PREFACE

Helsinki/London November 2017

GLOBAL SAWN SOFTWOOD MARKETS - DEMAND HOT SPOTS AND FUTURE SUPPLY POTENTIAL

The global market developments have varied between different regions of the world. Growth in Asia, and especially in China, has had a huge impact on the global demand and trade, whereas the demand in North America and Europe is still below the level prior to the financial crisis. The increasing overseas trade has enabled European and North American sawmills to increase production.

The global demand is expected to grow, driven mainly by China, but recovery is also expected to continue in Europe and North America. With the new, record high demand, the sawmill industry is facing new challenges. Where will the wood supply come from, and at what cost? How much capacity is needed and where?

In the light of these developments, Pöyry offers the first edition of the Global Sawn Softwood Markets multi-client report, which analyses the future demand globally in different regions and also the future supply potential for the growing markets. In this report, Pöyry addresses the basic fundamentals of the sawnwood markets: demand, supply, trade, state of the industry and wood supply.

We trust that this report will be an invaluable source of reference for the sawmill industry to assist in decision making and strategic planning, as well as for forest investors and other participants in the value chain.

Pöyry Management Consulting
GEOGRAPHICAL SCOPE

- Individual countries listed are profiled in Annex I

North America
  - Canada
  - USA

Western Europe
  - Austria
  - Germany
  - France
  - Netherlands
  - Italy

Eastern Europe
  - Czechia
  - Latvia

Middle East and North Africa
  - Algeria
  - Egypt
  - Saudi Arabia

Nordics
  - Finland
  - Sweden

Asia
  - China
  - India
  - Japan
  - South Korea

Latin America
  - Chile

Oceania
  - New Zealand
WHY SAWN SOFTWOOD?

Background

- Sawn softwood is an established market product facing different challenges in various markets around the World. Ranging from the most basic rough sawn products to value added speciality products each market can unveil new opportunities.

- Many of our clients whether in Russia or Australia share similar challenges such as rising production costs and low product prices. Some are close to end use markets but with expensive saw logs and high production costs, while others are blessed with an abundant supply of cheap raw material yet far away from key markets.

- With market growth slowing down in China and picking up in the USA the question arises how both of these markets can be supplied simultaneously alongside any other emerging opportunities. What production capacities can be mobilised in Russia and other core production regions?

- In the light of these developments, Pöyry offers the first strategic review of the future of the Global Sawn Softwood Markets. In this forward looking report Pöyry addresses all the fundamental issues of sawn softwood markets - demand, drivers, growth, trends, costs and profitability. Its conclusions will assist the key decision markers in the value chain in making strategic decisions relating to the direction of their company’s development and competitive position.

Key questions

- What is the current demand and supply for sawn softwood globally by region and how will it develop to 2022?

- How do the changing global market impact the product trends?

- Where are the attractive regions and what is driving the demand?

- Who makes money and who does not? What gross margins have been achieved in the industry and where?

- Where is the sawlog potential and who has the supply potential?

- What are the investment needs? Where is the room for new production capacity?

- How does the global market balance look like in the future?
The Global Sawn Softwood Report stands out as a unique report that helps with decision-making allowing company leaders to raise strategic thinking and planning to a higher level by:

- allowing companies to anticipate the future opportunities in various geographies
- providing decision support by identifying market trends for different products
- allowing companies to anticipate the impact on their operations if raw material supply changes

Scenario based outlook

- How can the global and regional demand change in different market scenarios?
- Which regions/countries are expected to supply the changing demand?
  - Availability of sawlogs
  - Investment needs in new capacity
- How are the global trade flows expected to change under the market scenarios.

Insights for decisions

- For associations, it provides a decision support tool that allows associations to understand how global and regional market developments would affect their members locally.
- For sawmillers, this is the solution that determines the need of decisions and strategy for many years into the future.
- For equipment manufacturers, the report allows them to identify the future geographies and market potential for new investments.
- For the timberland owners, this report highlights the potential geographies for growing demand for sawlogs.
REPORT CONTENTS

1 Preface 5

2 Scope and definitions 6
   Geographical scope 7
   Definitions and abbreviations 8

3 Executive summary 9

4 Global overview 19

5 Demand and supply development 2006-2016 29
   Europe 30
      Western Europe 37
      Eastern Europe 42
      Nordics 47
   Russia 52
   North America 59
   Latin America 68
   Middle East & North Africa 76
   Asia 83
      China 89
      Japan 94
      South Korea 99
      India 104
      Oceania 109

6 Demand outlook to 2022 by region 118

7 State of the industry 139
   Global overview 140
   Changes in cost competitiveness 151
   Industry structure and profitability 157

8 Wood Supply 171
   Global wood supply, trade and costs 172
   Pulpwood and residue 216
   Incremental cost of wood 219

9 Conclusions 224

10 Global overview: Engineered wood products and modified wood 233

11 Annexes 242
   Major supply countries 243
   Major consumption countries 257
   Demand drivers by region 278
   Unit costs in sawmilling 292
KEY FINDINGS

- The sawn softwood demand in the main regions has grown by 71 million m$^3$ since 2010. Most of the growth has taken place in North America and Asia. The demand in both Europe and North America is still clearly below the level prior to the financial crisis. The increasing demand in Asia has been fulfilled mainly by imports, which have increased by 65% in just six years to 37 million m$^3$.

- Both Europe and Russia have increased production by 8 million m$^3$, mainly by growing export demand. The increased production of 24 million m$^3$ in North America has been largely delivered to local markets.

- Depending on macroeconomic outlook (Pöyry’s low, central and high scenarios), global demand is expected to grow significantly until 2022.

- The main end use segment for sawn softwood is the construction sector, making up around two thirds of total demand globally in 2016. However, other end uses such as joinery, furniture and packaging are expected to grow faster due to overall faster growth of demand in regions where use of wood in construction is lower.

- Russian industry has been most profitable during the recent years, with average EBIT margin around 20% in 2016, and average EBIT margin in Eastern Europe and North America was close to 10%. In Central Europe and the Nordics, the costs are high and the profitability is low.

- Softwood rich Northern Hemisphere has a significant potential to increase softwood log harvesting by 2022. Of the estimated, resource driven potential to increase harvesting, which amounts to over 320 million m$^3$/a, the share of Northern Hemisphere is about 90% (i.e. some 300 million m$^3$). From log supply perspective, Southern Hemisphere is far less attractive sawnwood production or sourcing platform.

- Despite available supply of logs in coming years, the cost will increase due to market dynamics and infrastructural, logistics and harvesting challenges.

- Increase in demand by 2022 in major supply regions (Europe, Russia and North America) accounts for 40% of the global demand, whereas their share of future supply is expected to be around 90%. North America and Russia will have a key role in future supply, but significant investments in capacity are required.

- Only North America and Russia will be able to increase exports to satisfy growing import demand from Asian markets and record high demand and increasing costs are expected to put pressure on sawn softwood prices in the future.
ORDER FORM

GLOBAL SAWN SOFTWOOD MARKETS
2017 Edition
To order please complete and return by email to Antti.Koskinen@poyry.com

q Standard price (pdf file): EUR 9,900 (excl. VAT)

Workshop available upon request (travel cost will be charged)

Contact:
Antti Koskinen
Jaakonkatu 3, FI-01621 Vantaa, Finland
tel. +358 50 543 5262
Antti.Koskinen@poyry.com

Name
Position
Company
Address
Country
Phone
Fax
Email
VAT Number
The leading advisor to the world’s energy, forest and bio-based industries. Clients choose us for the sharpness of our insight, deep industry expertise and proven track record – because results count.

Pöyry Management Consulting