

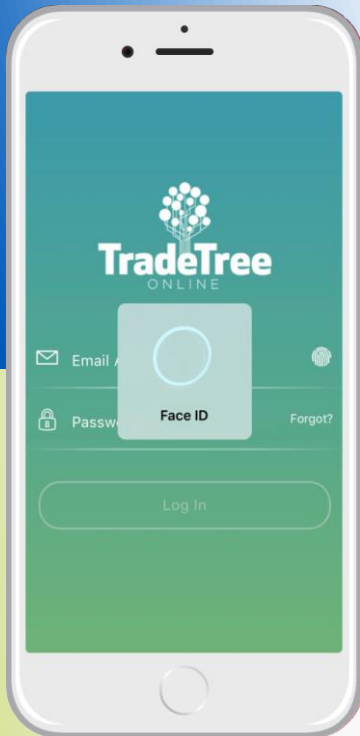


# Is China's imported pulp growth era over?

Gabriel Fernandez-Azzato  
May 2022

# TTO BMA





## Market Intelligence, Analysis, & Consulting

- Market Pulp Monthly reports and videos
- Pulp price forecasts
- Pulp market update webinars
- Pulp market, economic and FX data via TTO app
- Management consulting



## Pricing

- Open-market net-price indices
- Based on actual transactions
- Mobile app delivering content
- Price indices include: **NBSK, BHK, SBSK, UKP, Fluff pulp, BCTMP and Dissolving pulp**



**14<sup>th</sup> 5-year plan (FYP) aims to increase China's self-sufficiency in pulp/paper**

**2025/35 targets set for pulp/paper output and RCP use**

**Massive investment in pulp and paper projects have been and continue to be announced:**

- 60+ MM of paper/board
- 25+ MM of pulp

IS CHINA'S IMPORTED PULP GROWTH ERA OVER?  
The Potential Market Impact of Massive Planned Additions to  
China's Pulp Capacity Through 2025

January 2022

BMA



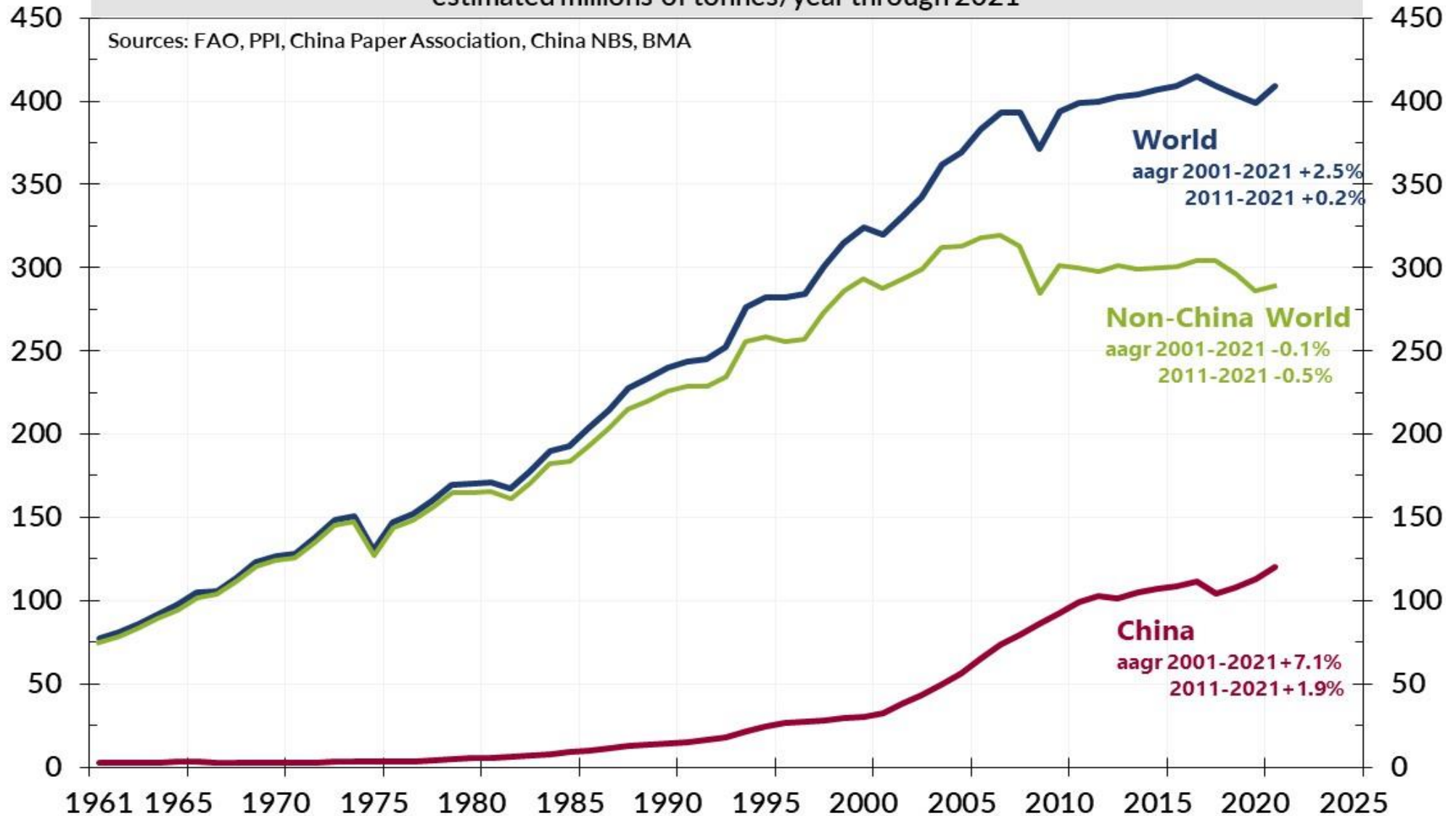
STRICTLY CONFIDENTIAL & PROPRIETARY

## What impact could that have on China's demand growth for imported pulp?

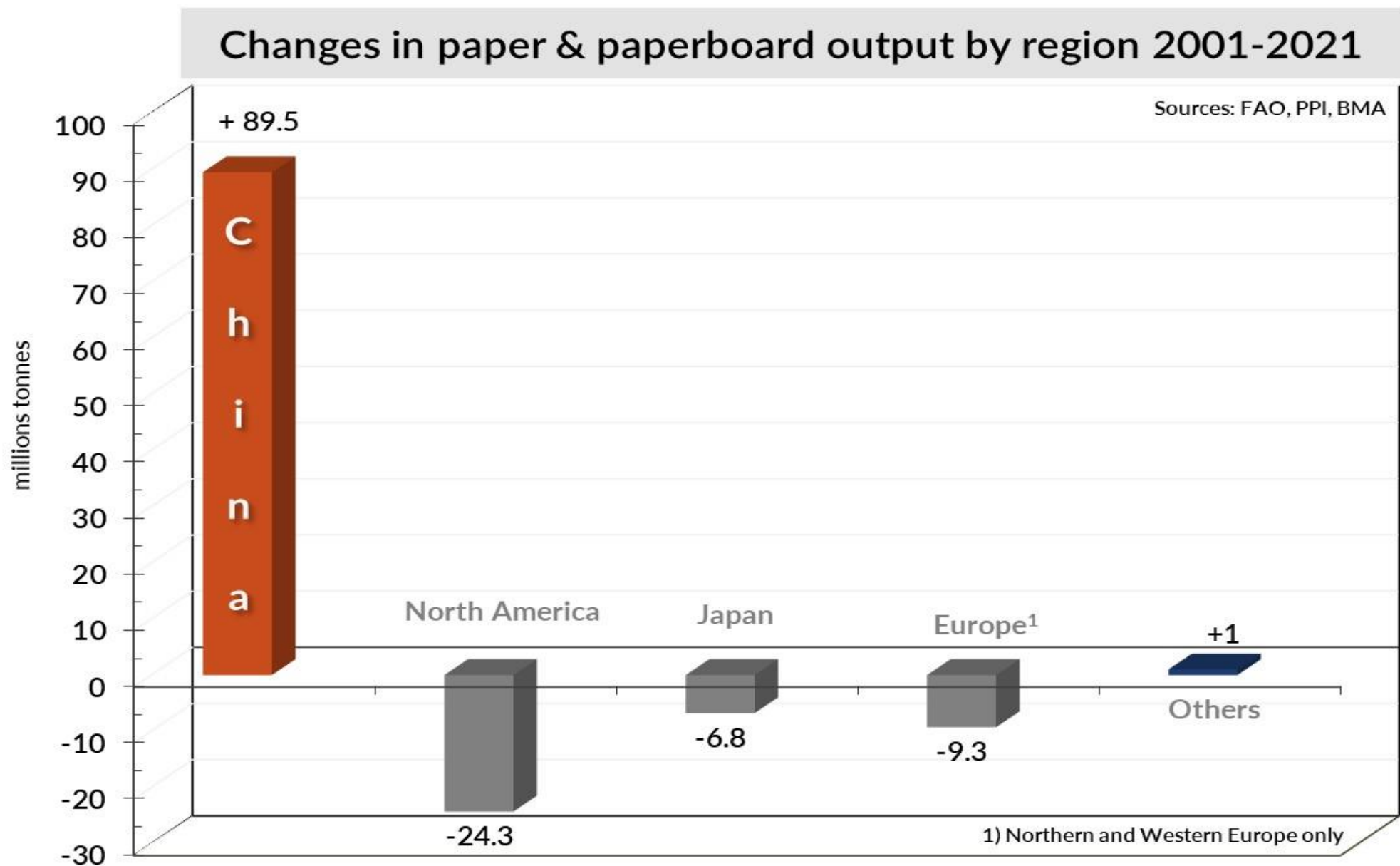
# World paper output growth since 2001 has been in China

## World Paper & Paperboard Output estimated millions of tonnes/year through 2021

Sources: FAO, PPI, China Paper Association, China NBS, BMA

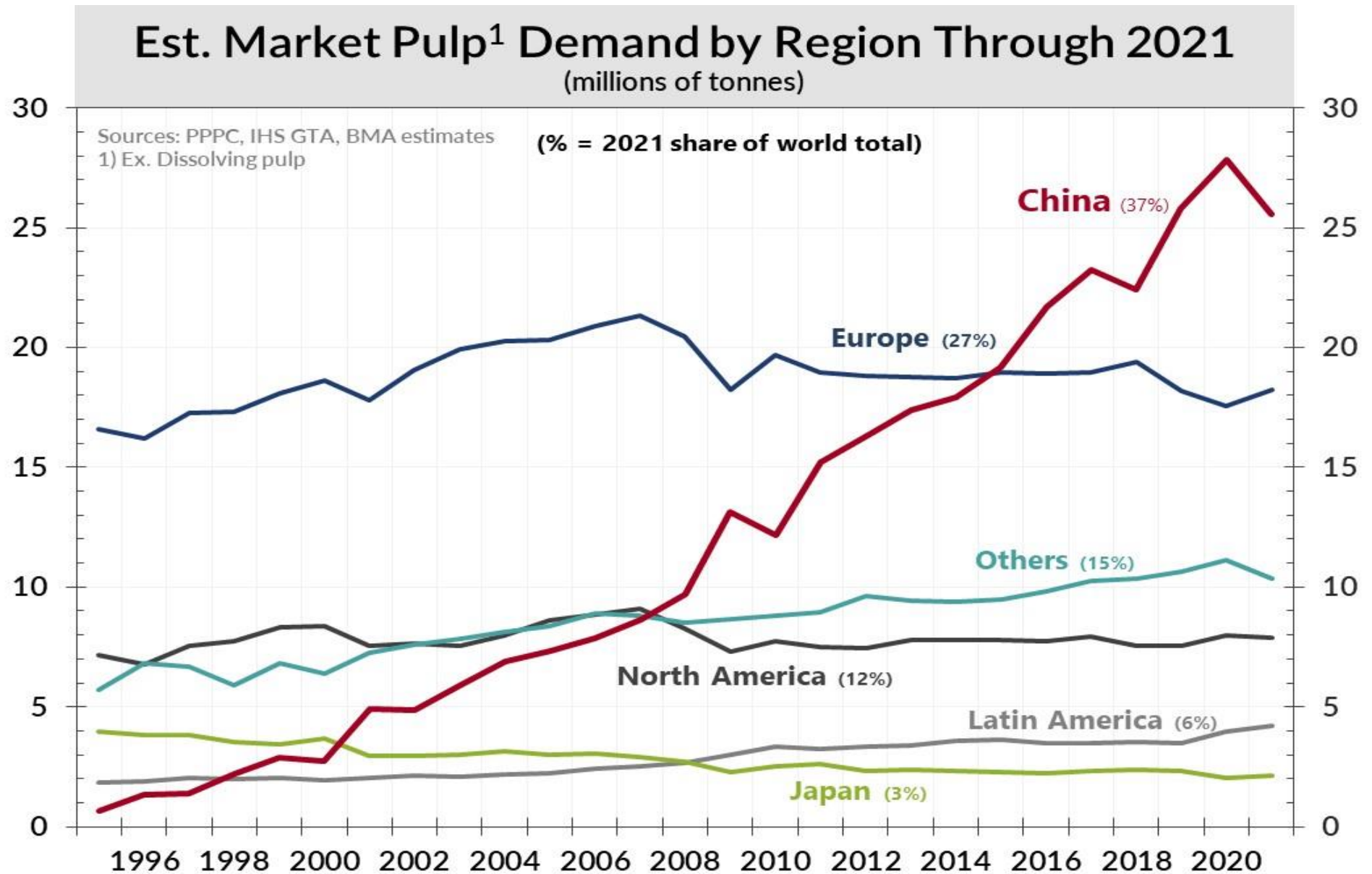


# Most of China's growth has been non-integrated but now?

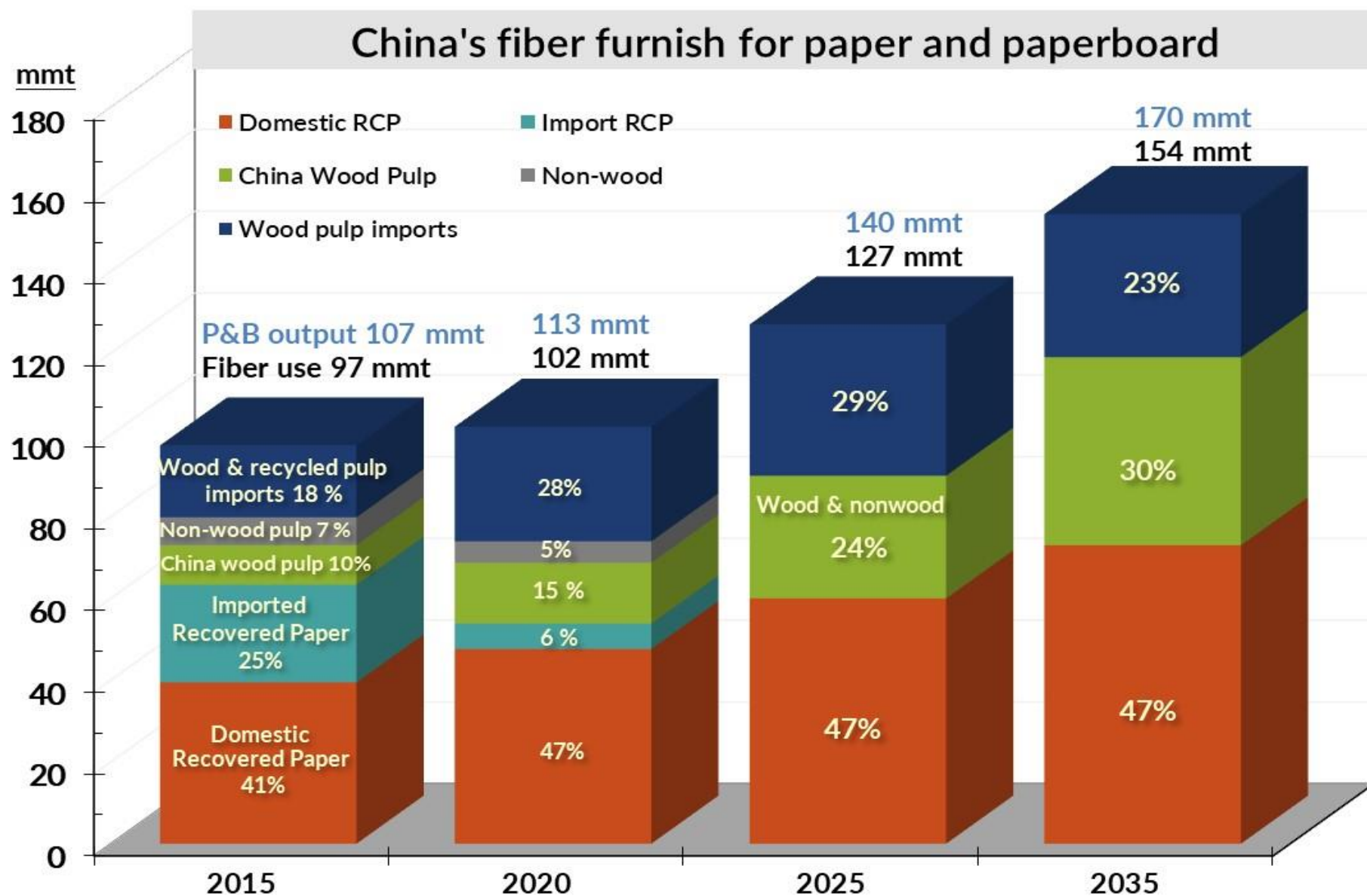




# China accounts for most market pulp demand growth



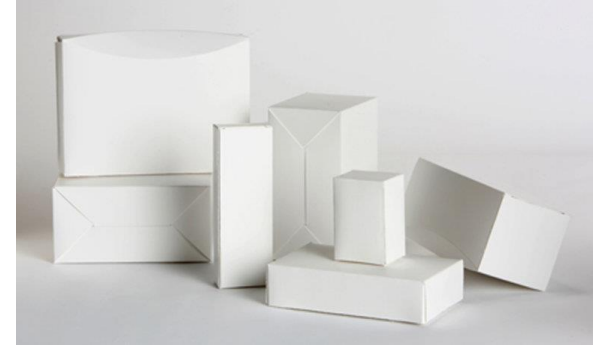
# China's 14<sup>th</sup> 5-year plan sees huge investment in wood pulp



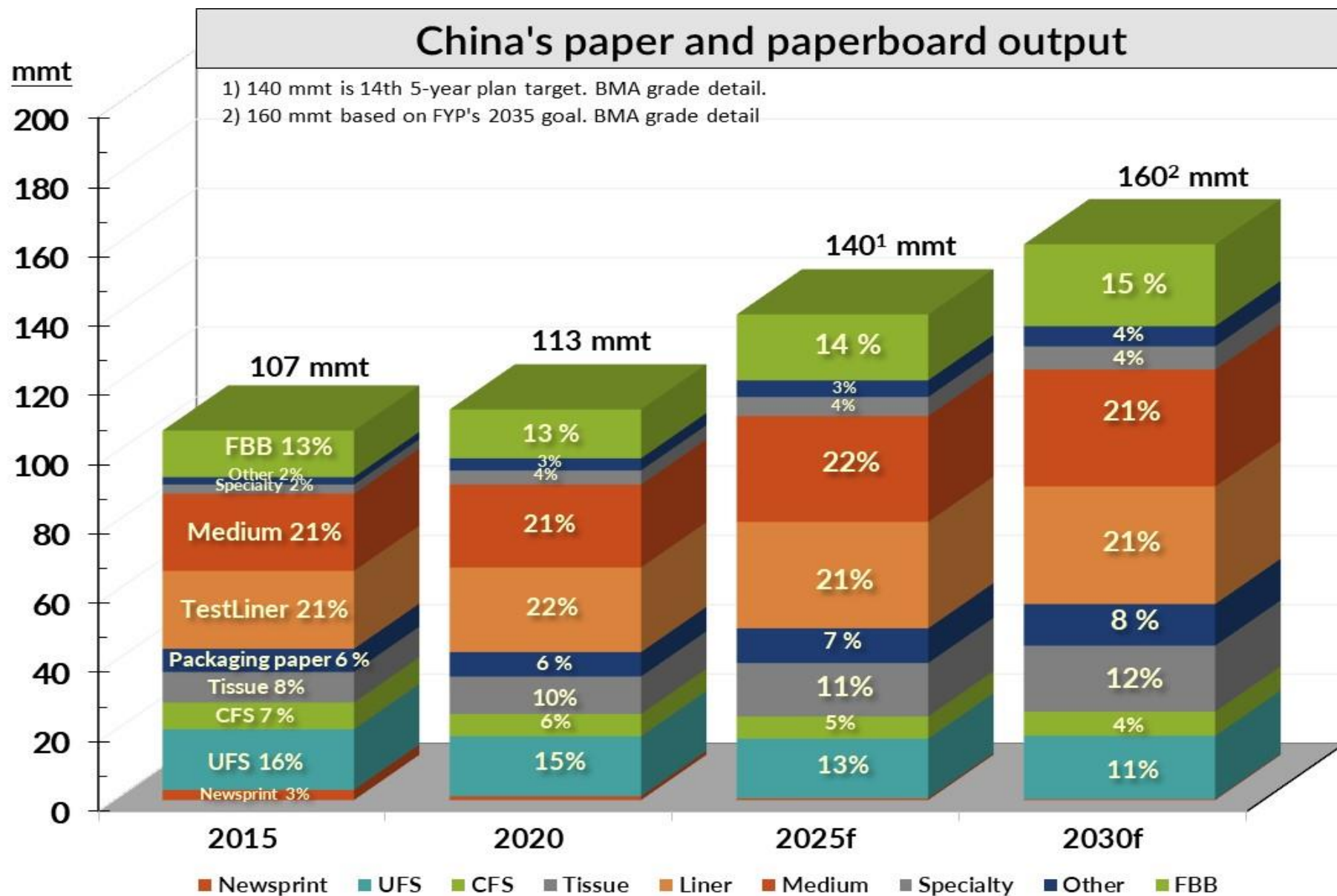


# World trends are also China's trends

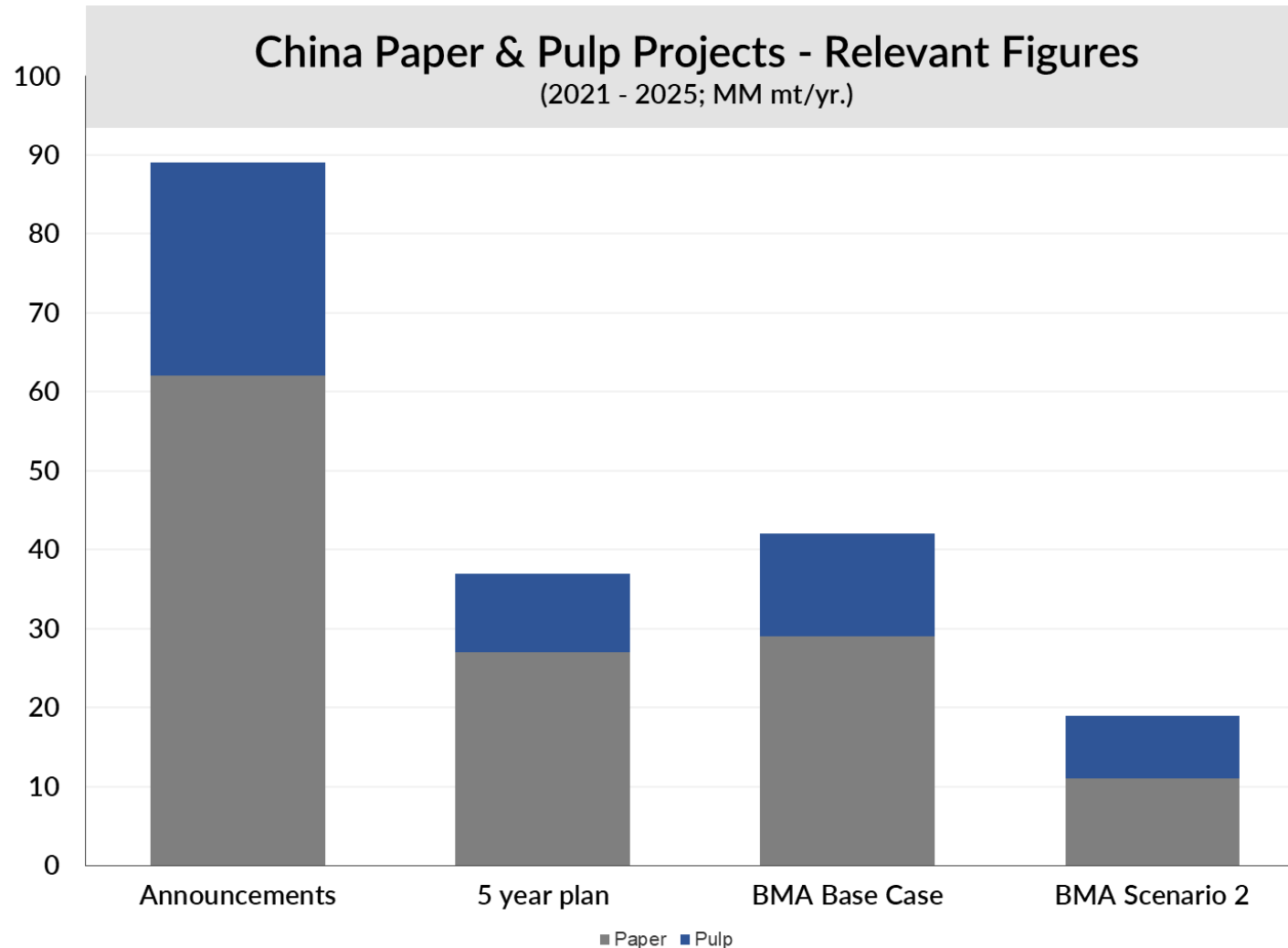
*From plastic/microplastic to wood-based packaging*



# China's FBB & tissue demand growing 5+%/y



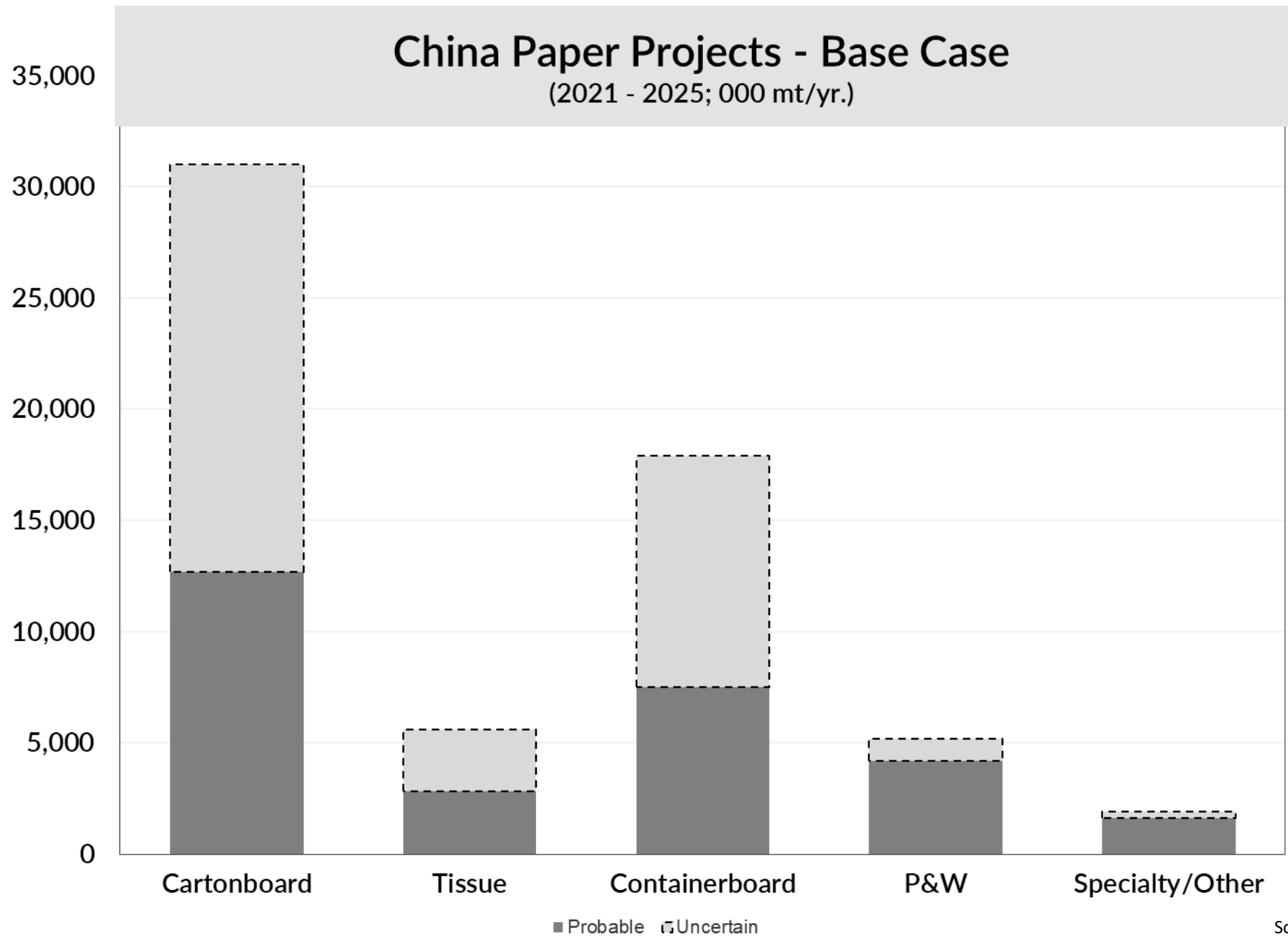
# BMA Assumptions – China Pulp & Paper



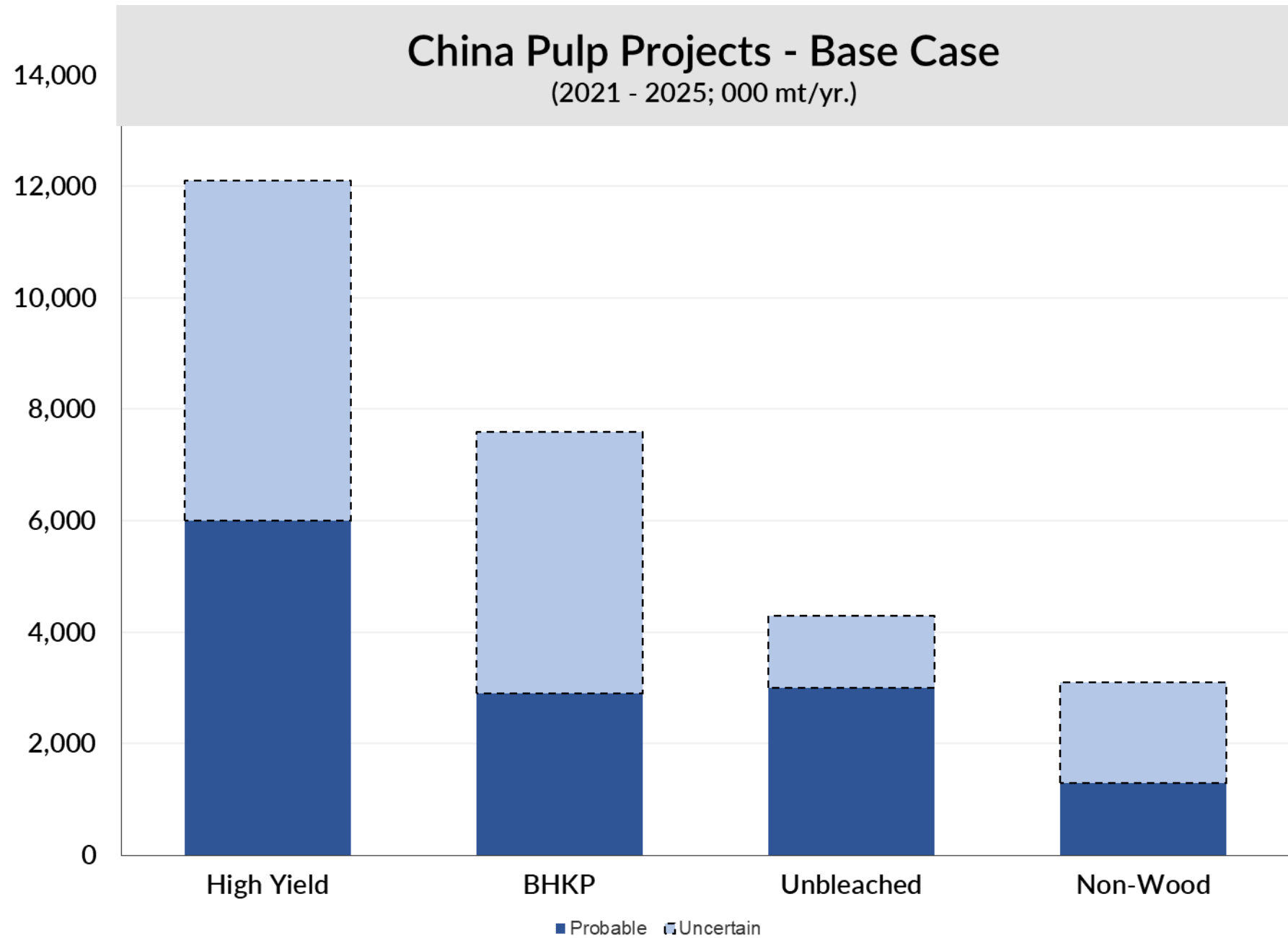
**BMA Base-Case:** energy consumption focus is reduced, or pulp & paper projects are given special exemptions

**Energy & Wood case (S2)** - energy reduction efforts diminish probabilities of these projects coming to completion.

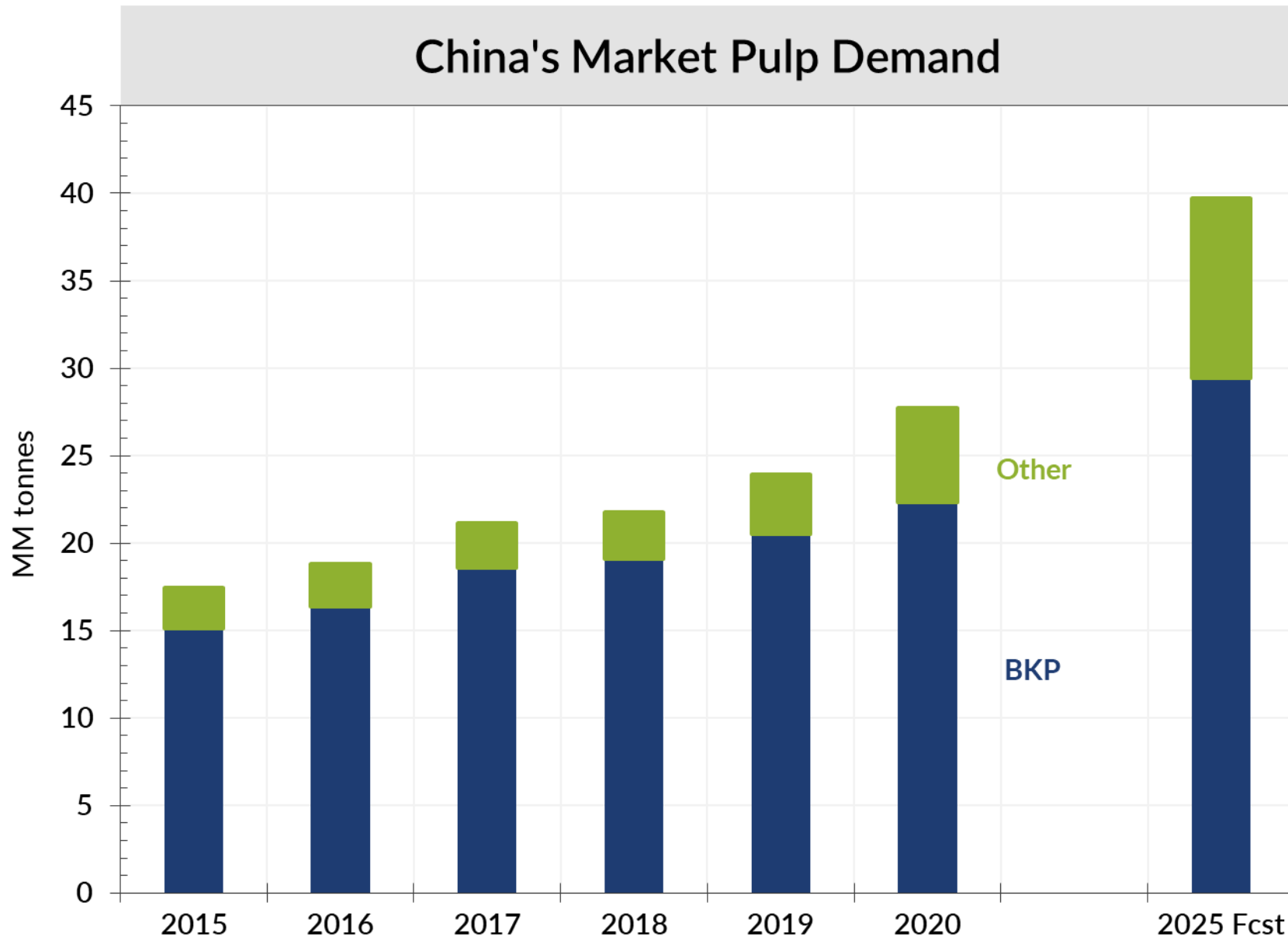
# ½ of paper expansions to move forward



# Own-use High-Yield Pulp most projects



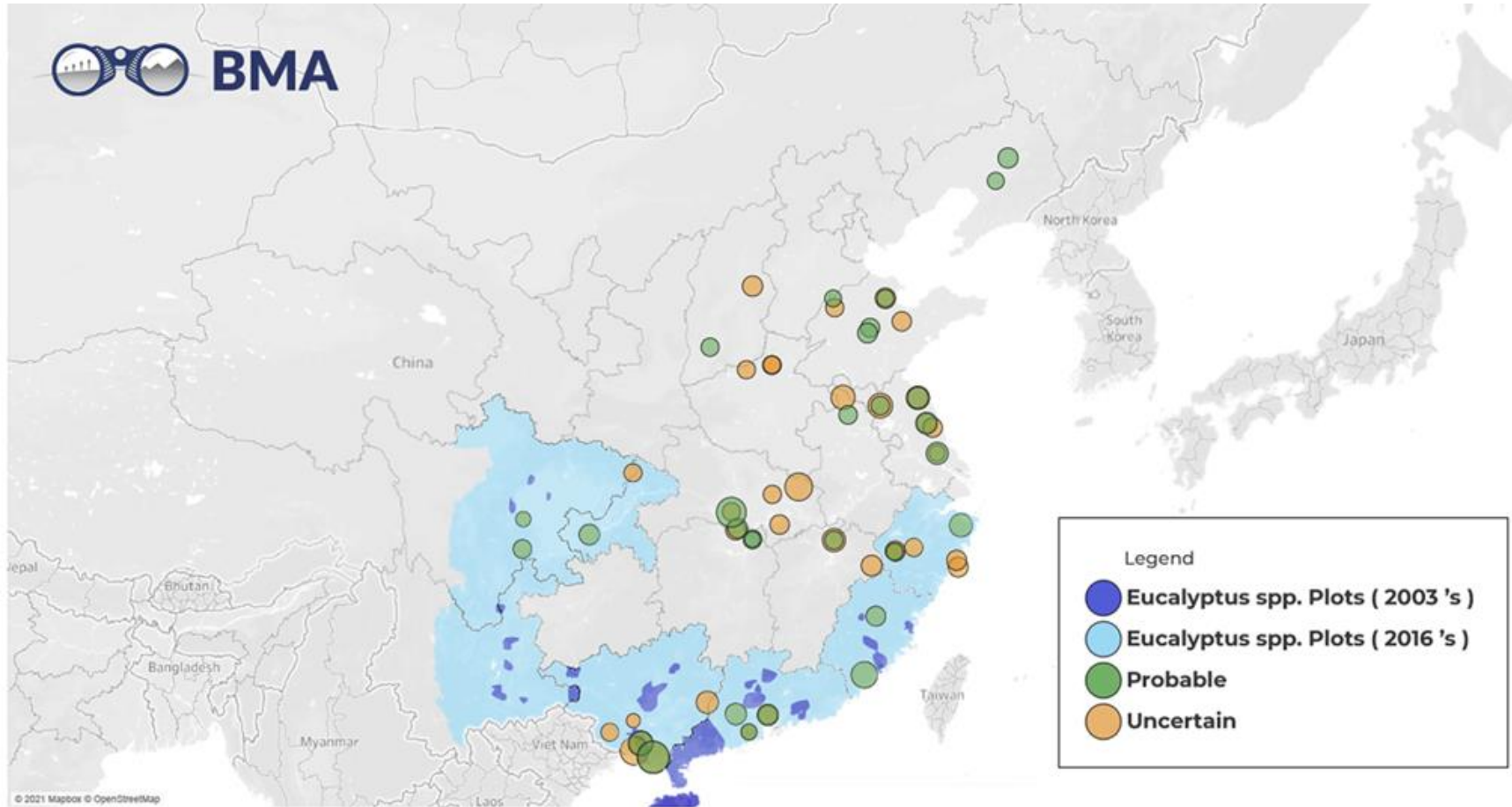
# 5-year demand increase to exceed previous 5





# More wood now in China for pulp production

## China Projects and Plantations



China has been increasing the number of plantations available to support forest products-based industries, primarily new Eucalyptus plantations.

BMA now believes 5.5 MM hectares are available, with ~20% of that going to pulp production

## NO!!!

- BMA expects the impact of “partial” integrated pulp & paper investments in China to be net positive for imported market pulp demand.
- If Energy carbon/policies apply harder to Pulp & Paper Industry, still positive
- The wood supply will continue to need imported wood. Pulp competes with other wood end uses.

**The impact on China's demand growth for imported pulp is positive!**

THANKS!



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**TTO BMA**







## Brian McClay

- Brian is Chairman of TTO LLC and President of BMA and is based in Montreal, Quebec, Canada.
- He has over 40 years experience in the pulp world, with expertise in global pulp markets and pricing, as well as international trade and sustainability issues.
- He has a Bachelor of Commerce - Management Science and Market Research from McGill University.



## John Litvay

- John joined TTO LLC as a partner in March 2021, and is based in Fort Mill, South Carolina, USA.
- Leveraging his experience in management consulting (Poyry) and Strategy & Business Development (GP Cellulose), he is responsible for BMA's forecasting and consulting services.
- He has undergraduate degrees in math and business as well as Masters degrees in pulp and paper and finance.



## Gabriel Fernandez Azzato

- Gabriel joined as BMA's International Business Director in April 2021, leading our commercial processes and subscriber engagement. He is based in Montevideo, Uruguay.
- With over 10 years of international experience in the pulp business, mainly in sales and commercial areas, Gabriel has experience securing sales in Latin America and Africa & Middle East, as part of multinational companies (Tetra Pak and GP Cellulose).
- He has a Business Administration degree from UCEMA and an Executive MBA from IAE Business School.

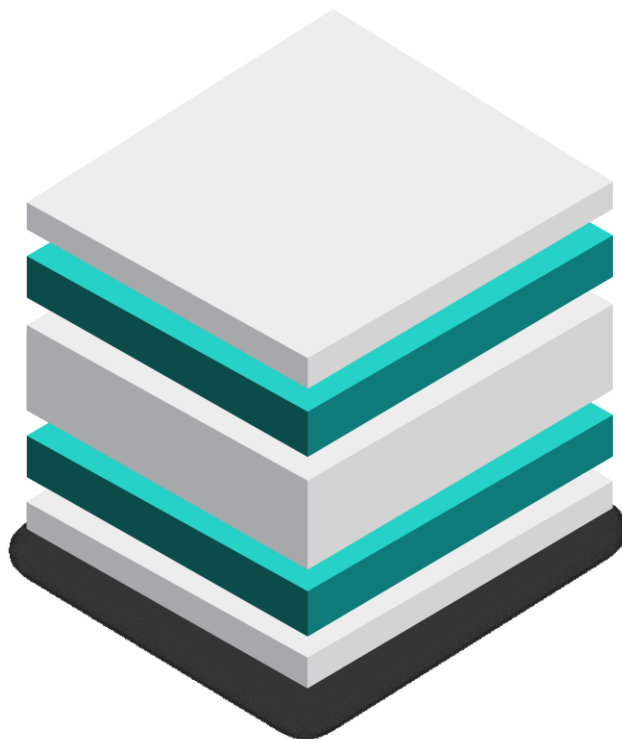


## Fraser Hart

- Fraser is TTO LLC's Managing Partner based in Fort Mill, South Carolina, USA.
- He had over 15 years of pulp sales experience before co-founding TTO in March 2016.
- Fraser's most recent position prior to TTO was at Resolute Forest Products.
- He has a Bachelor of Commerce from McGill University and an MBA from the University of Dayton, Ohio.



## FBB: Folding Box Board



Coating (double or triple coating)

Top Ply — Bleached HW kraft  
Bleached SW kraft

Middle Ply — GWD, PGW  
Broke  
TMP, CTMP, BCTMP

Back Ply — Bleached HW kraft  
Bleached SW kraft

Optional Coating





## Typical Duplex Board Structure

