CEBINA™


**Skogn, Norway**



★ Explore fibre and energy projects

**Capacity, tonnes**  
 PM1: 145,000 news  
 PM2: 145,000 news  
 PM3: 220,000 news


**Boyer, Australia**



★ Improve operations

**Capacity, tonnes**  
 PM2: 150,000 news  
 PM3: 135,000 LWC


**Circa (32% stake<sup>1</sup>)**



★ Seeking a listing in Norway

**Capacity, tonnes**  
 FC5: 20 Cyrene™  
 ReSolute: 1,000 Cyrene™ (2023)  
 FC6: 5,000 Cyrene™ (study)

**Golbey, France**



★ Convert to containerboard

**Capacity, tonnes**  
 PM1: 235,000 news (conversion 2023)  
 → 555,000 containerboard (2023)  
 PM2: 330,000 news

**Bruck, Austria**



★ Convert to containerboard  
 Construct waste boiler

**Capacity, tonnes**  
 PM3: 125,000 news (conversion 2023)  
 → 210,000 containerboard (2023)  
 PM4: 265,000 LWC


**Tasman, New Zealand**



★ Reposition to other industry

**Capacity, tonnes**  
 Converting grade paper: 200,000

**Nature's Flame, New Zealand**



★ Upgraded to 85,000 tonnes

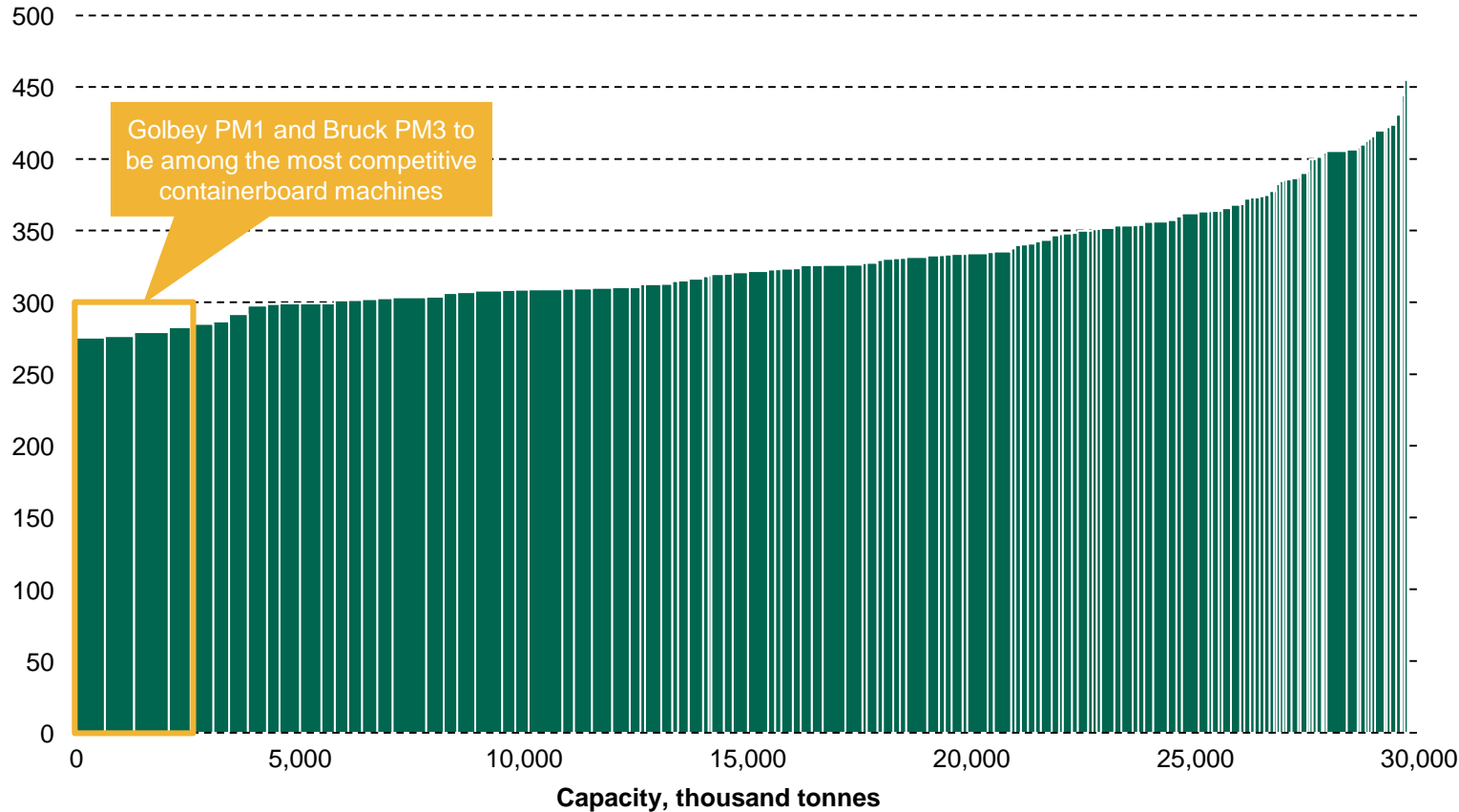
**Capacity, tonnes**  
 Pellets: 85,000

Europe Australasia Other

# Entering the containerboard market with first-quartile capacity

**Cash cost delivered Frankfurt for all recycled containerboard machines in Europe<sup>1</sup>**

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

# Sustainable production of premium quality pellets

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
- Current production around 90,000 tonnes
- Expansion opportunities of ~120,000 tonnes
- Equivalent to thermal energy of +425 GWh(th)<sup>1</sup>
- Fonterra offtake agreement for 50,000 tonnes





# Identifying new value in former Saugbrugs administration office

Part of former Saugbrugs administration office in Halden to be used for high school



- Porsnes Utvikling<sup>1</sup> to redevelop part of former Saugbrugs administration office for high school purposes
- Financing and municipality lease agreement in place
- Redevelopment completion planned for Q2 2022
- Porsnes Utvikling to develop remaining sections of the administration office and surrounding area
- Norske Skog explores opportunities for areas owned in the 'greater' region surrounding Saugbrugs

**~9,000 sqm**  
*indoors*

**~5,700 sqm**  
*outdoors*

**35 years**  
*lease length*

**Q2 2022**  
*completion*

# Pilot plant to enable further commercial development and testing

Replace plastics with sustainable fibre



- Bio Composites have been developed by Norske Skog since 2015
- Mixes fibre (TMP) and recycled plastics into a composite material
- Demand driven by better environmental profile (less plastics consumption and improved recyclability)
- Range of applications including pipes, car interiors, furniture and packaging
- Executed industrial-scale tests in Germany and working closely with potential customers
- NOK 15m Innovation Norway Grant received in Q4 2020 to invest in a NOK ~25m pilot plant
- Enables further commercial development and qualification testing with customers in 2021 and 2022

# Leverage quality assets and fibre competence towards green growth

## Entry into high-margin and growing containerboard market through conversion of paper machines

- Containerboard projects on track for start up in 2023 with expected **EBITDA contribution of NOK ~700-800m from 2025-26**
- Expect commitment from banks on **containerboard financing and refinancing of bond in Q1 2021**, and finalised loan agreements during H1 2020
- Expected to **cover 70-80% of EUR 350m project capex** of which 50-60% guaranteed by ECAs, tenor of 10-11 years and no amortisation during construction

## Promising green growth investment opportunities with significant earnings impact

- Bruck waste-to-energy plant on track for start up in H1 2022 with **expected EBITDA contribution of NOK ~200m**
- Nature's Flame pellets facility performing excellently with **EBITDA contribution of NOK ~30-35m**
- Circa<sup>1</sup> is leading a consortium towards construction of a **1,000 tonne biochemicals plant in France**
- **First sales of CEBINA in Q4 2020** with ambition for international distribution agreement during 2021

## High-quality publication paper mills with competitive cost position and significant cash generation

- **NOK 1,000m over-the-cycle EBITDA** and continuous work to improve and optimise publication paper cash flows
- **Cost reduction of NOK ~200-250m from 2021** due to machine closures, efficiency investments and cost programmes
- **Industry low CO<sub>2</sub> footprint** enabling annual CO<sub>2</sub> emission allowance surplus