Norske Skog

Capital Markets Day

3 February 2011

Norske Skog

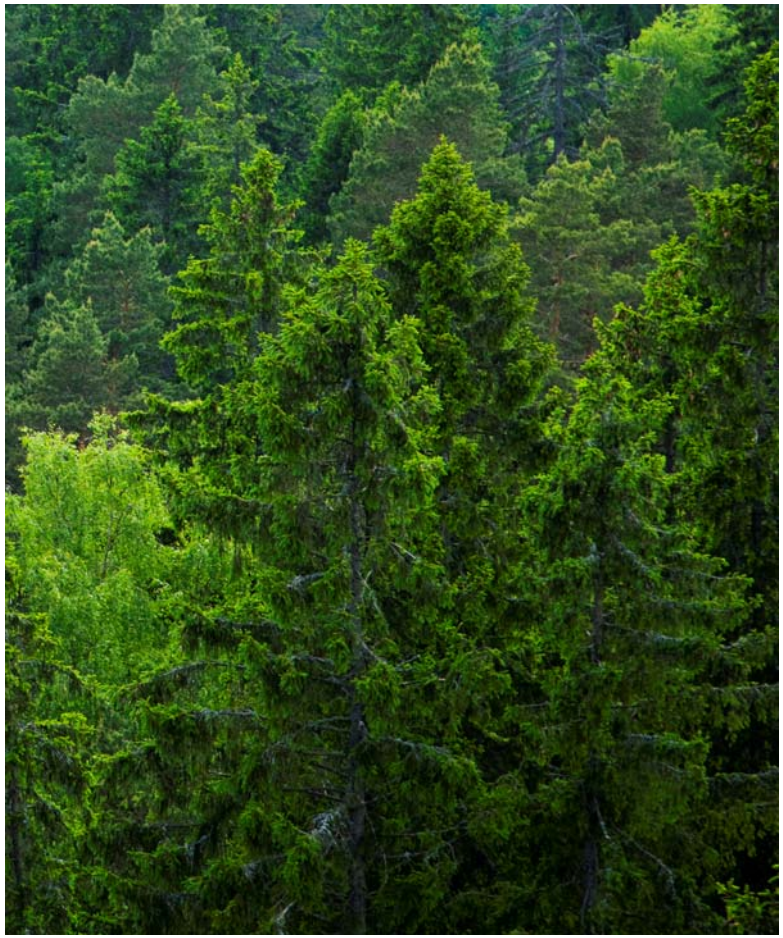
Jan Clasen - SVP Commercial

→ European market characteristics – an opportunity for Norske Skog

Norske Skog

Beware of Green Wash!

- **No** environmental reason not to use paper for communication, bills and packaging
- **No** industrial product is more recyclable and sustainable than paper
- **No** CO2 solution without living forestry
- European forests have grown by 30% since 1950



US printed media

- US newspaper readership steadily declining since early 1950s
- Ratio between editorial content and advertising in average US newspaper 30:70 (2005)
- In an average German newspaper the ratio was 70:30 (2008)
- Different approaches to circulation
- Newspapers are not only a business
- Book: “The Vanishing Newspaper”
- US printed magazine readership has grown since 2002
- This week Hearst paid USD 887 million for Lagardere’s non-French magazines

Media trends

- From “reading” to “watching”: The pad makes it move
- Will there be publishers in the future?
- Print loses advertising market share, absolute income still increases
- American Newspapers are an exception, not the rule
- “The world after advertising”: The feel-good of “community” and “social networks”
- “Only the elderly read printed newspapers!”
- Retail uses more and more print, publishing less important for consumption
- Product development towards “retail paper”, away from “publishing paper”
- How price-sensitive is printing paper demand?

Newspapers: end-use developments

- Circulation: subscription or no subscription
- Pagination up and down with consumer spending
- Stable number of titles
- Lower substances
- Stable size
- Stable advertising income, decreasing advertising share

Magazine: end-use developments

- Product licensing,
  not globalisation
- Stable total circulation
- Increasing number of titles
- Increasing pagination
- Stable basis weight
- Smaller size
- Increasing advertising income,
  decreasing advertising share

How do we promote Print Media?

- Activities promoting the **Effectiveness** of print media
- Activities promoting objective information about **Sustainable** aspects of paper and print
- Convince media buyers
- Two campaigns:

PRINT POWER

TWO SIDES

www.printpower.eu

www.twosides.info

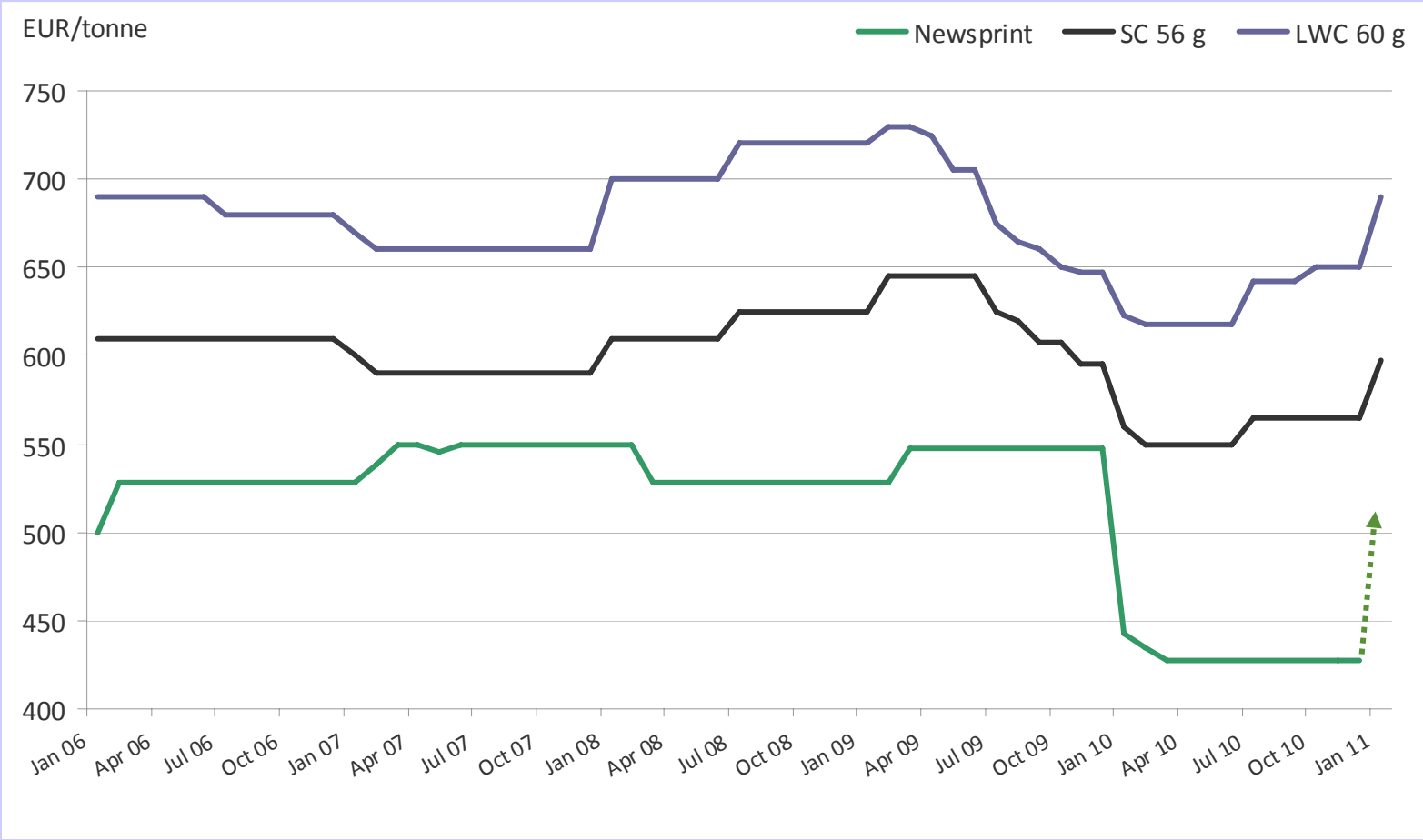
What is the Print Power campaign?

PRINT POWER

What is the Two Sides campaign?

TWO SIDES

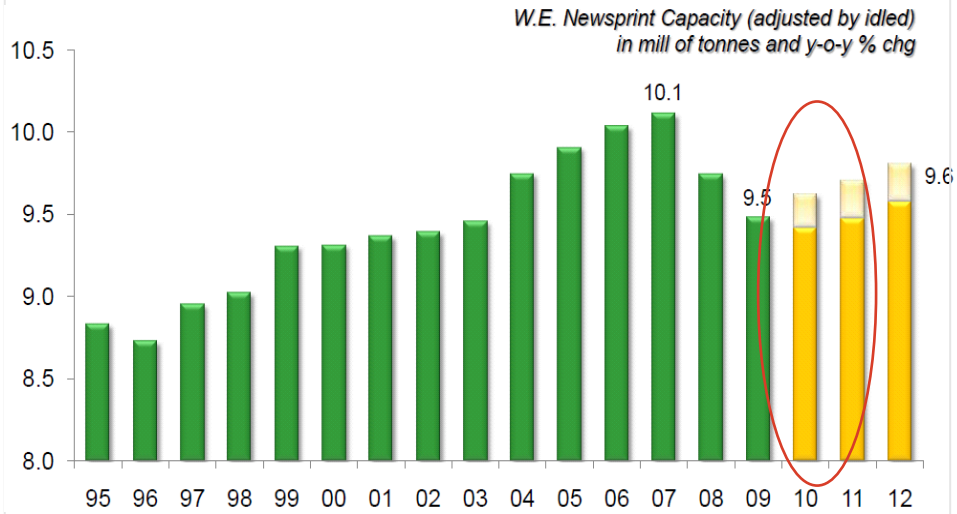
Product price development - Germany



Source: RISI

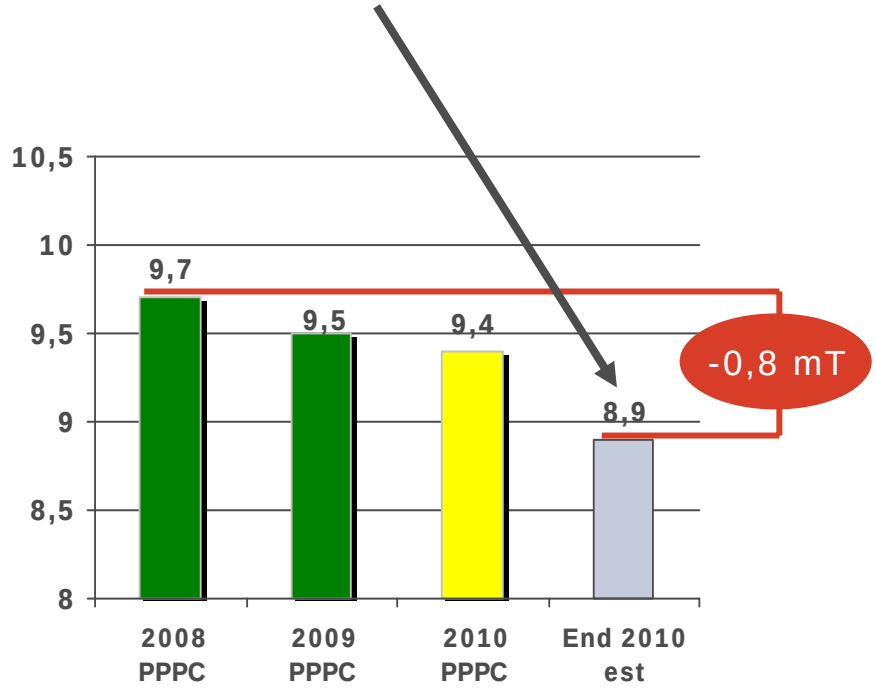
Western Europe newsprint capacity

PPPC – June 2010, adjusted by idled



PPPC Outlook meeting – June 2010

Own assumptions after announcements in 2010



Newsprint capacity changes between 2008 and 2010

Turkheim (incl UMI)	80
Palm King's Lynn	400
Perlen (oct 2010)	360

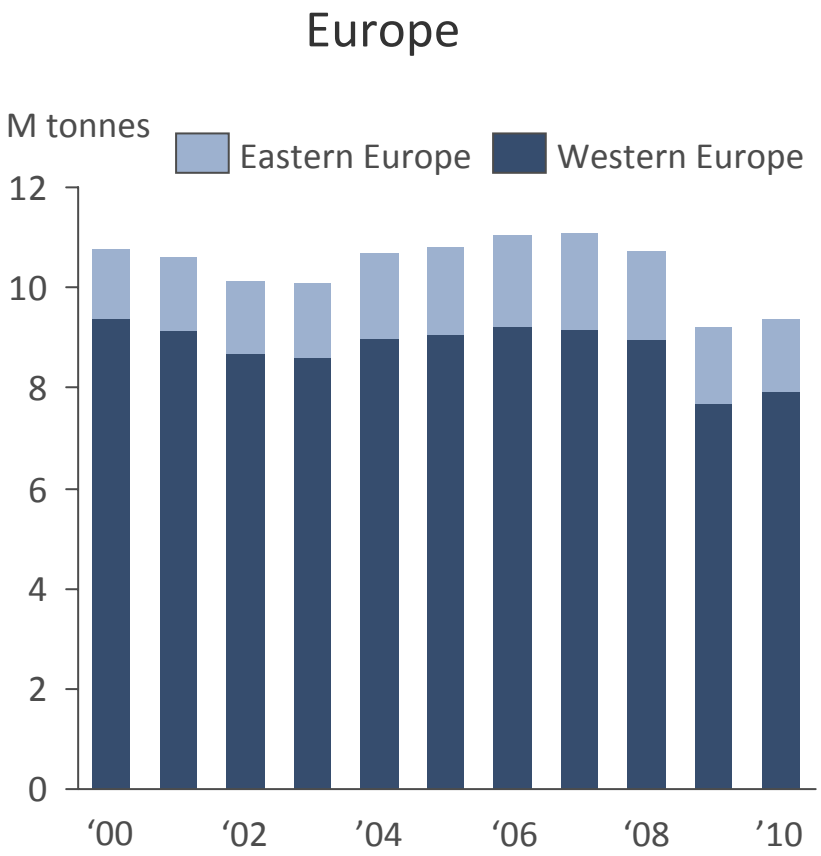
UPM Kajaani	-185
NS Follum (incl UMI)	-130
M&F Ledar	-30
Holmen Hallsta	-150
NS Parenco	-225
Perlen	-125
AbiBow Bridgewater	-230
Varkaus	-290
Maxau	-195

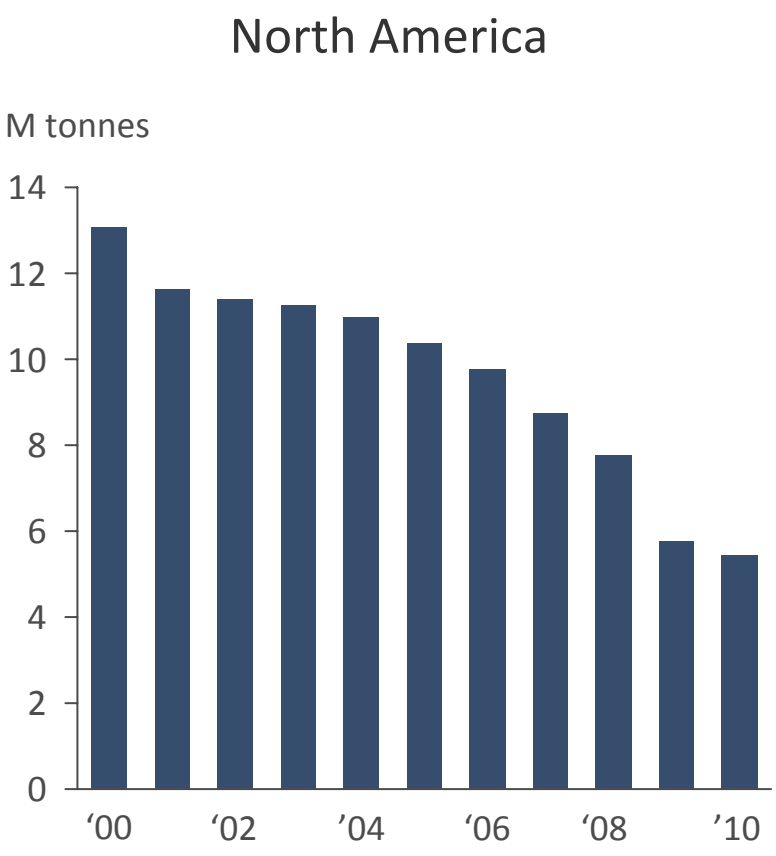
+840 kT

-1560 kT

Total -720 kT

Demand newsprint 2000 – 2010





Source: PPPC

Magazine capacity changes between 2008 and 2010

Plattling	380
Ortviken (rebuild)	30

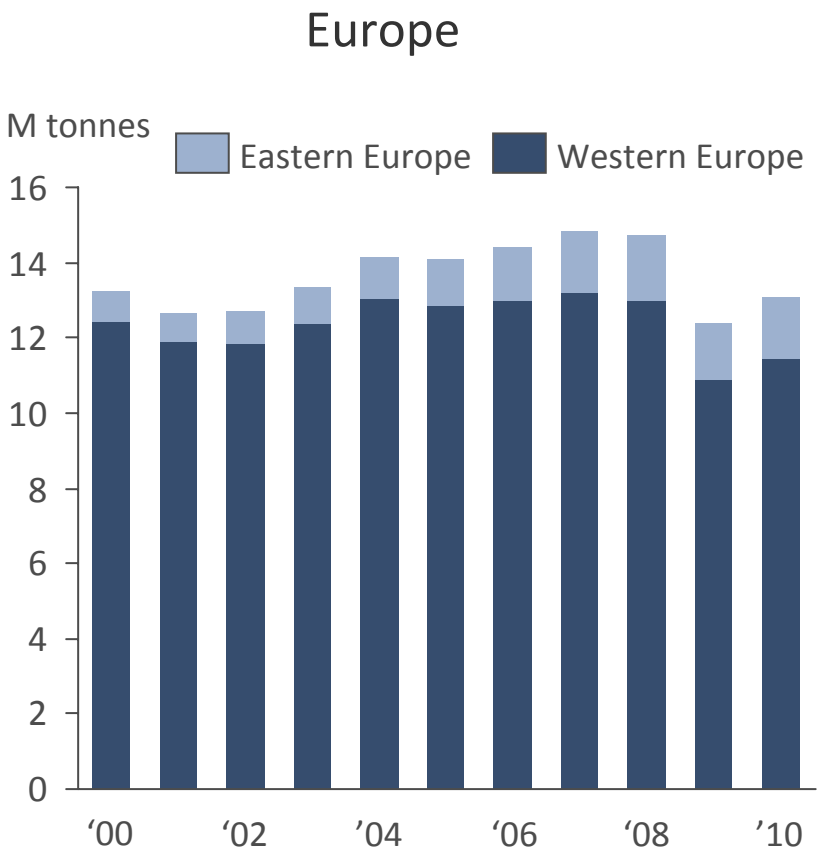
SE Summa	-380
SE Anjala	-120
UPM Kanjala	- 435
SE Varkaus	-195
M-Real Kangas	-100
Papeterie de Lancey	-130
SE Kabel	-140
Holmen Wargön	-145
Duino	-80
Sappi Kangas	-210
Others (<60 kt)	-165

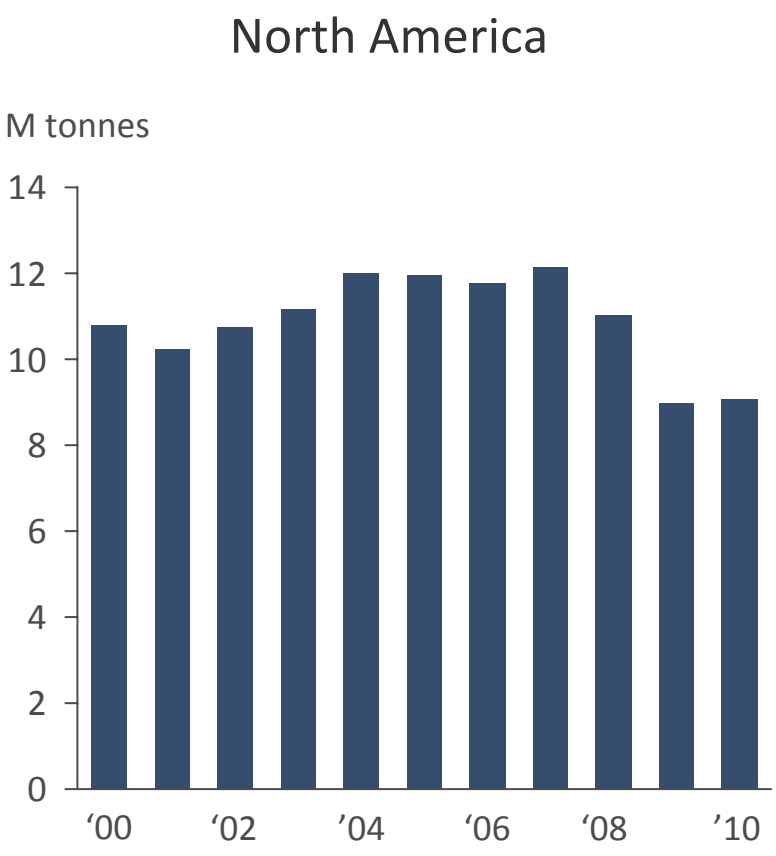
+410 kT

-2100 kT

Total -1690 kT

Demand Magazine 2000 – 2010

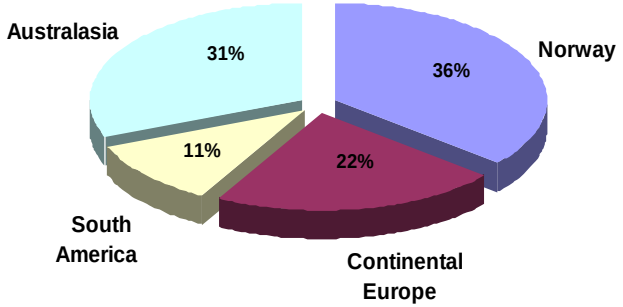




Source: PPPC

Wood

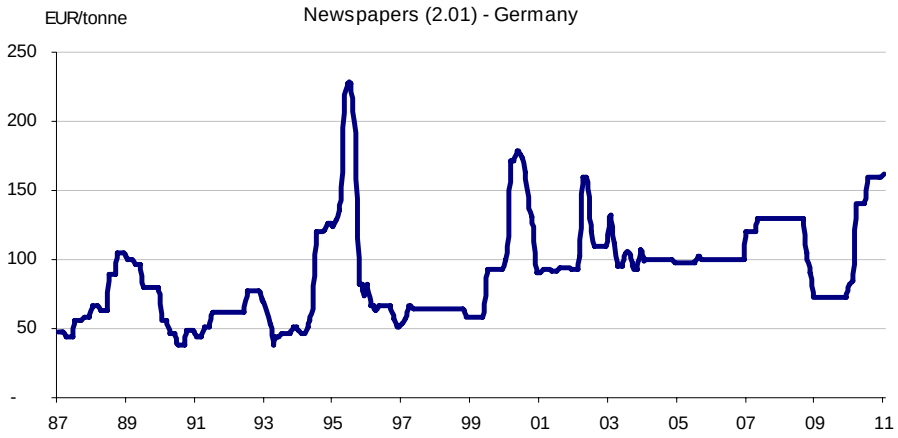
Wood consumption 2010 ~5.5 mill m^3



- The main raw material
- 12% of cash cost in 2010
- Pricing influenced by:
  - Bio energy demand
  - Pulp prices
  - Saw mill activity
- Increasing resource base
- Wood can become more attractive for newsprint compared to recovered paper if harvesting increases

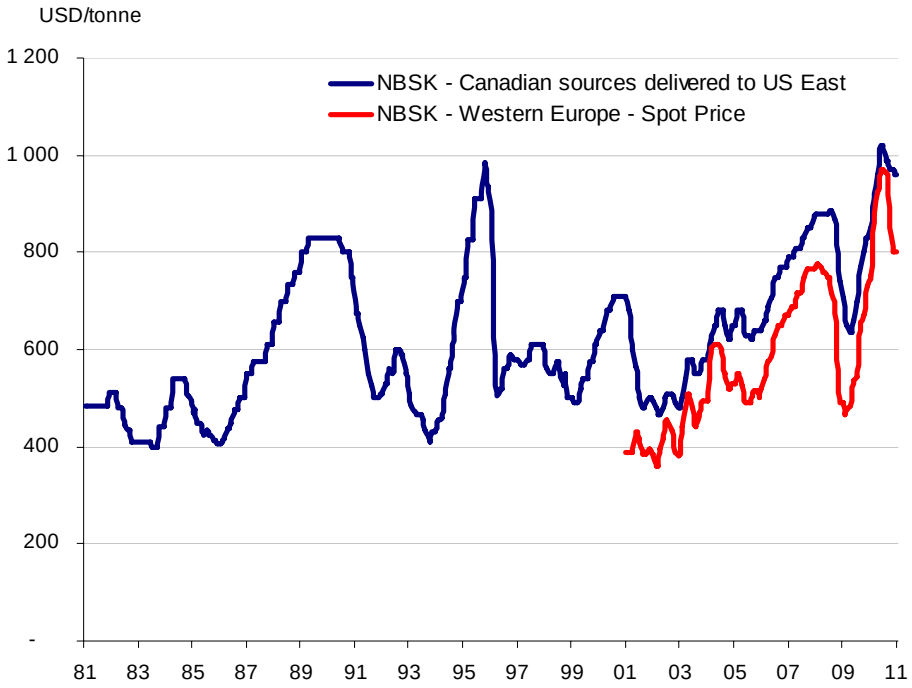
Recovered paper

- 11% of cash cost in 2010
- Volumes
  - Europe 1.2 mill tonnes
  - AA & Thailand 0.3 mill tonnes
- Tight market strongly influenced by demand from China and packaging

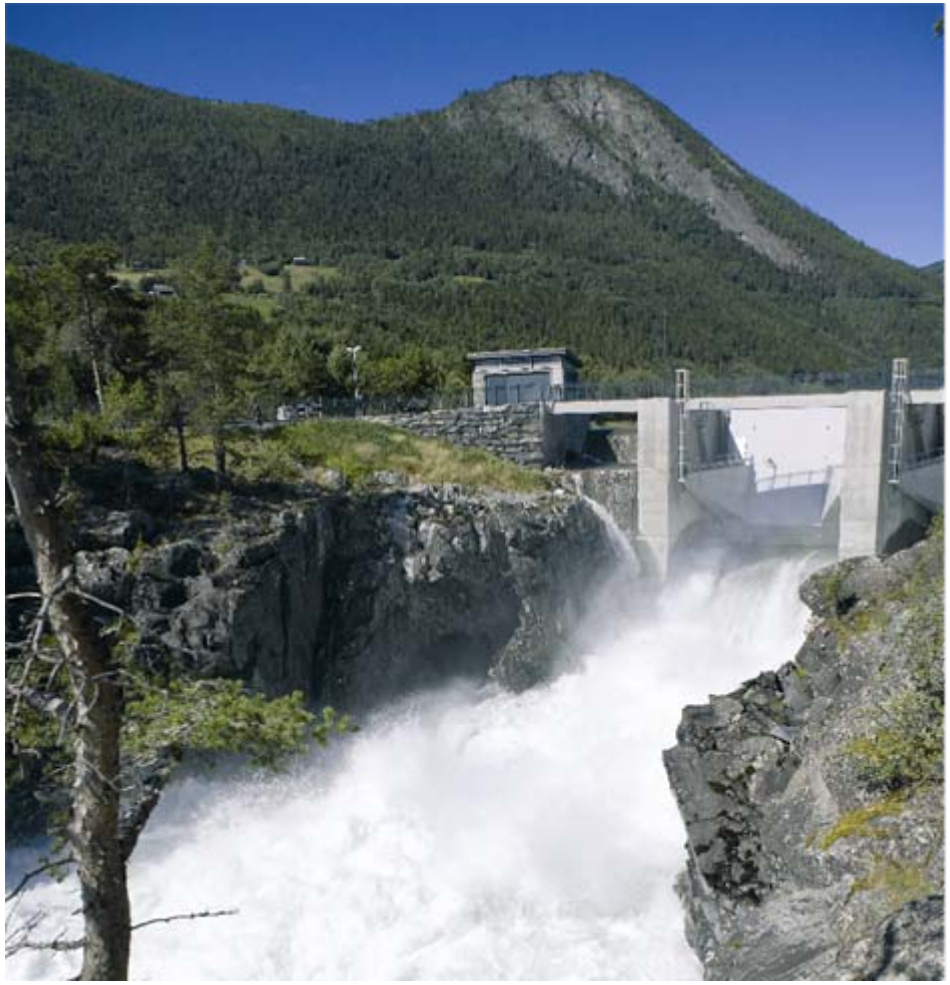


Market pulp

- 4% of cash cost in 2010
- Volume ~170k tonnes, mainly within magazine paper



Energy



- 23% of cash cost in 2010
- 2/3 electricity, mostly bought under long term contracts

Terry Hamilton - SVP European Operations

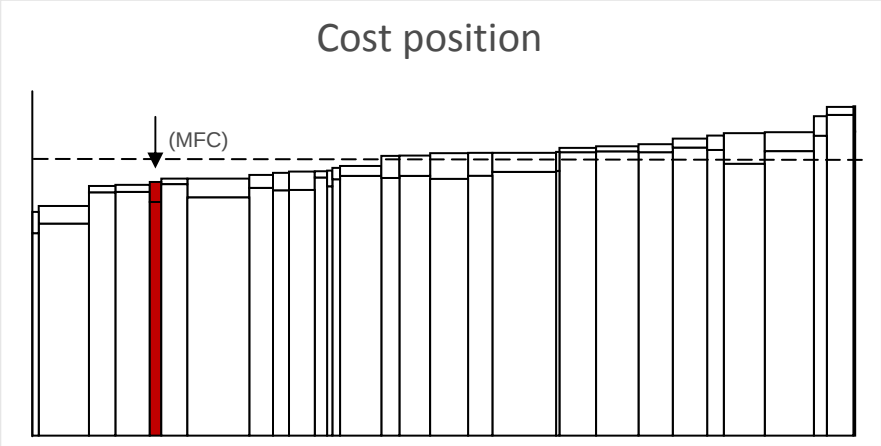
→ European Operations

Norske Skog

Norske Skog in Europe: a key market

- Seven mills – 70 % of total capacity
- 3.12 mill. tonnes capacity
  - Newsprint: 1.58 mill.tonnes
  - Magazine grades: 1.54 mill.tonnes
- World-class management systems
  - ISO 9001 and 14001 certified
  - Chain of Custody certification
  - Norske Skog Production System
  - Industry-leading health and safety performance
  - Strong commitment to continuous improvement

Follum (Norway)



Facts

- 290k tonnes of Improved News, Book Paper and CMR (MFC) capacity
- 340 employees

Strengths

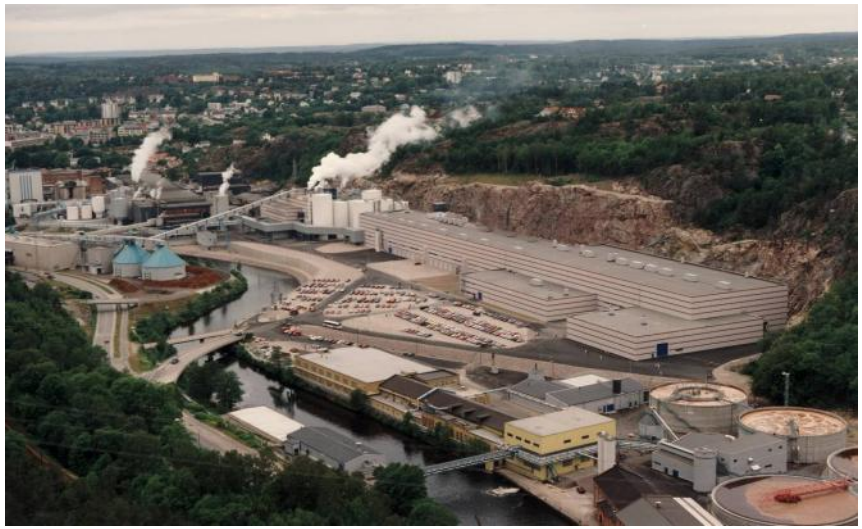
- Lowest cost fibre in Norway
- Long-term power contract covering 90+% of capacity
- New product development (book paper and MFC grades) with papermaking capabilities at site

Challenges

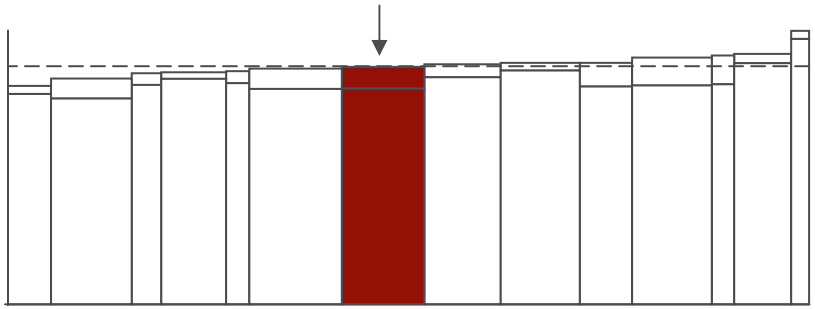
- Strong NOK
- Uncoated mechanical (improved news) cost position
- High fixed costs with small paper machines

European CMR cost curve (delivered Frankfurt) as of Q3-10 from RISI

Saugbrugs (Norway)



Cost position



Facts

- 545k tonnes of SC-A capacity
- 550 employees

Strengths

- High quality and productive machines with low technical age
- Superior paper quality and preferred supplier
- Long-term power contract covering 90+% of capacity

Challenges

- Strong NOK
- Central town location and limited access to harbour

European SC cost curve (delivered Frankfurt) as of Q3-10 from RISI

Walsum (Germany)

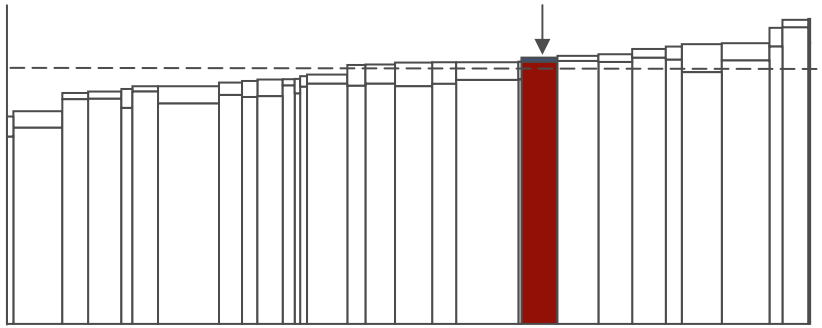
Facts

- 435k tonnes of CMR capacity
- 480 employees

Strengths

- Superior quality for most demanding printers
- Favourable site/location on Rhine River

Cost position

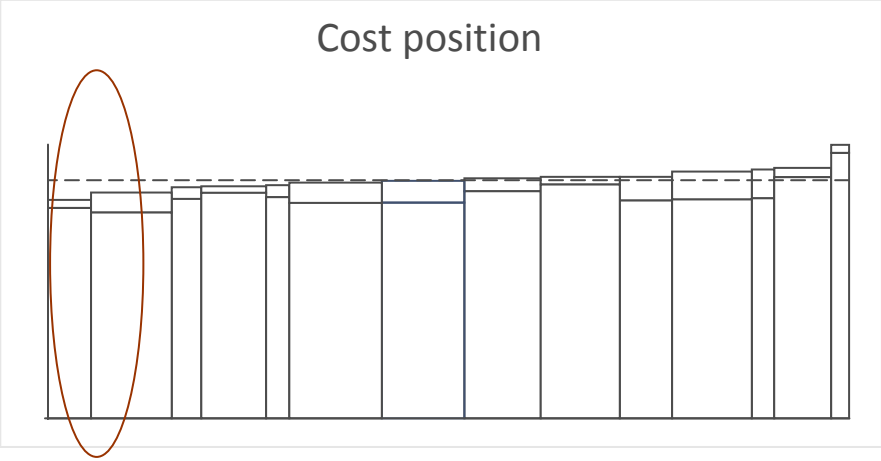


Challenges

- Mill configuration (off-line coating and supercalendering) adds cost
- Purchased steam and power
- Wood supply – availability of sawmill chips

European CMR cost curve (delivered Frankfurt) as of Q3-10 from RISI

Parenco (Netherlands)



European SC cost curve (delivered Frankfurt) as of Q3-10 from RISI

Facts

- 265k tonnes of Newsprint/Improved Newsprint and SC-B capacity
- 260 employees

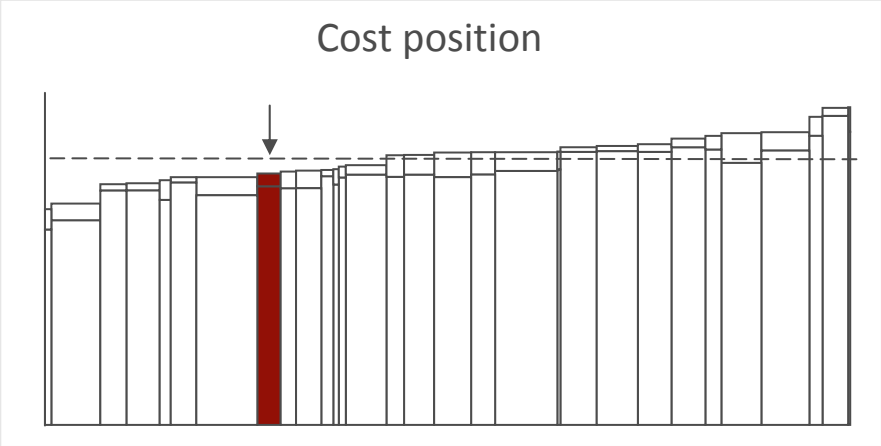
Strengths

- Favourable site/location on Rhine River
- Flexible papermaking configuration
- New SC grade is low cost and market acceptance is high
- Gas turbine provides power

Challenges

- 100% exposure to recovered fibre supply availability and quality
- High fixed costs and limited capacity with single PM configuration

Bruck (Austria)



Facts

- 405k tonnes of Newsprint and CMR capacity
- 430 employees

Strengths

- Highly regarded local supplier to “around the chimney” publishers and printers
- Low-cost on-machine CMR capabilities
- Own power plant

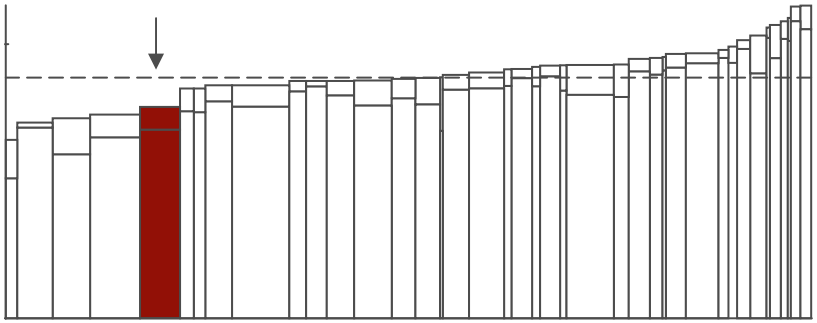
Challenges

- Scale and technical age of NP PM

European CMR cost curve (delivered Frankfurt) as of Q3-10 from RISI

Skogn (Norway)

Cost position



Facts

- 560k tonnes of newsprint capacity
- 450 employees

Strengths

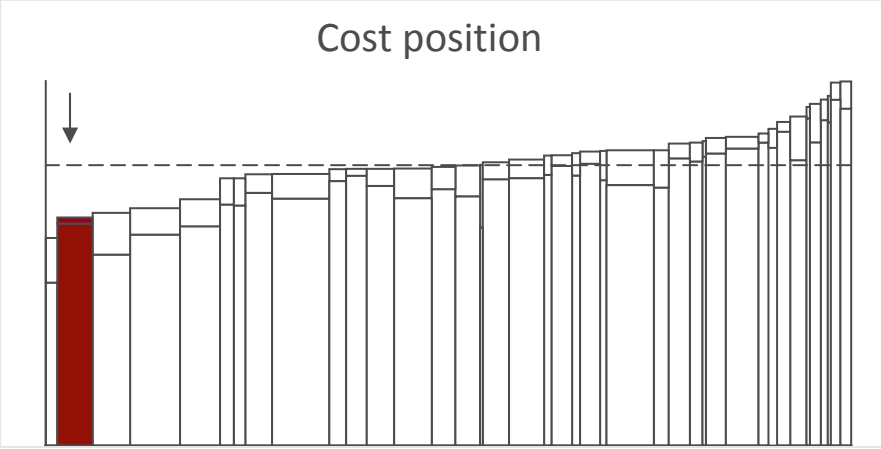
- Productive machines - low technical age
- Well-situated for ocean freight
- Long-term power contract covering about 70% of capacity
- Secure wood fibre supply

Challenges

- Strong NOK
  - Exposed to weak GBP with ~40% exports to the UK
- Recovered fibre supply and quality

European Newsprint cost curve (delivered Frankfurt) as of Q3-10 from RISI

Golbey (France)



Facts

- 620k tonnes of NP capacity
- 410 employees

Strengths

- High quality and productive machines with lowest technical age in Norske Skog
- Strong delivered cash cost position
- Favourable fibre supply conditions:
  - RP: long-term contracts with local communities
  - Wood: long-term contracts with sawmill partners
- Further opportunities to exploit site infrastructure

Challenges

- Maintain leading cost position
- Recovered paper supply and quality

European Newsprint cost curve (delivered Frankfurt) as of Q3-10 from RISI

Rune Gjessing
SVP Australasia, Asia & South America
→ Australasia

Norske Skog

Kellogg's
NUTRI-GRAIN

Norske Skog Australasia

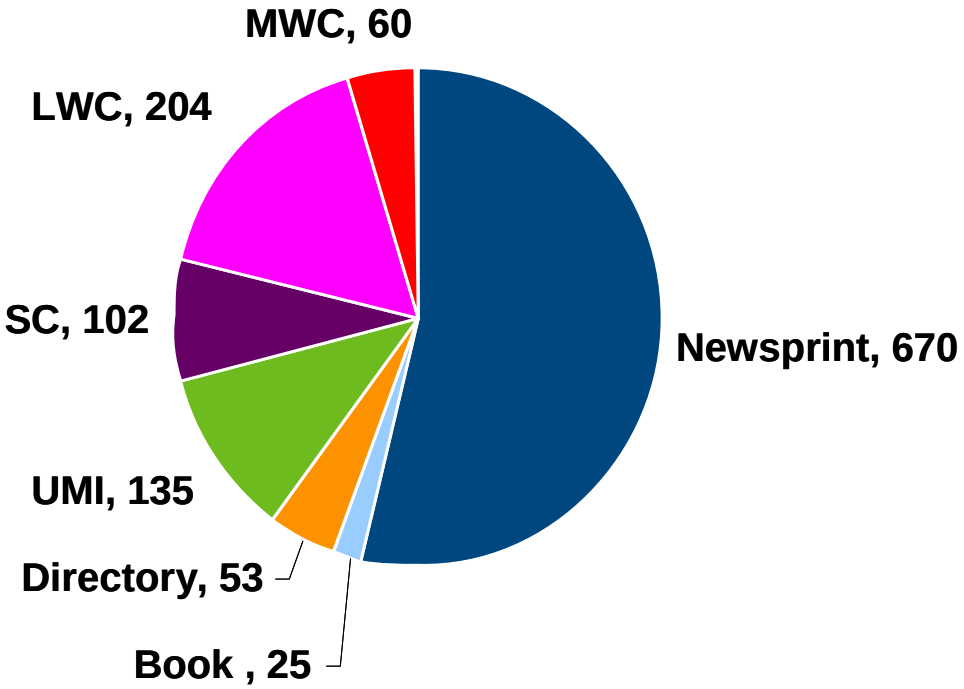
Corporate headquarters
Regional sales office
Paper mills
Owned plantations

Regional Highlights

Dominant market position	• Sole producer of newsprint and related grades in Australia and New Zealand • Supplied more than 90% of the newsprint for Australia and New Zealand's largest newspaper publishers for more than 10 years	• Strongly positioned against competing imports and potential market entrants
Stable Cash Flows	• High visibility over future capex obligations • High cash conversion	• Favourable commercial terms secure cash flow and minimal working capital requirements
Low Cost Producer	• Low cost plantation-based fibre supply arrangements • Long-term electricity supply contracts with rights to renewal • Cost-reduction capital projects	• Lowest delivered cost to Australian and New Zealand customers • A cost competitive supplier into Asia
Long-term Supply Contracts	• Relationships of up to 75 years with Australia and New Zealand's major news media companies	• Long term contracts provide scope to optimise the supply chain and develop innovative processes
Extensive integration with customers' businesses	• Perform an integral function within key customers' businesses – newsprint supply process managed on behalf of customers	• Integrated supply chain systems and processes • Customer-site product performance monitoring
Business development opportunities	• Well positioned to increase market share into growing Asian export markets • Opportunity to expand into market for magazine printing grades	• Opportunities in alternative energy market

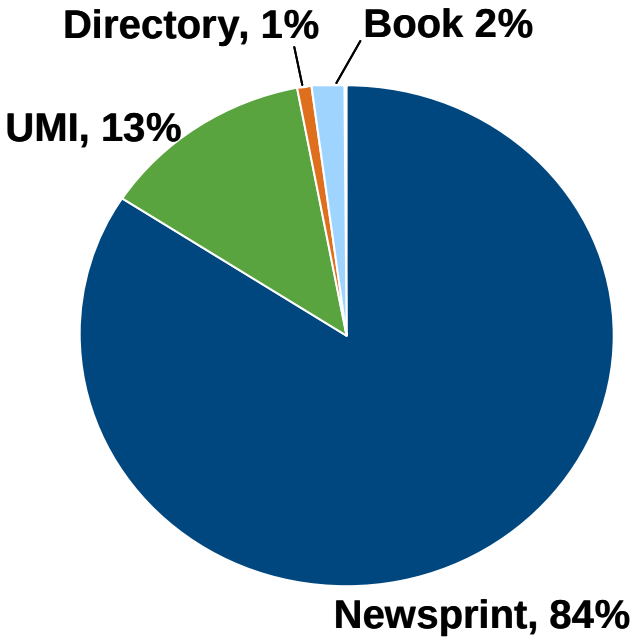
The very big picture:
Publication papers - 1.2+m tonnes in Australasia

Australasia total



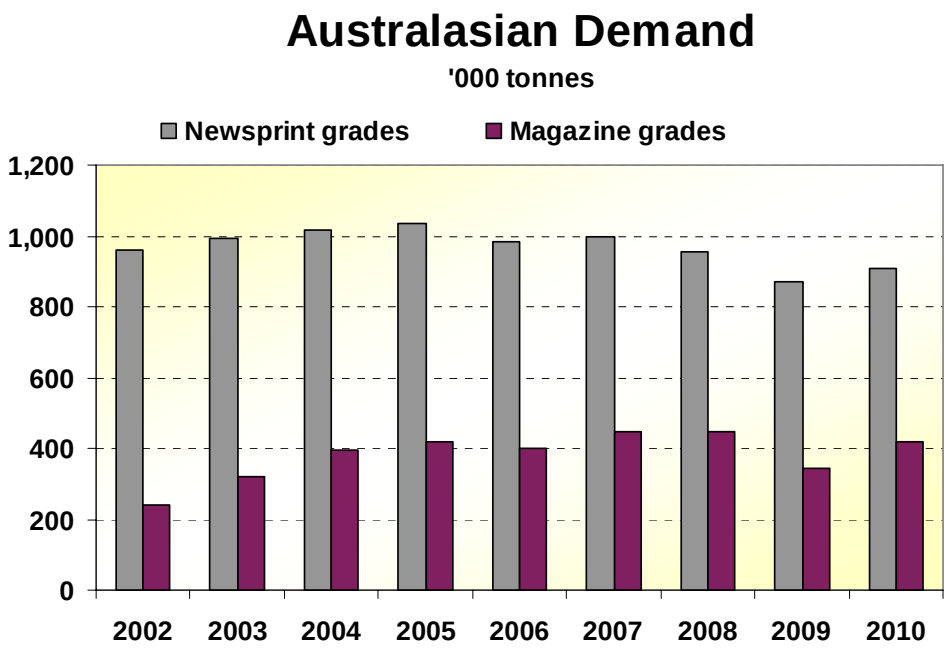
000 tonnes

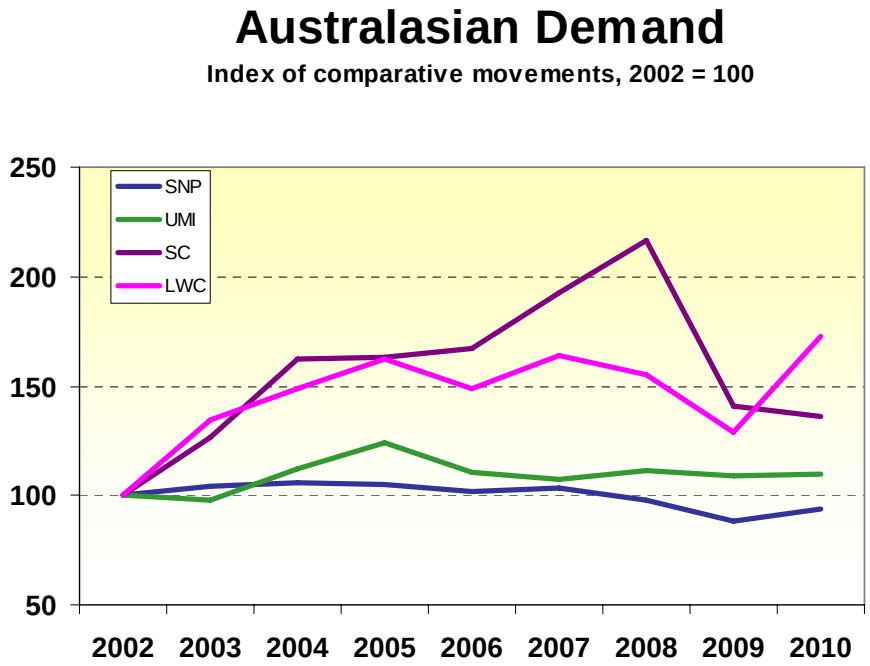
Norske Skog Sales



2009 estimates - ABS, SNZ, NSA

Improved Demand in 2010





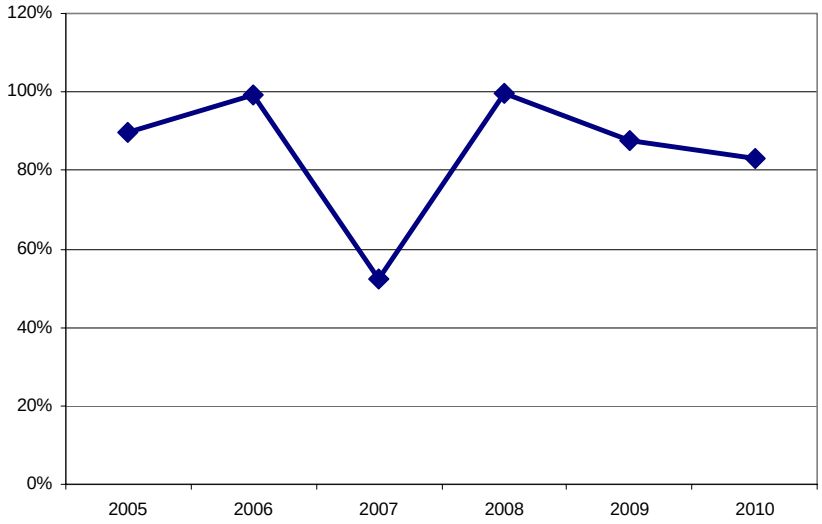
Stable cash flows

- **NSA's long term contracts deliver a strong revenue foundation, underpinning future cash flows**
  - High cash conversion

Highly predictable forecast capex profile provides strong cash conversion and free cash flow visibility

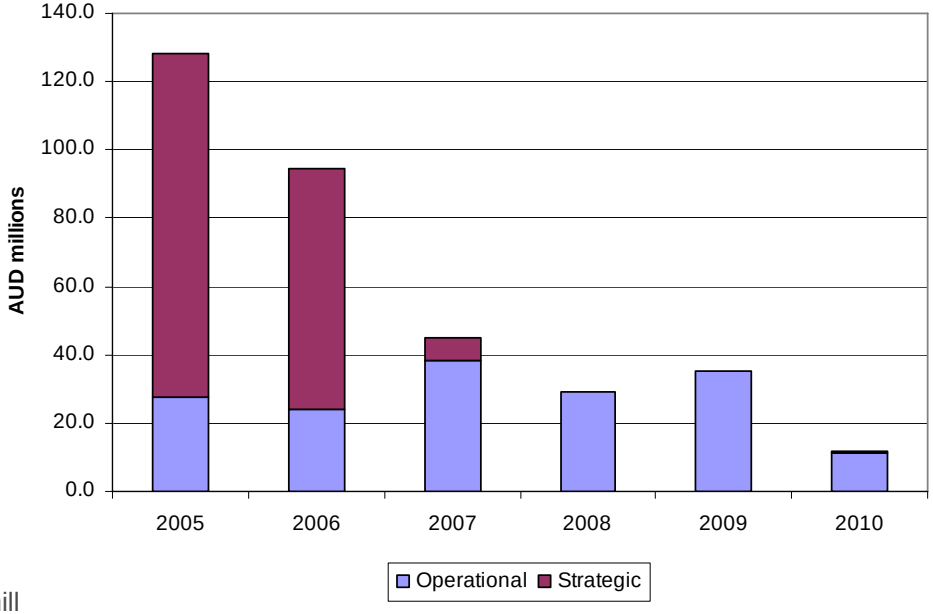
- Significant investment over the past five years minimises future growth capex obligations

NSA cash conversion



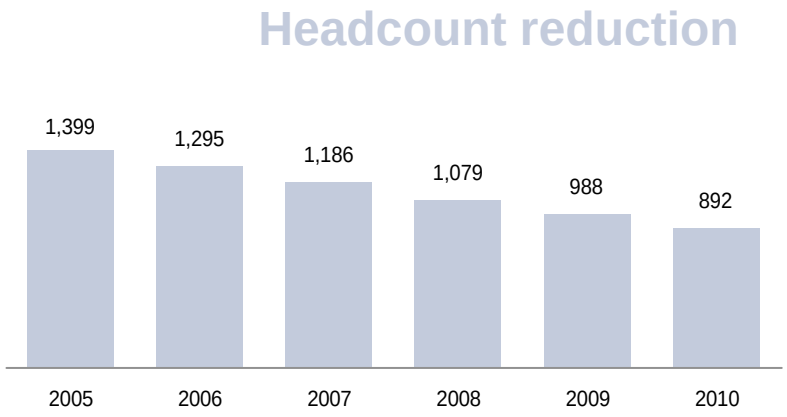
2007 increase in working capital with significant build in finished goods inventory as a precaution against possible industrial action at Tasman mill

NSA capital expenditure

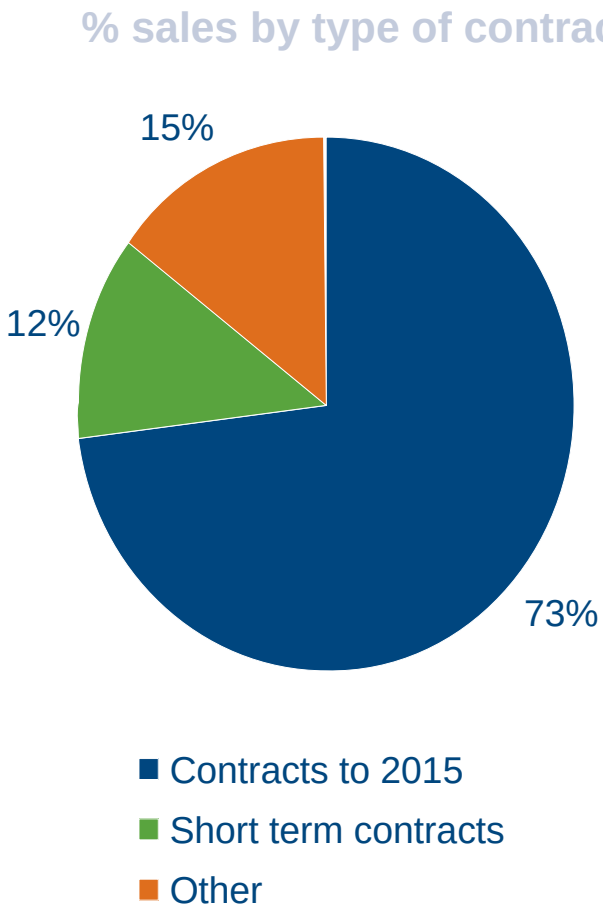


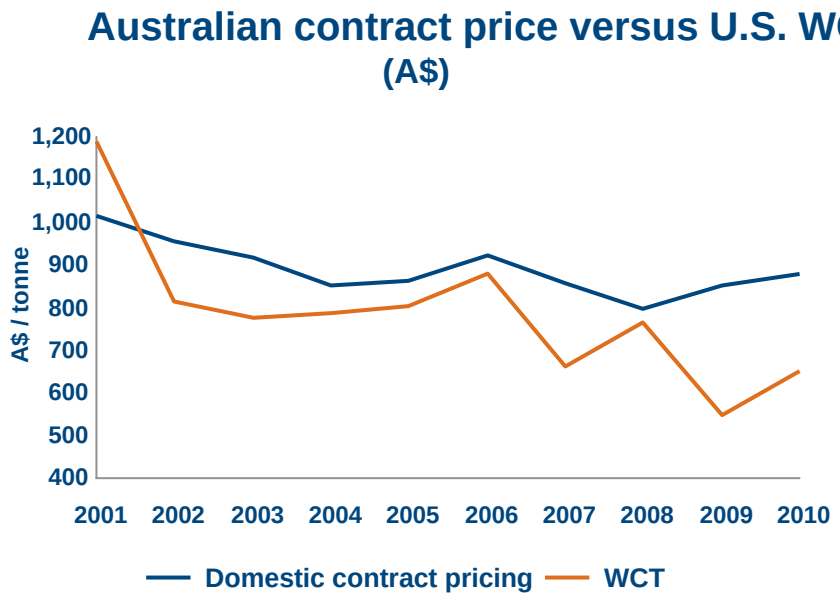
Lowest delivered cost producer to Australasia

- **Key reasons:**
  - High availability of low cost, plantation-based fibre supply arrangements on favourable terms
  - Competitors rely on sourcing recovered fibre at volatile market prices
  - NSA management has good track record of on-going cost cutting through:
    - FTE reduction
    - production management
    - incremental operational efficiencies
    - implementing cost-reduction capital projects
  - Long-term, attractive electricity supply contracts
  - Long term logistical arrangements with customers and existing distribution infrastructure



Long term contracts key



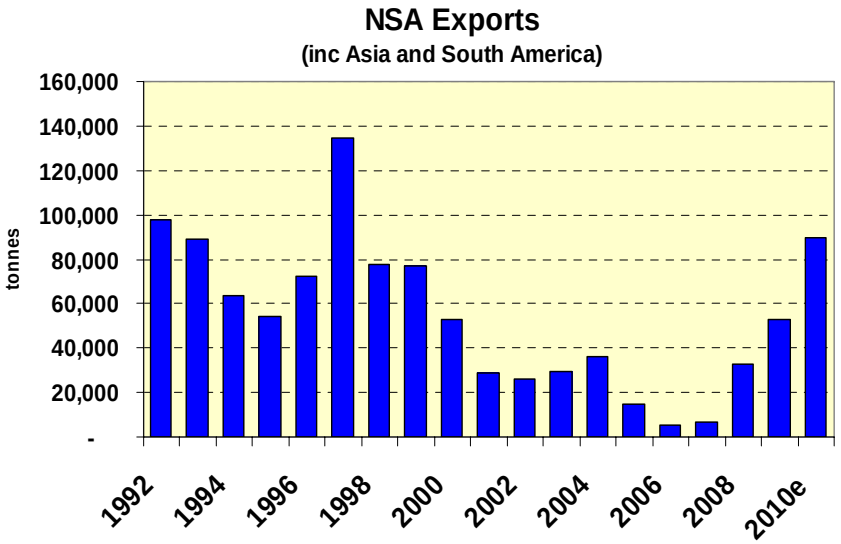


Highly Integrated with Customers

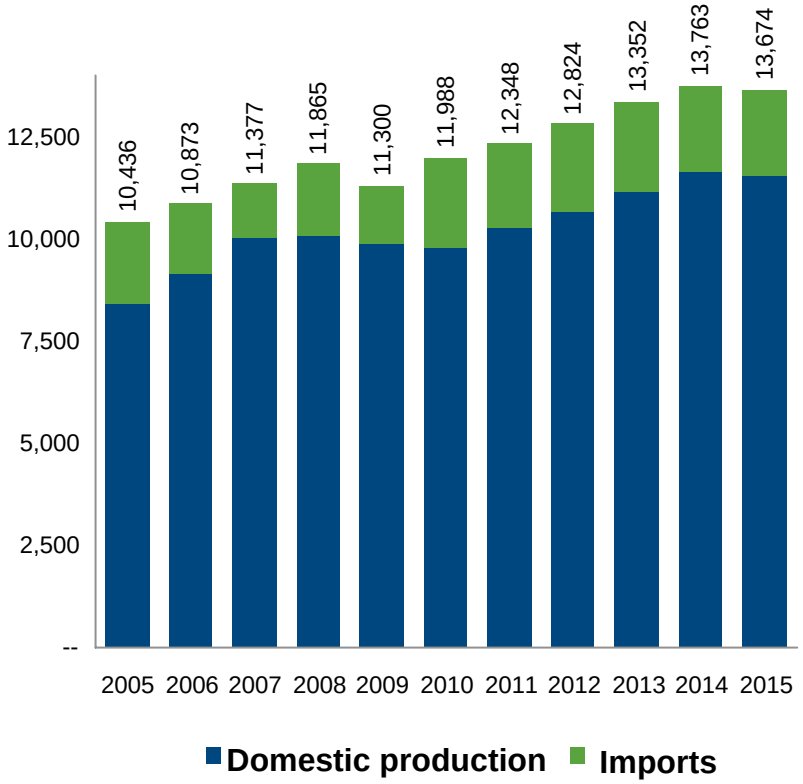
Local sales team	• Sales teams in most major centres to maintain consistent and high levels of service to key customers
National footprint	• Access to national network allows NSA transportation and delivery systems to service all regions of Australia
Logistics	• Existing delivery infrastructure allows regular large scale delivery to customers – no need to warehouse large inventories
Logistics support	• Manage large part of customers' supply chain through proprietary technology and integrated with customer logistics systems

Asian growth opportunity

Sales track record

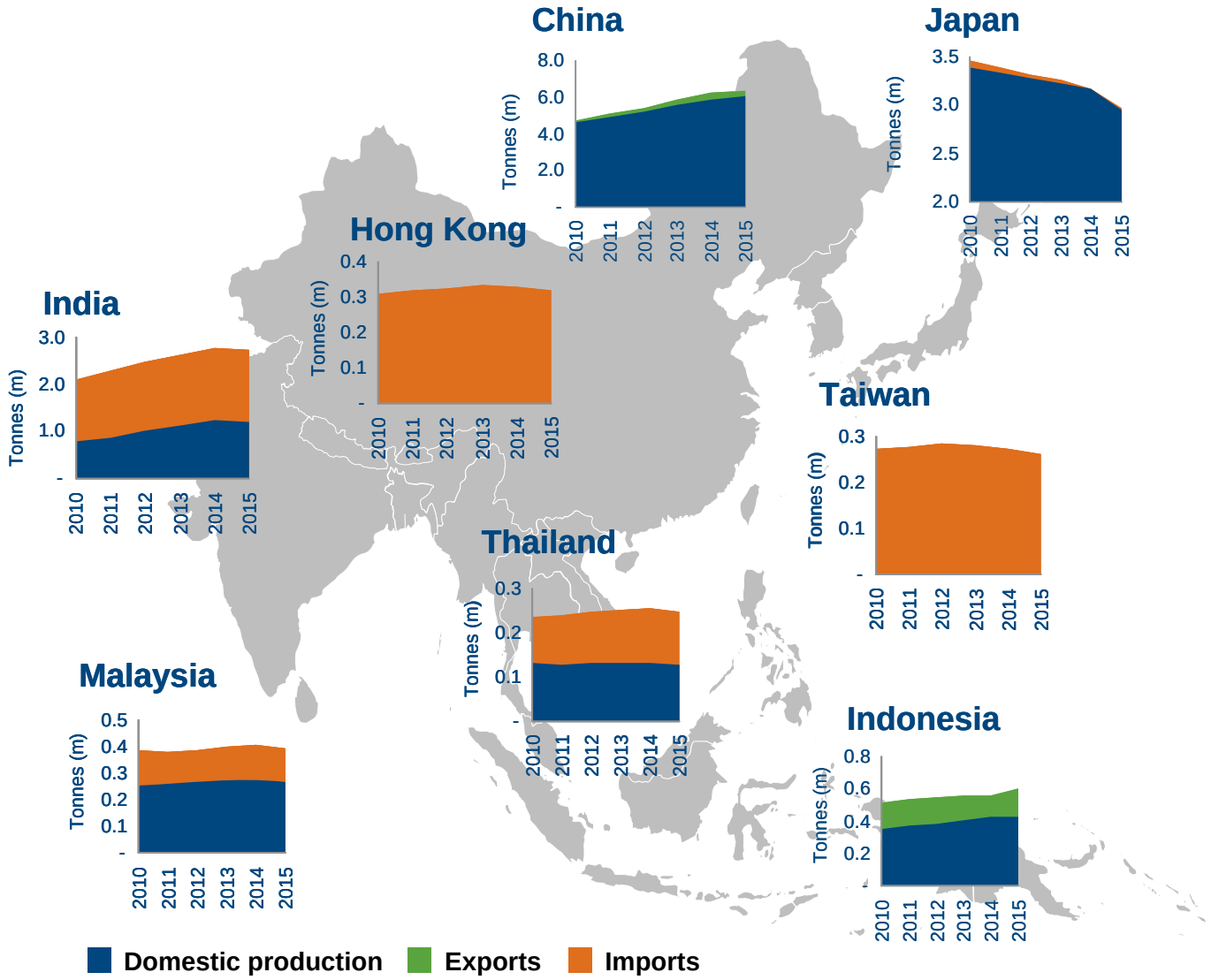


Long term market



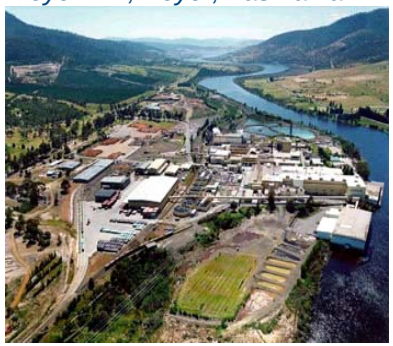
Sources: RISI Asian Graphic Paper Forecast

Asian region ongoing net importer



Source: RISI Asian Graphic Paper Forecast

Attractive assets

Mill	Overview	Capacity/specifications	Fibre supply and Energy
Albury Mill, Albury, NSW	• Single machine mill established in 1981 – *full rebuild in 2006* • Four lines of thermo mechanical pulping • 222 FTEs	• Production capacity of 270 ktpa • Maximum speed of 1,600 metres per minute • Maximum customer trim of 8.505 metres • Produces standard newsprint 42, 45 and 48.8 gsm basis weight grade	• Wood / fibre – c.430 ktpa – c.57% contracted medium term • Recovered paper – c.110 ktpa – c.93% contracted medium term • Energy – contract pricing through to 2022
Boyer Mill, Boyer, Tasmania 	• Two machine mill – *PM2 built in 1952, rebuild in 1991* – *PM3 commence production in 1969, major rebuild in 1989 and efficiency rebuild in 1996* • Three lines of thermo mechanical pulping • 294 FTEs	• Production capacity of 267 ktpa • Maximum mill speed of 1,200 metres per minute (PM3) • Maximum customer trim of 6.66 metres (PM2 and PM3) • Produces all standard newsprint, improved newsprint, book paper and directory grades	• Wood / fibre – c.600 ktpa – c.60% from owned plantations • Kraft – minimal kraft input – provided under long term contract • Energy – 825MW/hr per year usage – 1000 ktpa coal – Hydro based green energy
Tasman Mill, Kawerau, NZ	• Two machine mill – *PM2 built in 1962, rebuild in 2005* – *PM3 commenced production in 1975, major rebuild in 2005* • Two lines of refiner mechanical pulping • Two lines of thermo mechanical pulping • 307 FTEs	• Production capacity of 310 ktpa • Maximum mill speed of 1,160 metres per minute (PM3) • Maximum customer trim of 6.80 metres (PM3) • Produces all standard newsprint, improved newsprint, book paper and directory grades	• Wood / fibre – c.750 ktpa – c.60% provided under long term contract • Energy – long term contract in place for geothermal-based green electricity

Strong environmental credentials

Renewable fibre	• Sustainable plantation softwood solely used – no native timber • Extensive use of forest industry waste and by-product – thinnings – sawmill chips • All three mills are Chain of Custody certified
Recycling	• Key element in customer partnership • 78% Australian recovery rate at world best practice (70%+ in NZ) • Albury recycles over 100,000 tonnes of recovered paper per annum
Carbon footprint	• 25% reduction in carbon emissions intensity since 1990 • Commitment to further 25% reduction by 2020 • Tasman mill has onsite geothermal power plant and is unique in the world using solely geothermal steam for paper drying
Water	• Albury mill is world's best practice in water use per tonne paper produced • Albury introduced a salt interception scheme to remove twice as much salt from the Murray river as it discharges

Growth Opportunities

	Opportunity / timing	Overview	Benefits
Asian sales market	• Secondary market opportunity • Present	• Growth of Asian regional demand for newsprint represents a sizeable market • Existing supply / demand imbalance in Asia is forecast to grow • NSA is a low cost, virgin-based supplier into Asia	• NSA maintains strong sales and marketing capabilities in the region through the wholly owned subsidiary, PanAsia Paper Trading Pty Limited
Magazine printing grades	• Growth market opportunity • 2012-2013	• Conversion of a paper machine to offer SC or LWC print capability • No existing domestic production of magazine grades	• Transfer of existing mechanical printing grades capability • Access to the growing market for magazine grades
Alternative energy opportunities	• New business division • 2011-2015	Multiple opportunities under evaluation • Production of torrefied pellets • Cogen and geothermal energy projects	• Biomass handling experience and existing infrastructure • Scale and experience in driving thermal efficiency

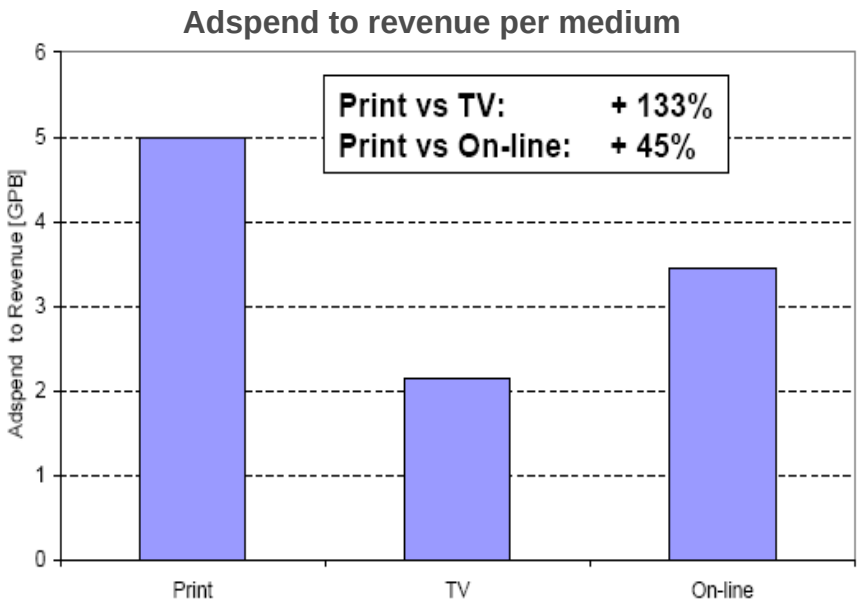
Gaute H. Andreassen - SVP Strategy

→ Pursuing a sounder industry structure

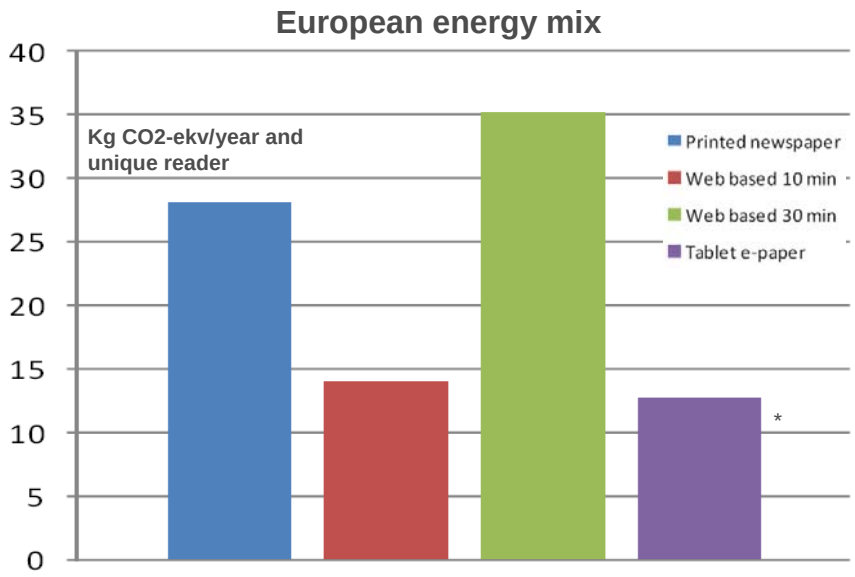
Norske Skog

Paper is a well-positioned product

Advertising strength



An environmental product

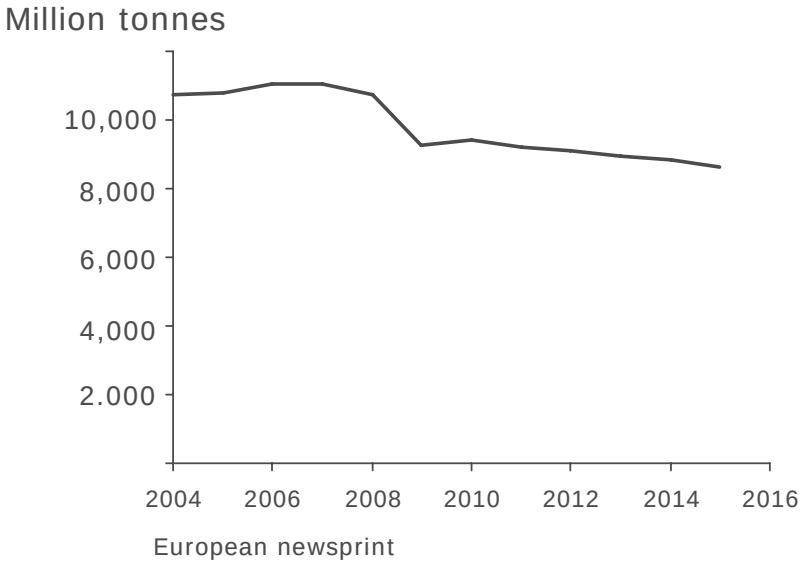


Source: Risi, Moberg et al 2007

* Newspaper read on electronic reading devises such as Ipad, Kindle, iRex iLiad etc.

It is possible to make money in declining market

Newsprint demand will fall…



Other industries have managed

Ferry industry

European fertilizer

Steel

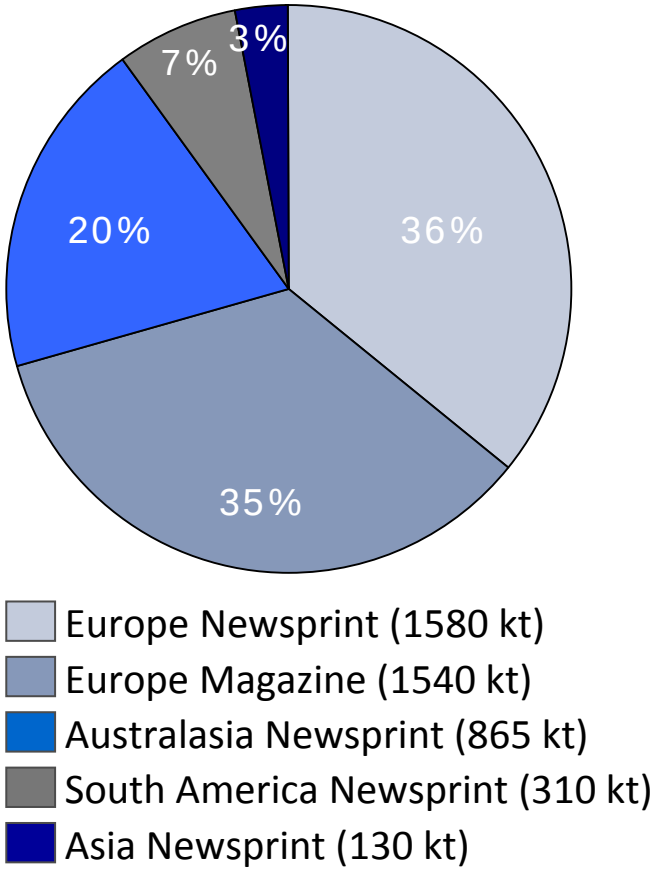
Success criteria

- Fewer players
- Stronger balance sheets
- Strong industry leadership

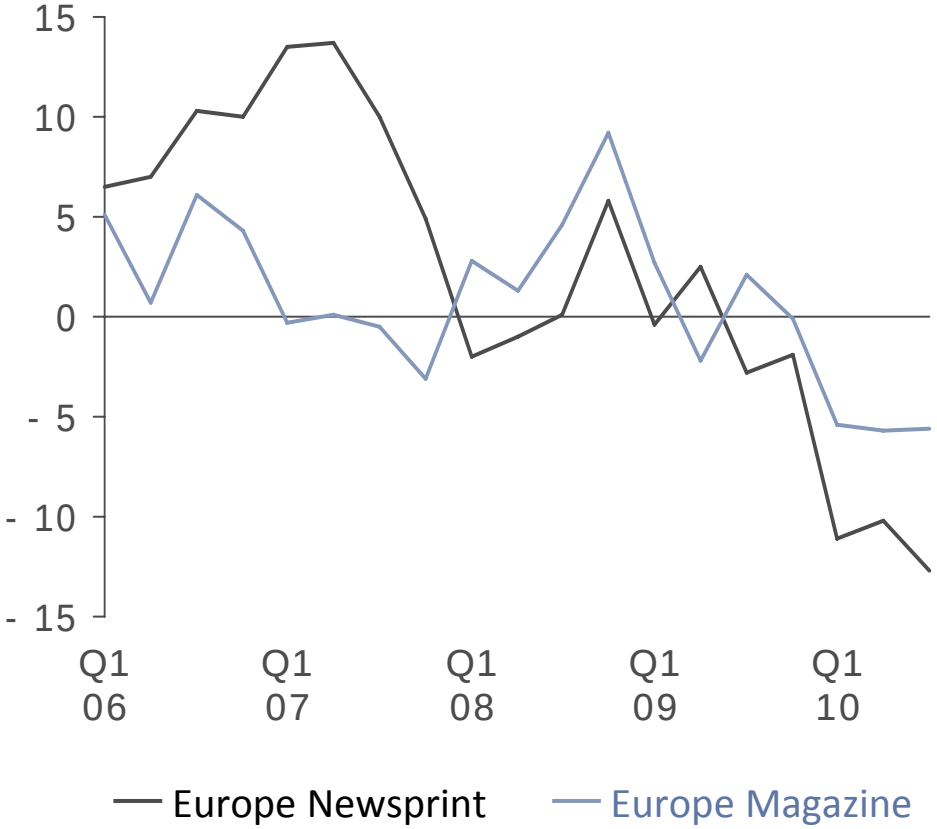
Source: PPPC, RISI

70% of Norske Skog's production capacity in Europe

Total 4.4 Mt production capacity



EBIT margins Norske Skog Europe



Motivation to work for sustainable industry solution

Norske Skog

- Focused paper company
- NOK 20b invested in publication paper assets
- Debt situation requires actions and speed

Competitors

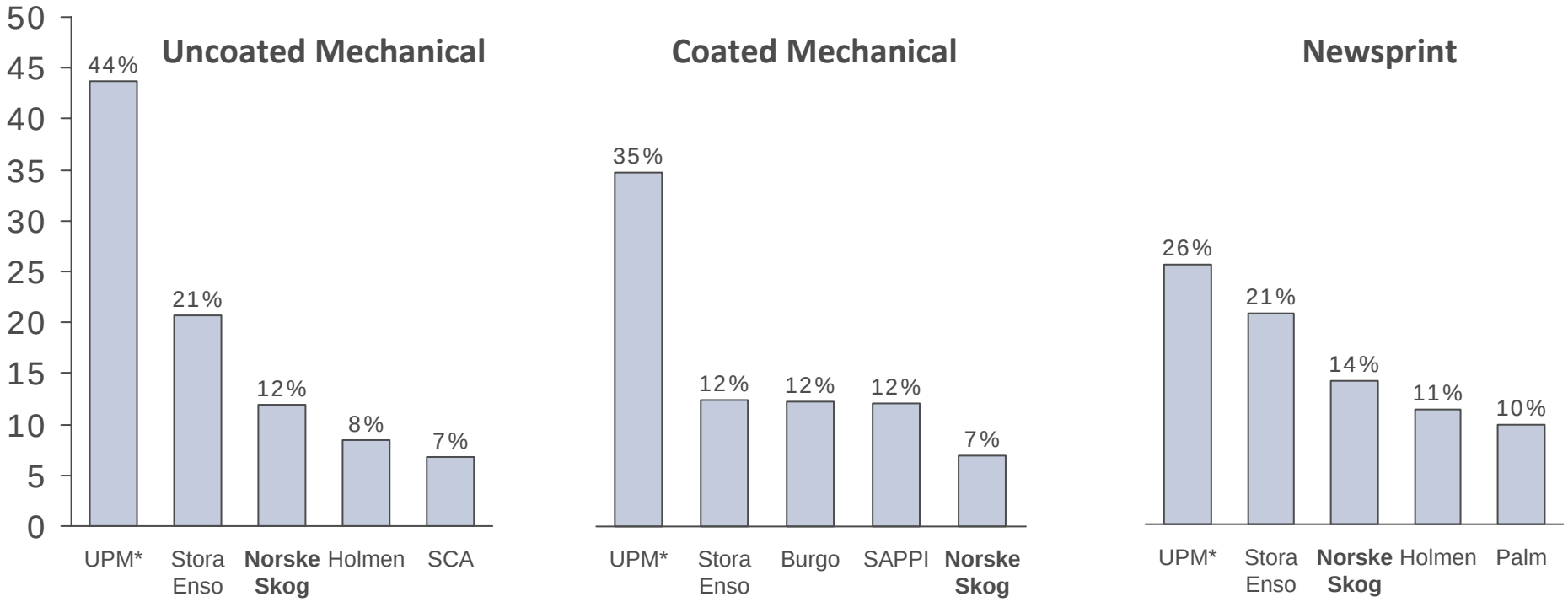
- Gain margins throughout the value chain
- Investment grade rating gives flexibility

	Fiber	Energy	Pulp	Paper
Norske Skog	☐	☐	☐	■
UPM	■	■	■	■
STORAENSO	■	■	■	■
HOLMEN	■	■	☐	■

Newsprint needs consolidation

- Myllykoski acquisition makes UPM clear market leader in magazine
- Not so in newsprint

Capacity share (%)
Western Europe

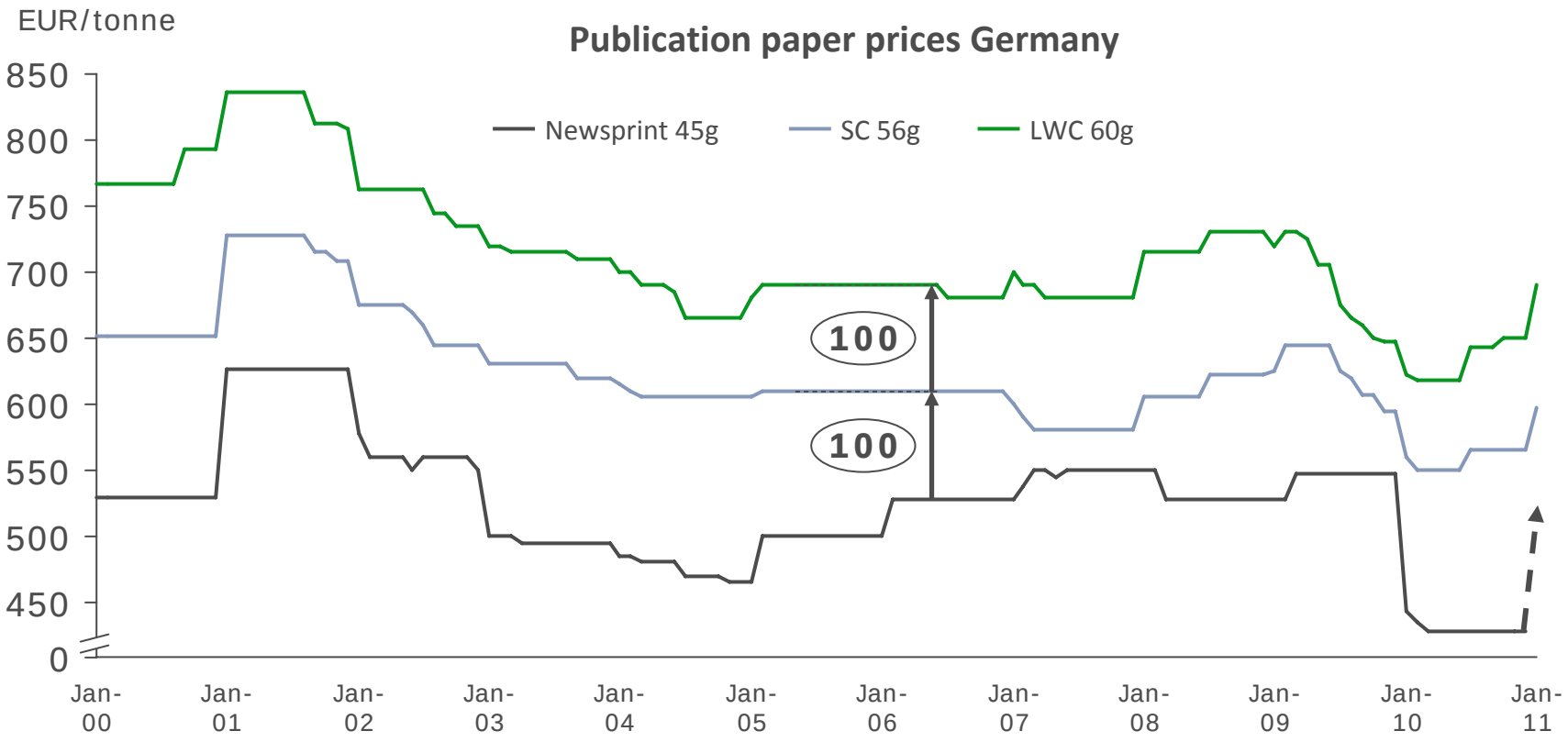


* UPM inclusive Myllykoski

Source: RISI

European publication paper has common destiny

Newsprint constitutes the "floor" in publication paper pricing



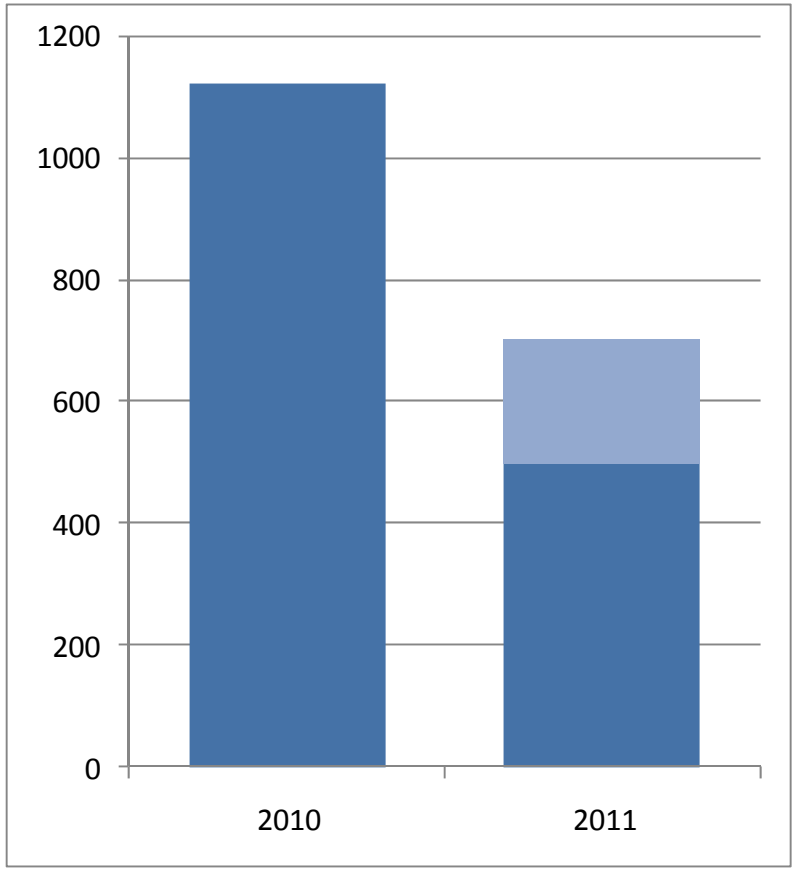
Source: RISI

Streamlining company structure and asset portfolio

- Legal clean up/company restructuring
- Objectives:
  - Stronger operational focus
  - Divest non-core assets
  - Simplify organisation and save costs
  - Prepare for various restructuring scenarios and more efficient industry structures

Sale of non-core assets

- 2010: NOK 1.1 billion
  - Surplus energy
  - Norwegian property
  - Shareholdings and property RoW
- 2011: NOK 0.5-0.7 billion
  - Brazil forest
  - Various properties, etc.



Sven Ombudstvedt President and CEO

→ Closing remarks

Norske Skog

Q & A

Norske Skog