Norske Skog

Carnegie Forest Seminar

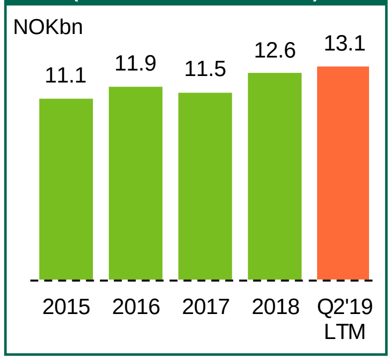
16 September 2019

Norske Skog – major producer of news and magazine paper

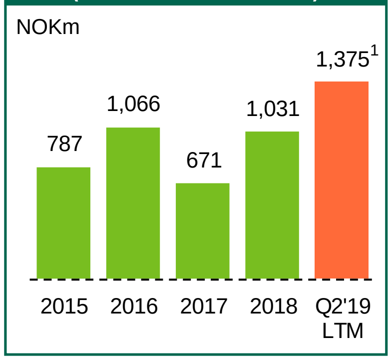
Introduction to Norske Skog

- Norske Skog (the "Company") is a **major producer of newsprint and magazine paper** (~2.6m tonnes capacity) with ~70 years of industry experience serving a diversified group of globally recognised and longstanding customers
- Oceanwood is the sole shareholder of Norske Skog

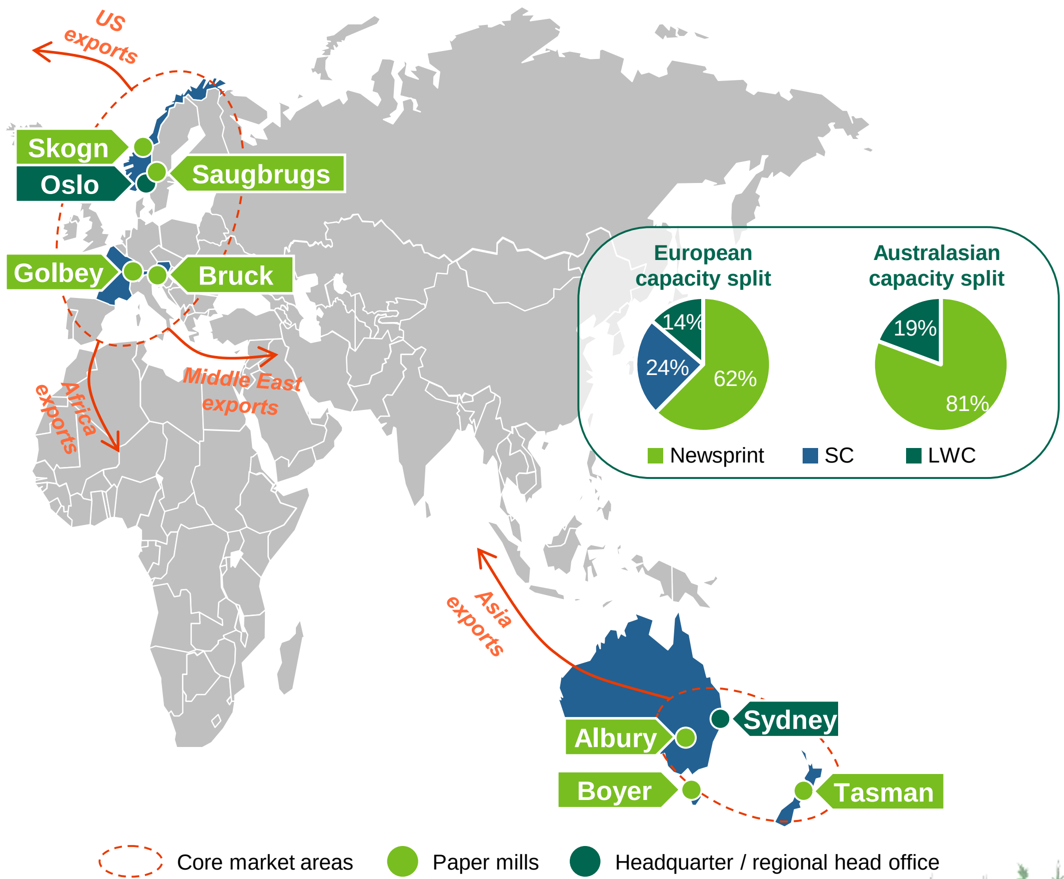
Revenue (2015 to Q2'19 LTM)



EBITDA (2015 to Q2'19 LTM)

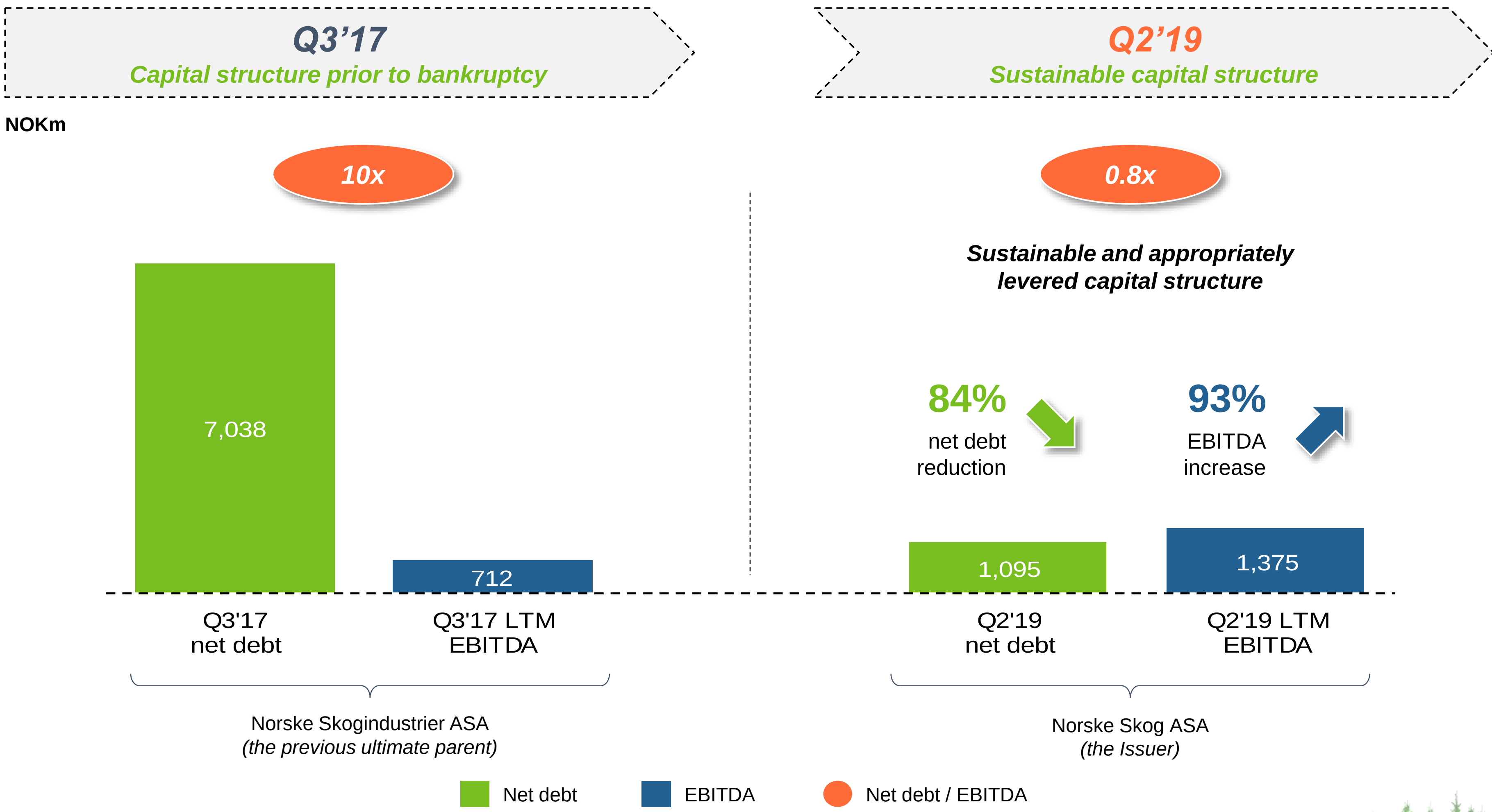


Production capacity located in proximity to core markets



1) Includes NOK 89m from sale of Bruck Hydro plant

Transformative restructuring and strong operational performance creating a balanced platform for the future



1) Includes NOK 89m from sale of Bruck Hydro plant;

Norske Skog Strategy…

Long-term strategy remains

Core Business	**Improve the core business**
Conversions	**Convert certain of the Group’s paper machines**
Diversification	**Diversify the business within bioenergy, fibre and biochemicals**

Clearly defined position in the value chain

Sourcing

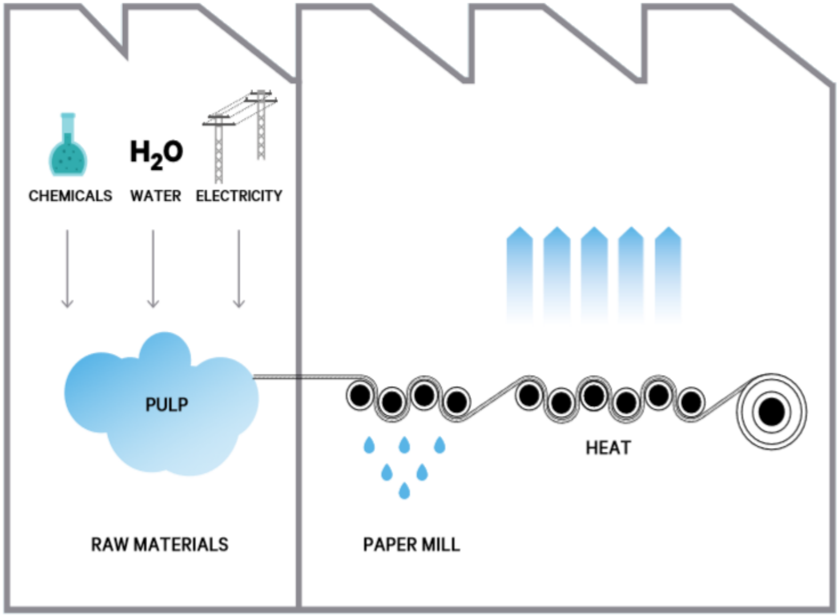
In-bound logistics

Production

Out-bound logistics

Delivery

Pressens Fællesindkøb
SCHIBSTED MEDIA GROUP
AP ASSOCIATED PRESS
RCS MEDIAGROUP
Gruppo Editoriale L'Espresso Spa
MediaPrint
FUNKE MEDIEN GRUPPE
GRAMMEO
Nine
News Corp Australia



Electrical energy used to separate, process and transport fibre and water. Thermal energy used to provide process heat and to dry the paper

Pure-play producer of high quality publication paper

Newsprint

NOR|News

67% 65%

Super calendered (SC)

NOR|SC

18% 18%

Lightweight coated (LWC)

NOR|Cote

15% 17%

Share of capacity, tonnes

Share of revenue, Q2'19 LTM[1]

1) Based on revenue from paper mills

Paper is renewable, degradable and environmentally friendly

Norske Skog is a frontrunner in the circular economy

Sustainable
+90% of wood fibres converted to paper in 2018, minimal waste

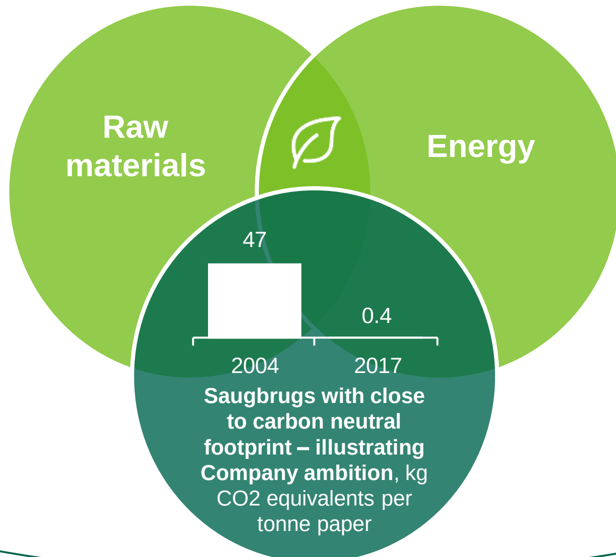
Recovered
80% of production-related waste used to generate thermal energy

Certified
Consumed 1.6m tonnes fresh fibre in 2018 of which ~88% was certified

Bio focused
26% of energy from renewable sources, incl. bio-energy and recovered from TMP[1]

Recycled
Recycled 0.9m tonnes of 2.6m tonnes paper produced in 2018

Energy efficient
Comprehensive programmes in place to reduce energy consumption



Carbon credits
Norske Skog is a net receiver of carbon credits

Carbon neutral ambition
Plan in place to be carbon neutral on all paper mills

1) The major use of electrical energy in mills which process fresh fibre is the Thermo Mechanical Pulping (TMP) process which mechanically converts wood chips into fibres, heat recovered from TMP provides thermal energy for the production process

Norske Skog and the UN Sustainable Development Goals

SDGs in one sentence

Norske Skog shall create value for people and society in a responsible way, while maintaining a sustainable environment and use of natural resources.

Norske Skog and the UN Sustainable Development Goals

Prioritized SDGs

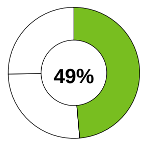
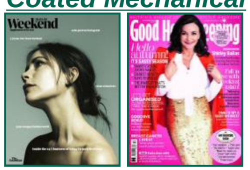
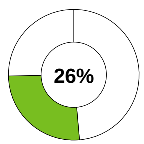
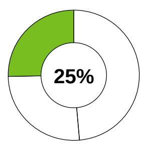
Norske Skog supports all 17 SDGs, but realize that some are more relevant to our business.

Publication paper is a ~40m tonne industry supported by substantial global demand for newspapers and magazines

Three main products within publication paper production

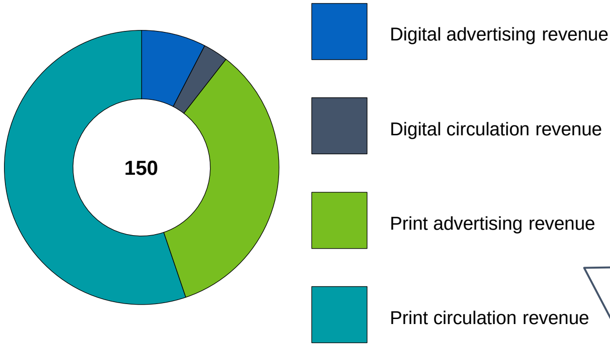
Breakdown of 2018 demand by product categories

Global publication paper demand in 2018

	Total demand	*as % of total*
Newsprint 	**19.4** million tonnes	
Coated Mechanical 	**10.5** million tonnes	
Uncoated Mechanical 	**10.1** million tonnes	

Print remains the main newspaper revenue source globally

Breakdown of global newspaper revenue in 2017 (USD billion)



Print accounts for ~90% of global newspaper revenues, representing a substantial market for producers of publication paper

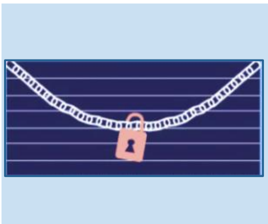
1) Subscription revenues per month per user

Source: WAN-IFRA, respective newspaper websites

Paywalls act as growth inhibitors for digital media revenues

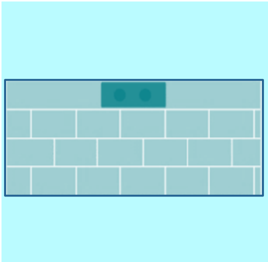
Digital media paywalls

Hard Paywall



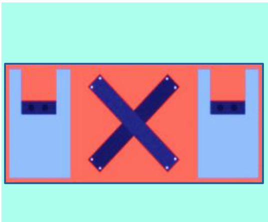
- Hard paywalls require users to pay for a subscription to access any and all content

Soft Paywall



- Includes:
  - **Freemium**
  - **Metered**

Hybrid Paywall

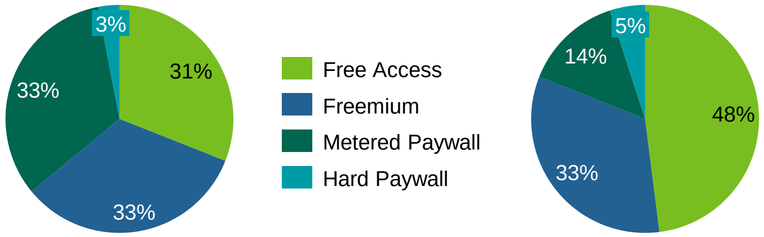


- A combination of hard and soft paywalls

Paywalls as growth inhibitors

- While most print newspapers globally are subscription based as of 2018, only 60% of digital news media operates some form of a paywall
- Paywalls act as growth inhibitors for digital media:
  - Introduction of paywalls enables "free" competitors to eat up traffic – e.g. 90% drop in online traffic after The Times introduced its paywall in 2010 and 60% after The Sun introduced its paywall in 2013

Newspaper paywalls 2018 *Weekly magazine paywalls 2018*

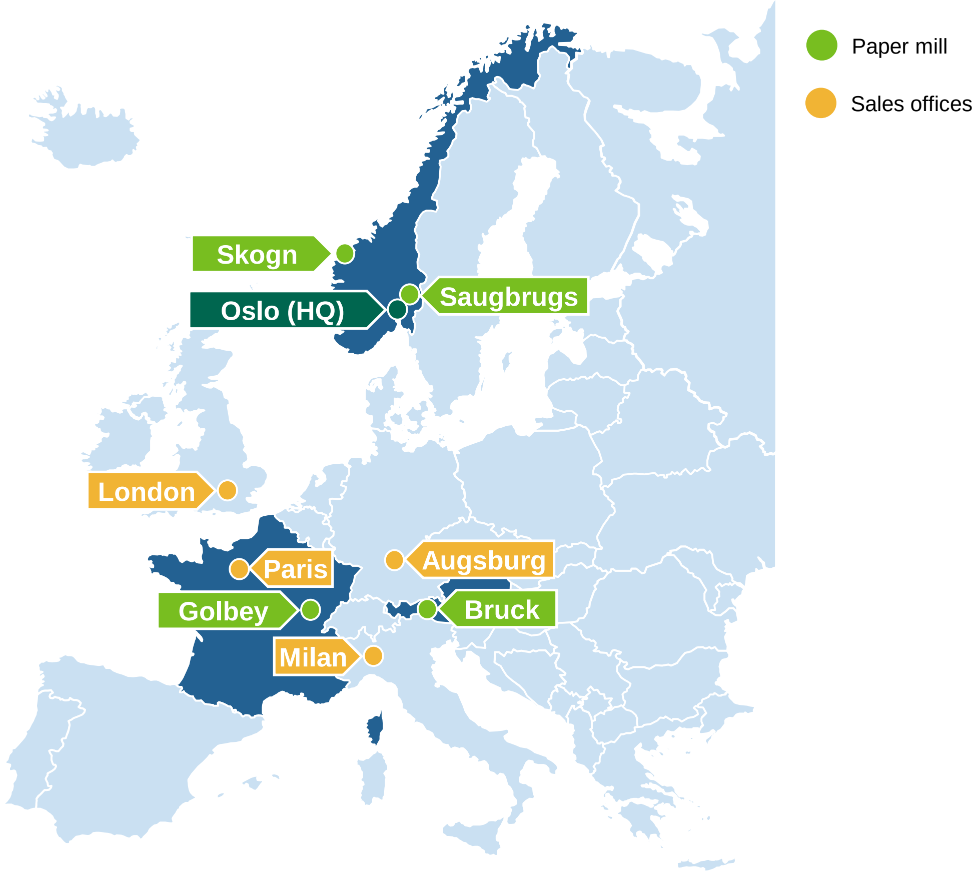


Source: MediaNorway statistics 2018, NeimanLab 2019, Guardian "Mirror's online traffic soars in wake of Sun paywall" – Dated 19 September 2013, accessed 18 June 2019

Close to market production with local sales organisation serving a diversified customer base

Norske Skog geographic footprint Europe

~90% of volume sold in Europe, remaining in North America, Africa and Asia



- Four production mills in Europe centred around core markets
- Marketing, sales and logistics efforts coordinated from sales offices in London, Augsburg, Paris and Milan.
- Supported by several smaller offices and agency agreements
- Long-standing customer relations with more than 450 customers in total, ranging from commercial printers and retailers to globally recognised publishers

Close to market production as only domestic producer

Norske Skog geographic footprint Australasia

Two thirds of Australasia volume sold domestically and one third of volume to Asia

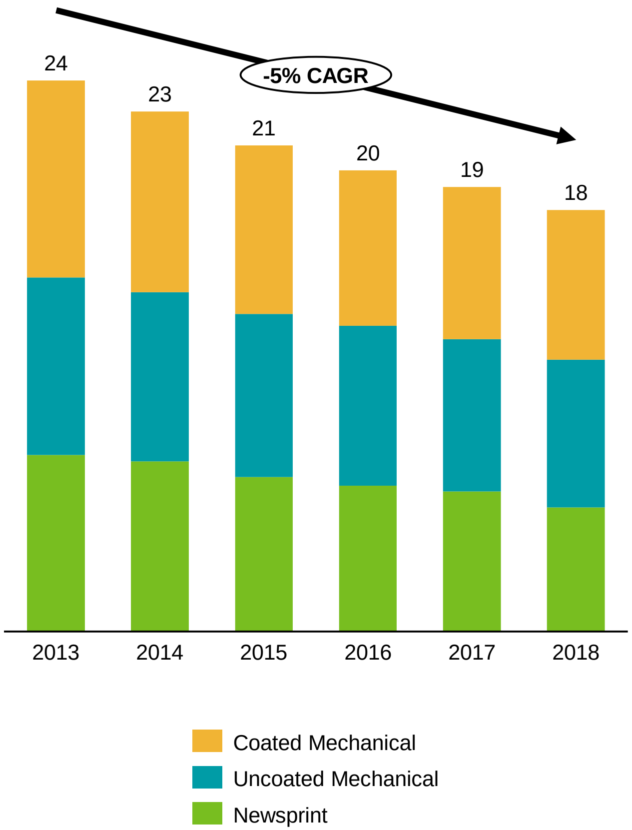
- Norske Skog has the only domestic paper production capacity in Australasia
- Marketing, sales and logistics efforts coordinated from sales offices in Sydney
- Long-standing customer relations with key publishers in the region

The industry has shown ability to cut capacity to face demand decline resulting in stable high utilisation rates

Norske Skog

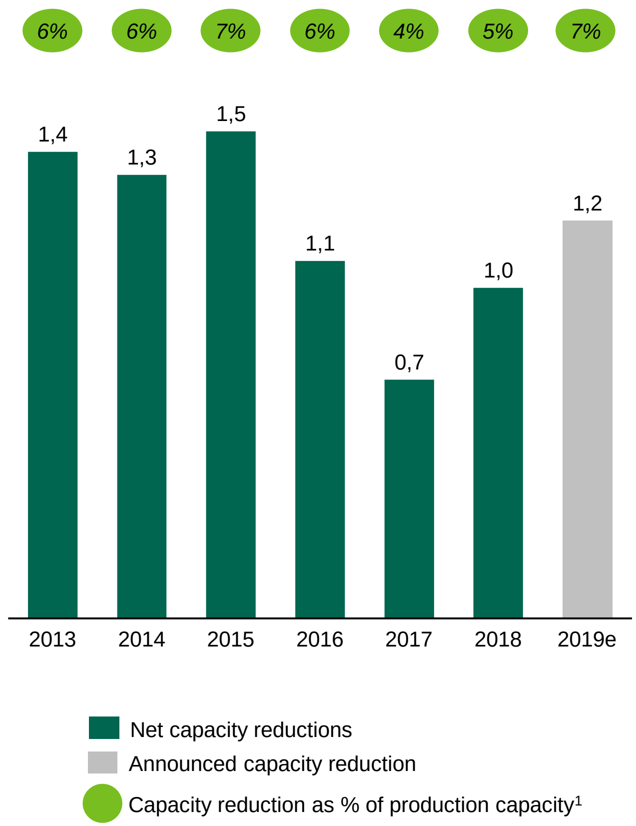
Capacity continues to come down…

Western European production capacity, million tonnes



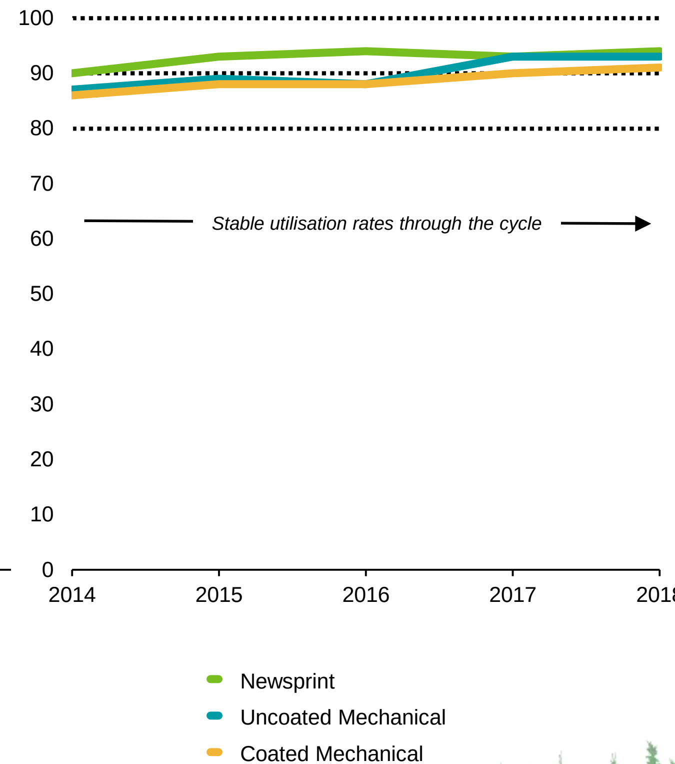
…with substantial closures every year...

Western European net capacity reduction, million tonnes



…maintaining a strong market balance

Utilisation rates, %[1]



Source: PPPC, RISI

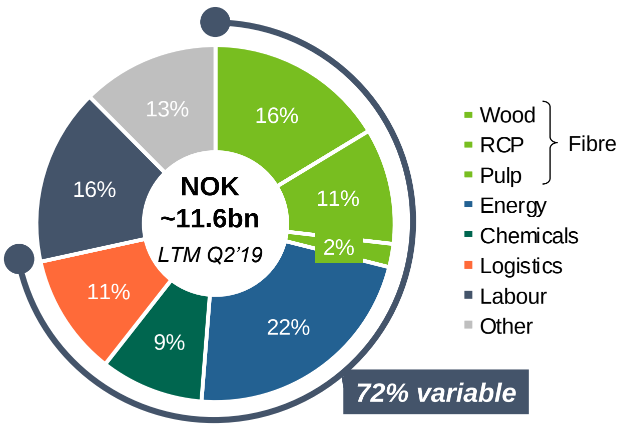
1) Calculated as production divided by capacity

Cost base management at the core of operations…

Cost category descriptions

Fibre *(Wood, RCP and pulp)*	**Significant effort towards optimising contracts and sourcing for fibre and energy, which together represent 51% of the cost base…**
Energy	
Chemicals	**…but all cost are subject to review continuously**
Logistics	
Labour	

Fibre & Energy ~51% of cost base



1) Small proportion from owned forests in Australia; 2) The major use of electrical energy in mills which process fresh fibre is the Thermo Mechanical Pulping (TMP) process which mechanically converts wood chips into fibres. Heat recovered from TMP provides thermal energy for the production process; 3) Including terms for price adjustments

New revenue streams being explored…

Bio energy projects

Bio chemical products

Fibre products







PELLETS

BIOGAS

WASTE-TO-ENERGY

CYRENE

NANOFIBRILS

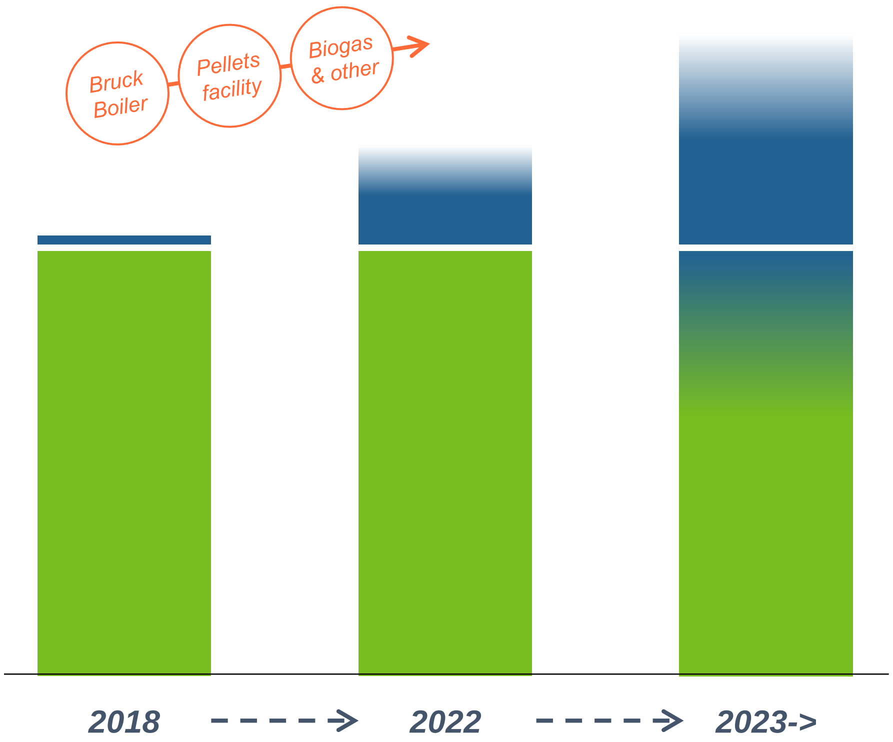
CON-STRUCTION BOARDS

+25-30 OTHER INITIATIVES

1) In partnership with Circa Group

… and expected to represent an increasing share of EBITDA going forward

Over the cycle EBITDA



Core business: Publication paper production

Growth and conversion opportunities

Q&A

Norske Skog