

PÖYRY INSIGHT - 2018 EDITION



World Fibre Outlook up to 2030

Reshaping the Fibre Planet

Pöyry has published long-term forecasts of global pulp and recovered paper supply and demand since mid-1980s at three-year intervals. Over all these years, Pöyry's World Fibre Outlook has become an essential reference report for all business participants, including pulp and paper companies, various suppliers and solution providers, investors, financiers, institutions, pulp traders, logistics companies and other interest groups. Our next update of the study will be published in December 2018.

World Fibre Outlook up to 2030 provides in-depth analysis and long-term forecasts of major economic and market trends affecting the demand, supply and pricing of papermaking fibre and specialty pulps in all key regions of the world. The main focus of the study will be on pulp and recovered paper demand and changes in papermaking furnish patterns, supply, trade and pricing. Specific issues to be dealt with include the role of new constraints on global fibre trade, new innovative ways to overcome these constraints, role of substitution, future of specialty pulps and new drivers of price formation, to mention but a few.

STRONG TAILWIND FOR VIRGIN FIBRE

The pulp industry has maintained a strong tailwind for a few years now, and for many reasons. Steady growth of the global tissue paper market, exacerbated by tightening supply of recovered paper, dramatic changes in China's papermaking fibre furnish, and most recently, the strong global economic recovery along with the enforced recyclables ban in China have all contributed to the present state of the pulp market.

At the moment, the fundamentals of the papermaking and specialty pulp markets look solid – earnings keep growing and market imbalances have not distorted the

overall positive sentiment of the industry. The macroeconomic environment is still extremely positive and investor optimism remains high, especially in the West, but the economic horizon is getting cloudier with various risks rising, including trade conflicts between the US and China, Brexit, economic instability in some of the leading emerging markets, etc. Risks of deteriorating market balances for the pulp industry have not materialized due to still growing demand and coincidental and intentional downtime.

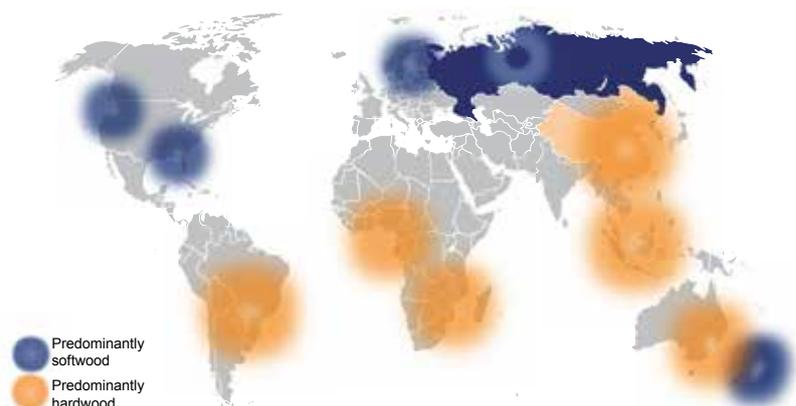
CHINA IS SWAYING THE GLOBAL FIBRE BALANCES

China, which is the world's biggest importer of solid waste has stopped accepting any

recycled plastic and unsorted recovered paper from abroad. By banning waste imports, China is hoping to improve the quality of imported recyclables. Imports of mixed paper have been forbidden since the beginning of 2018, and an all-out ban will be enforced in 2020.

This will have enormous implications on global fibre balances. Out of the 115 million tons of recovered paper collected and 46 million tons exported from North America and Europe in 2017, some 21 million tons were shipped to China. First, where will this surplus be used? Second, what will happen to the Chinese paper industry – mainly recycled containerboard and cartonboard mills - as domestic collection rates cannot

FIGURE 1 - GEOGRAPHIC MISMATCH IN VIRGIN FIBRE AVAILABILITY AND DEMAND



SPECIAL TOPICS:

- China and changing recovered paper trade dynamics
- The future role of bamboo pulp
- Textile opportunities for man-made cellulosic fibre
- Untapped fibre baskets? How and where to source growing needs for fibre?
- Addressing the issue of marine litter & plastic substitution
- Are the pulp price cycles broken? New avenues for price forecasting

be substantially increased? Will they run out of fibre? Third, how is the Chinese paper industry going to respond to this challenge – via investment in containerboard or OCC pulp mills outside China, or would this lead to increased demand for OCC and mixed paper by non-Chinese players aiming to serve the Chinese paperboard markets from North America, Europe or Southeast Asian platforms? Fourth, would all this trigger furnish changes towards virgin fiber pulps inside and outside China?

HOW TO SUPPLY GROWING NEEDS FOR FIBRE?

While the consumption of fossil-based materials has continued to rapidly pick up globally – plastics in particular – environmental concerns have emerged and brought the opportunities of circular bio-based economy into discussion. Products based on renewable raw materials are increasingly perceived as a more sustainable solution to substitute fossil-based plastics, fuels and chemicals. Even though the market

entrance of novel bio-products has taken longer than expected, major upside potential for both conventional and new forest industry products exists. What are the bio-products and applications with near- and medium-term potential?

Wood supply from plantation forests will provide an increasing share of the overall fibre supply in the future. What is the role of various geographies in the supply of and demand for plantation-grown wood in the future? What are the pulpwood surplus and deficit regions, and how is this affecting the future pulp supply volumes? And what is the role of natural forests in the global pulpwood market?

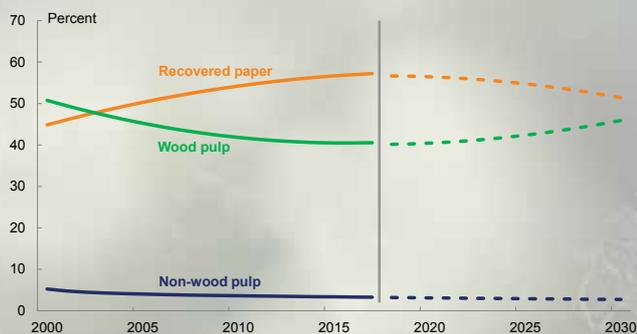
Concerns about climate change and sustainability have also spurred interest in non-wood fibre. The long-term trend in utilization of non-wood fibre raw materials has been downward, but there is renewed interest in annual crops as raw material for pulp and paper use, e.g. moulded fibre products, tissue, packaging. What will be the role of non-wood fibres in the global fibre markets in the future?

DELIVERABLES OF THE STUDY

The Pöyry Insight study *World Fibre Outlook up to 2030* addresses these and many other significant market issues that are of current strategic interest for the business participants. As in Pöyry's previous global fibre market studies, the scope is global, providing demand forecasts from 2017 through 2030 for ten product areas and ten geographic regions. The study contains descriptions of key drivers which are common across many product areas, or particularly relevant to specific papermaking and specialty fibre grades. The forthcoming study also has new elements, such as boxed illustrations and case studies of selected topics.

Besides printed reports and pdf files, deliverables include a customized video conference/webcast and discussion with the idea of bringing the study findings, impacts and implications closer to issues revolving around your business. The webcast will be hosted by the authors of the study, supported by fibre market and pulp industry specialists.

FIGURE 2 - SHARE OF WOOD PULP TURNING UP?



Mr. Timo Suhonen

Email: timo.suhonen@poyry.com
Tel. +358 10 33 22600

Mr. Tomi Amberla

Email: tomi.amberla@poyry.com
Tel. +358 10 33 23627

Pöyry Management Consulting Oy

P.O.Box 4, Jaakonkatu 3
FI-01621 VANTAA, Finland
Tel. +358 10 3311

Photo: iStock / Getty Images Plus

www.poyry.com

Consulting. Engineering. Projects. Operations.

We serve clients across power generation, transmission & distribution, forest industry, biorefining & chemicals, mining & metals, infrastructure and water & environment. Together, we deliver smart solutions and work with the latest digital innovations.

5500 experts. 40 countries. 115 offices.

In 2018 Pöyry is proud to be celebrating its 60th Anniversary, together with employees, clients and partners.

CONTENTS

Analysis and synthesis

- Driving forces of the pulp industry
 - Paper and paperboard supply/demand trends by region
 - Papermaking fibre furnish developments
 - Overview of global fibre resources – wood, non-wood and recovered paper raw materials
 - Technological trends
- Demand, supply and trade of papermaking fibre pulps
 - Total and market pulps; recovered paper through 2030
 - Pulp industry structure; key players, industry concentration, mill technology & asset metrics
 - Main trade flows between world regions
- Price trends – selected wood pulps and recovered paper grades
- End uses and quality issues
- Global outlook for specialty pulps (dissolving, fluff)

Product areas

Papermaking fibre

- Mechanical wood pulp
- Semi-chemical wood pulp
- Chemical wood pulps
 - BSKP
 - BHKP
 - UKP
 - Sulphite pulps

- Non-wood pulps
- Recovered paper
- Dissolving and other high-alpha pulps
- Fluff pulp

Geographic coverage

- North America
- Western Europe
- Eastern Europe
- Middle East
- Japan
- China
- Rest of Asia
- Latin America
- Africa
- Oceania

Deliverables

- Executive report
- Statistical annexes
- Memory stick enclosed with the printed report
- 1-2 hour customized video conference/webcast & discussion

ORDER FORM

World Fibre Outlook up to 2030

2018 EDITION

To order, please fill in the order form and send to

Ms. Maria Ekroth

Tel: +358 10 33 49204
Fax: +358 10 33 21031
Email: maria.ekroth@poyry.com

THANK YOU FOR ORDERING!



ORDER FORM

World Fibre Outlook up to 2030

2018 EDITION

The report will be published in December 2018

TO ORDER PLEASE COMPLETE AND RETURN THE BELOW ORDER FORM

- World Fibre Outlook up to 2030 (1 hard copy and pdf file) EUR 9 500 (excl. VAT)
- Additional printed copies EUR 200/copy
- 1-2 hour video conference & discussion

METHOD OF PAYMENT AND DELIVERY:

- Please invoice me.

Direct bank transfer:

Nordea Bank Finland Plc.
Satamaradankatu 5 B
FI-00020 Nordea Finland
Account name: Pöyry Management Consulting Oy
Account number: 166030-81839 (EUR)
Swift code: NDEAFIHH
IBAN: FI6916603000081839

An invoice will be issued on order, and the report dispatched on receipt of payment.

Name: _____	Position: _____
Company: _____	Phone: _____
Address: _____	e-mail: _____
City: _____	VAT No: _____
Postal code: _____	Signature: _____
Country: _____	

Return to:

Ms. Maria Ekroth

Tel: +358 10 33 49204
Fax: +358 10 33 21031
Email: maria.ekroth@poyry.com

Pöyry Management Consulting Oy
P.O.Box 4, Jaakonkatu 3
FI-01621 VANTAA, Finland

