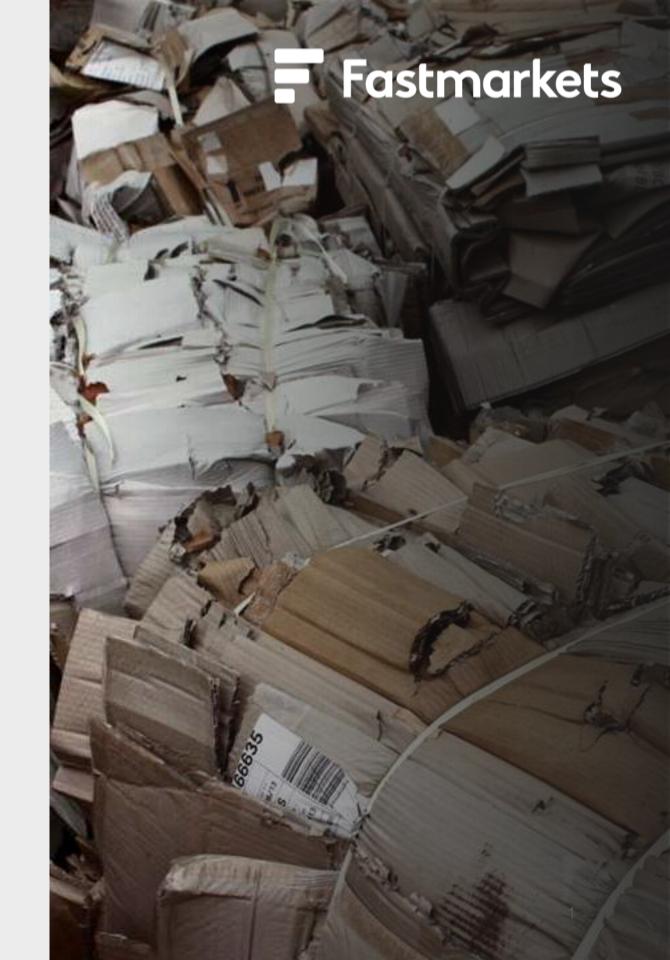
Outlook for Global Recovered Paper Markets

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Agenda

1

Recent demand, supply and pricing dynamics

2

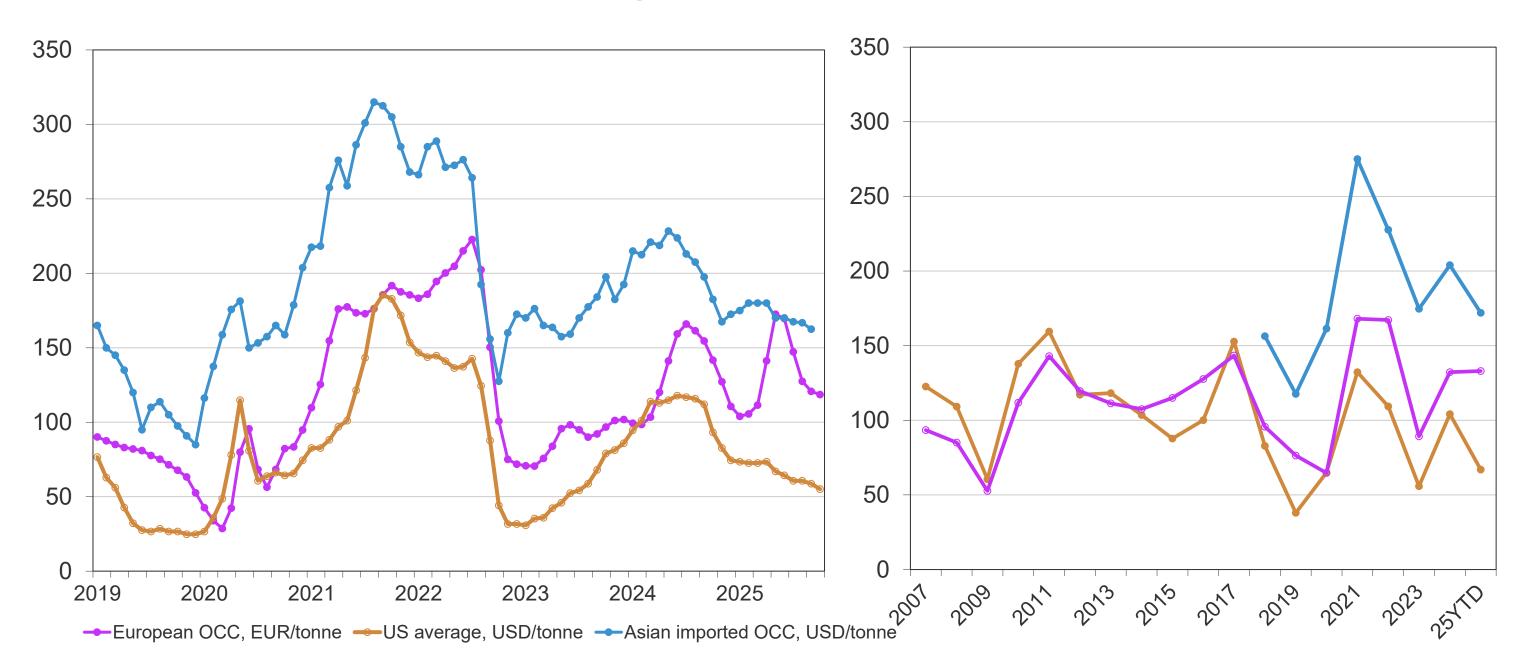
Future demand drivers

3

Shifting recovered paper trade flows

Global markets softened, significant risks ahead





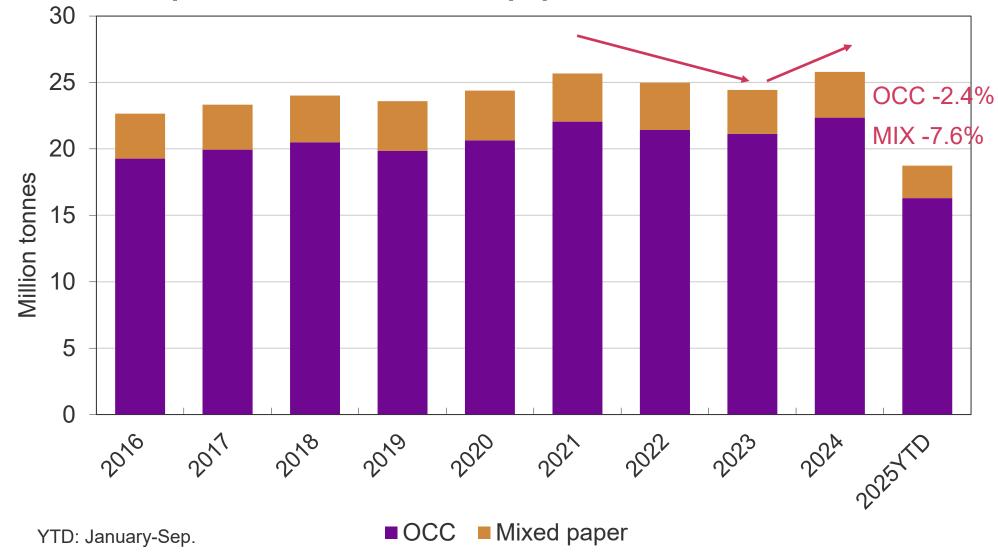
Source: Fastmarkets.

US domestic consumption of bulky grades fell again in 2025



- US OCC consumption dropped 2.4% year over year in the first 3 quarters of 2025 after growing 5.3% in 2024
 - Mixed paper consumption fell by 7.6% YoY
 - Sluggish paper packaging segment
 - Recycled containerboard production dropped
 - Capacity closures and extended downtime

US consumption of OCC and mixed paper

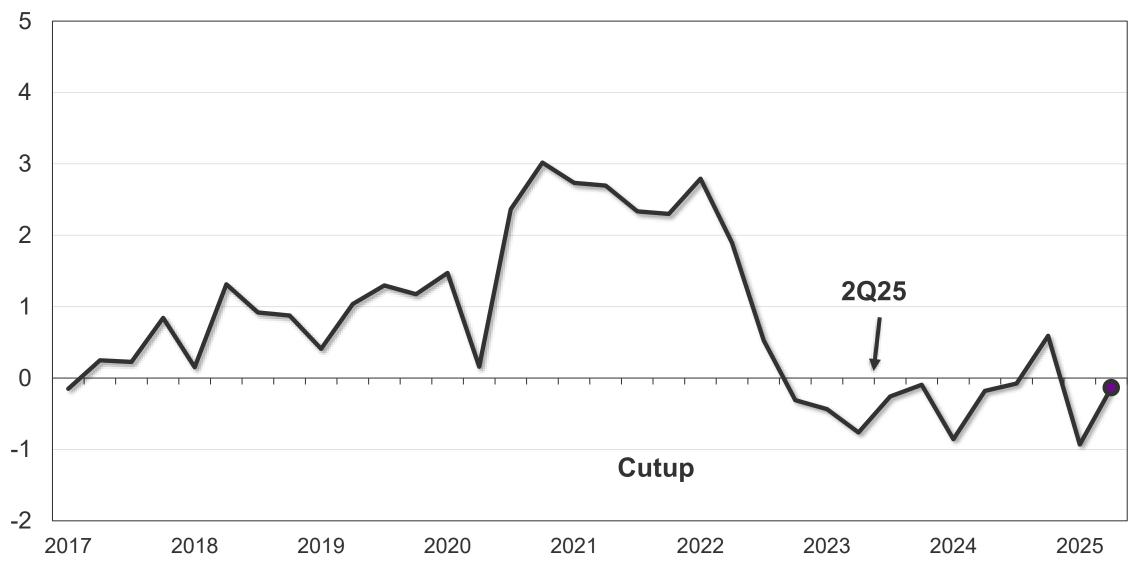


US containerboard consumption fell back to late 2016 levels



Cumulative growth for US containerboard cutup since 4Q16

Million tons, annualized



Source: Fibre Box Association, AF&PA Fastmarkets Paper Packaging Monitor.



Cutup has averaged below late 2016 level since 2022

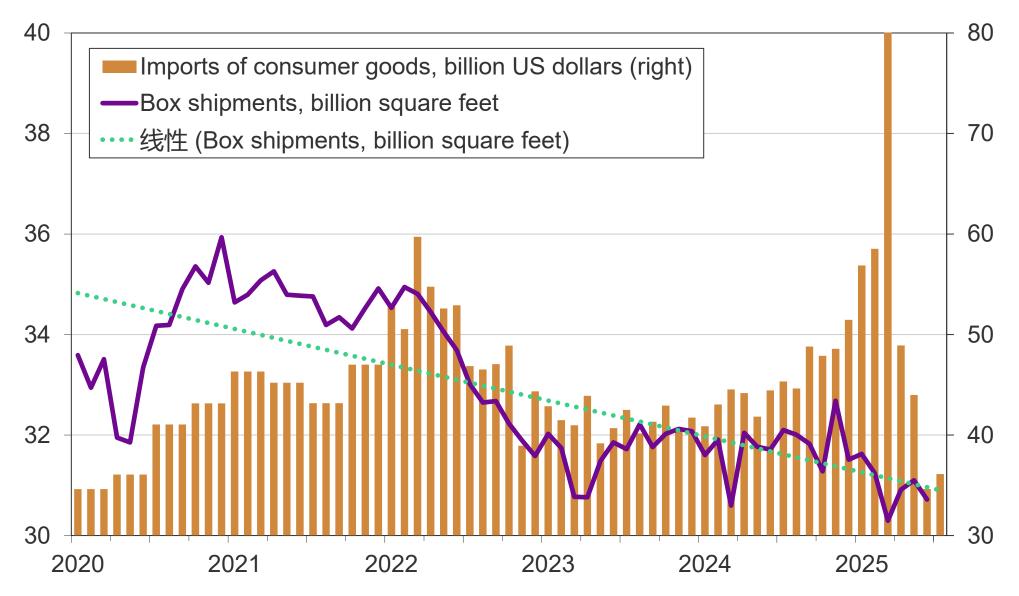
3.7 million tons of net capacity closures in 2025

Expected 4.4% decline in containerboard production in 2025

US RCP supply improved recently



- Domestic source: Box shipments dropped further
- Import source: Net imports of consumer goods grew 18.3% in the first seven months of this year
 - Sharp increase in frontloaded imports early this year



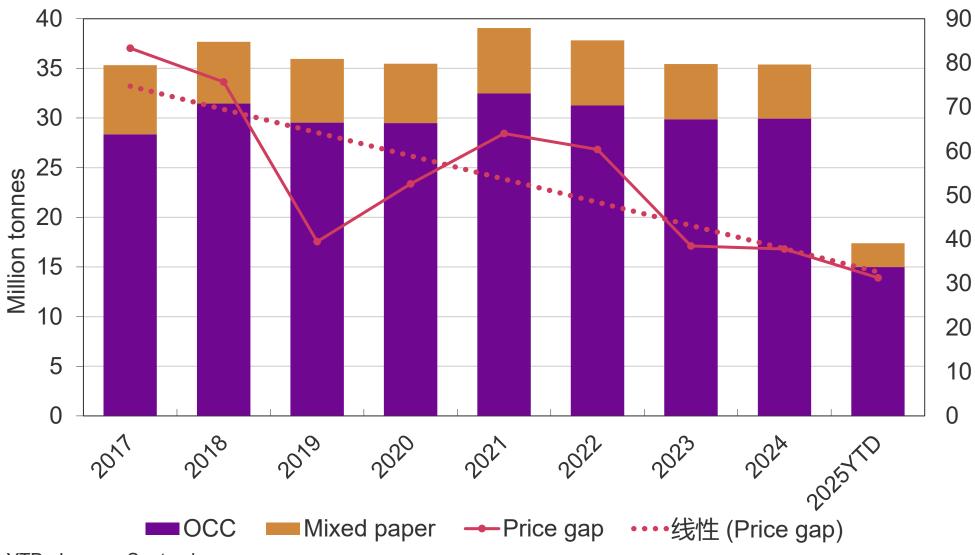
Source: Fibre Box Association, US Bureau of Economic Analysis, Fastmarkets.

Less mixed paper, more OCC?



- Share of mixed paper in total mixed paper and OCC collection fell from 20% in 2017 to 15% in 2024 and 14% in January-September 2025
 - Mixed paper generation dropped 4.6% YoY
 - Restrictions on mixed paper trade
 - Improvement in sorting:
 more OCC and SRP# 56,
 less mixed paper

US OCC and mixed paper collection



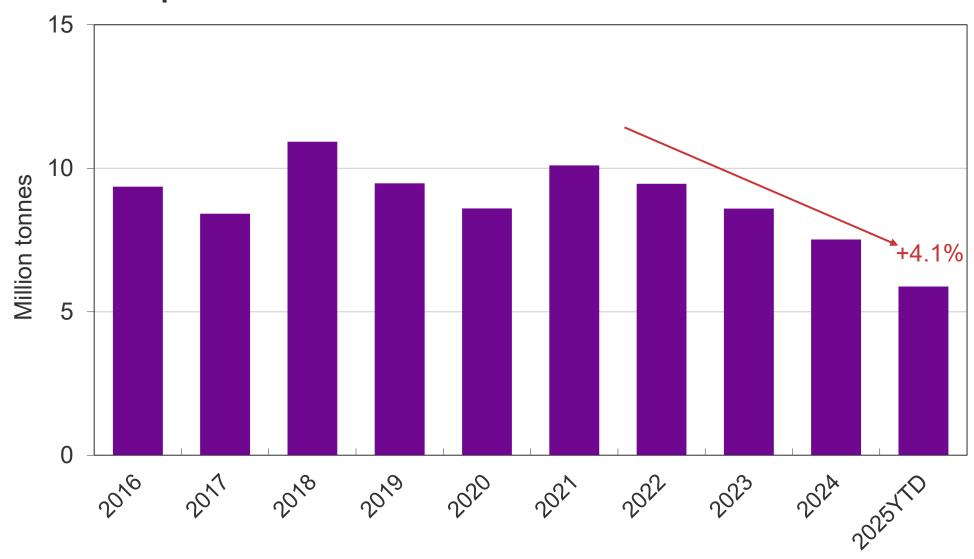
YTD: January-September.

US OCC exports rebounded in 2025 after falling in 2022-24



- OCC exports increased 4.1%
 YoY in January-August, but mixed paper exports dropped 4.6%
 - Exports helped keep the US market relatively stable
 - Shipments to Asia rose
 although total Asian imports
 dropped slightly; some Asian
 mills sourced more from the US

US OCC exports

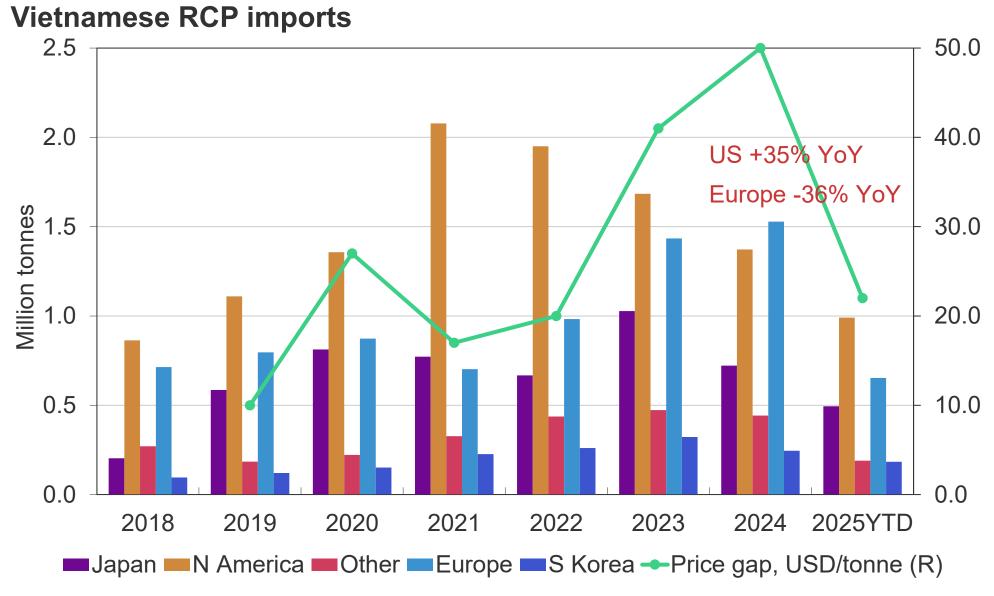


YTD: January-August.

US OCC gained share from OCC from other regions?



- US OCC became less expensive relative to European OCC
 - Overall much tighter OCC demand/supply balance in Europe
- High virgin fiber content in US OCC
- Will this last?



YTD: January-August.

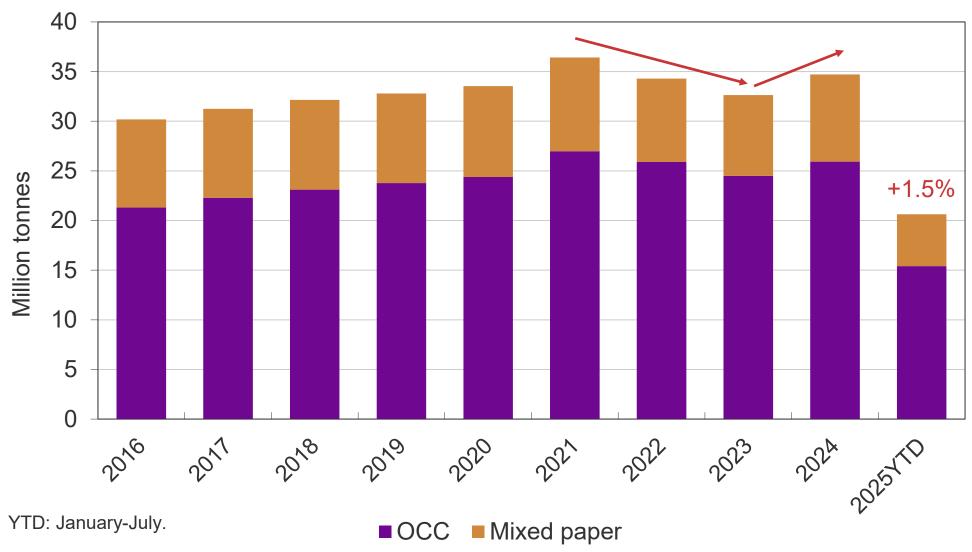




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- Total RCP domestic consumption dropped slightly in January-July, but bulky grades, including OCC and mixed paper, increased slightly by about 1.5%
- Recycled containerboard output grew modestly in 1H
- About 1.0 million tonnes of net containerboard capacity expansion in 2025

Western European OCC and mixed paper consumption

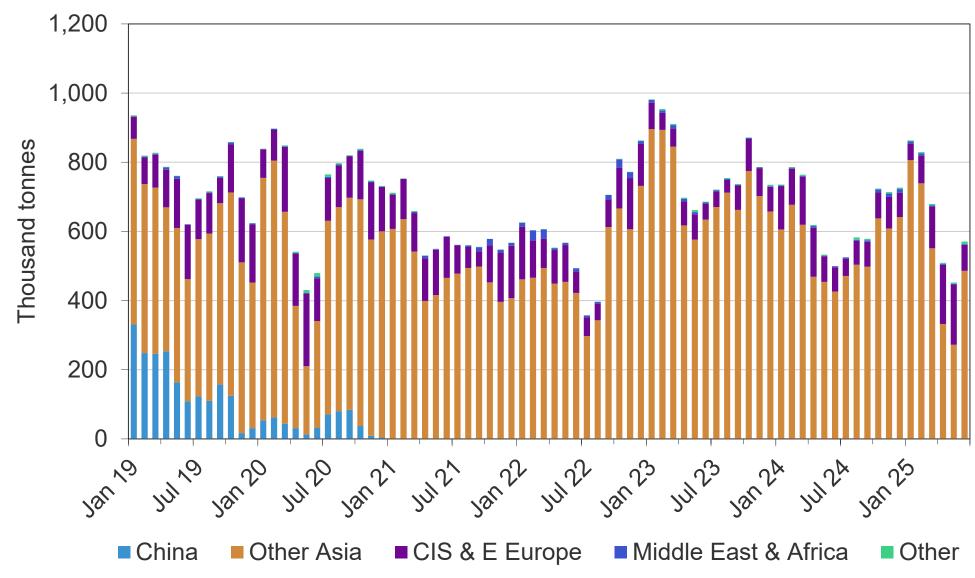


European RCP exports dipped in the first half of the year as domestic demand picked up



- Western European RCP exports fell 20% in 2024 while domestic demand rose 4.5%
- RCP exports dipped 1.0%
 YoY in January-June
 - Exports fell sharply in March-May as domestic demand strengthened
 - The spike in prices during this period scared off some Asian buyers

European RCP exports



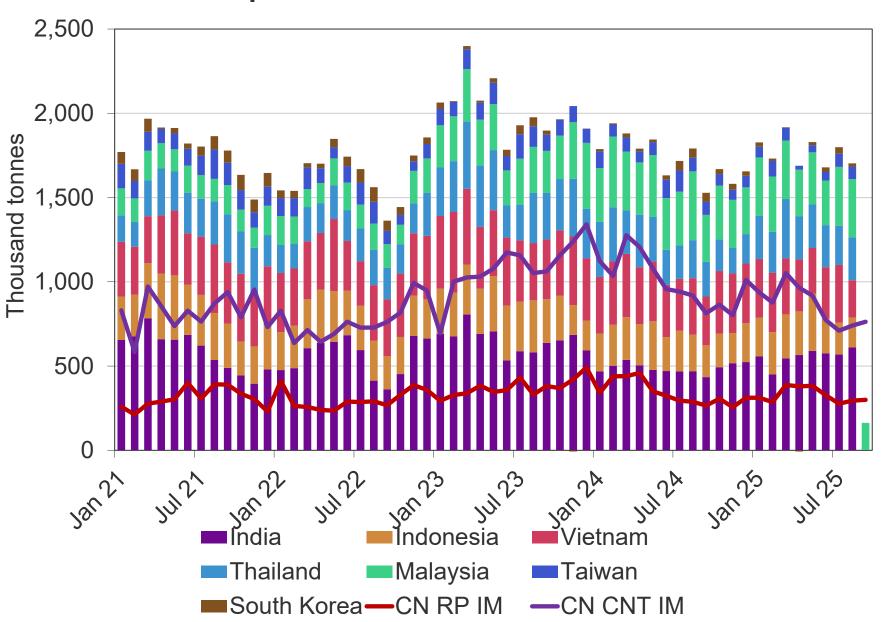
Asian RCP imports remained sluggish in January-August 2025



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- Total imports dropped 1.6% YoY in January-August; imports contracted in most countries/regions except India
- Trade policies dampened demand for paper packaging
- Recycled pulp and containerboard exports to China declined
- Driven by rising costs and logistical disruptions, Asian mills increased procurement of domestic RCP to enhance supply chain resilience
- Southeast Asian RCP imports are closely linked to China: China's new recycled pulp import policy could slow Southeast Asian RCP imports in the near term

Asian RCP net imports

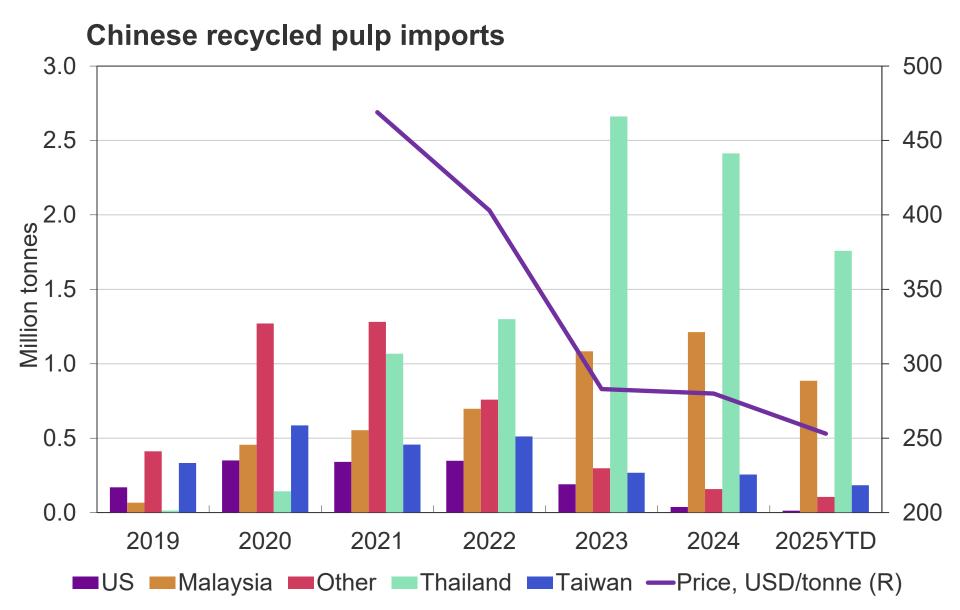


Chinese recycled pulp imports fell further in 2025



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- Chinese recycled pulp imports dropped 8.0% y-o-y in January-September after declining 8.9% in 2024
- Weakened demand for high-quality paper packaging
- Rising virgin fiber usage
- Recycled pulp imports increased in most of May-September: US-China trade truce; limited local OCC supply during the rainy season
- Tighter restrictions on imports of drygrinding recycled pulp (about 60%)



YTD: January-September.

Different types of recycled pulp







Source: China Business Network, General Administration of Customs of the People's Republic of China

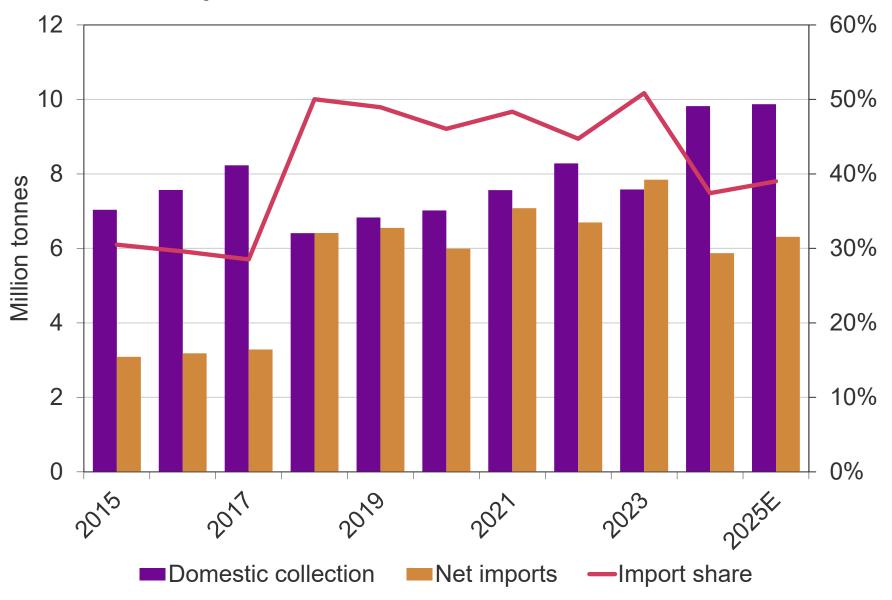
India continues to rely heavily on RCP imports



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- Indian RCP imports and import share peaked in 2023
 - Imports dropped significantly in 2024: shipping issues, more domestic supply
 - Indian RCP imports increased
 14.4% YoY in January-August 2025:
 healthy demand and limited
 domestic collection (heavier monsoon rains)
 - The US-India trade dispute
 - India is the largest buyer of RCP

Indian RCP imports and domestic collection

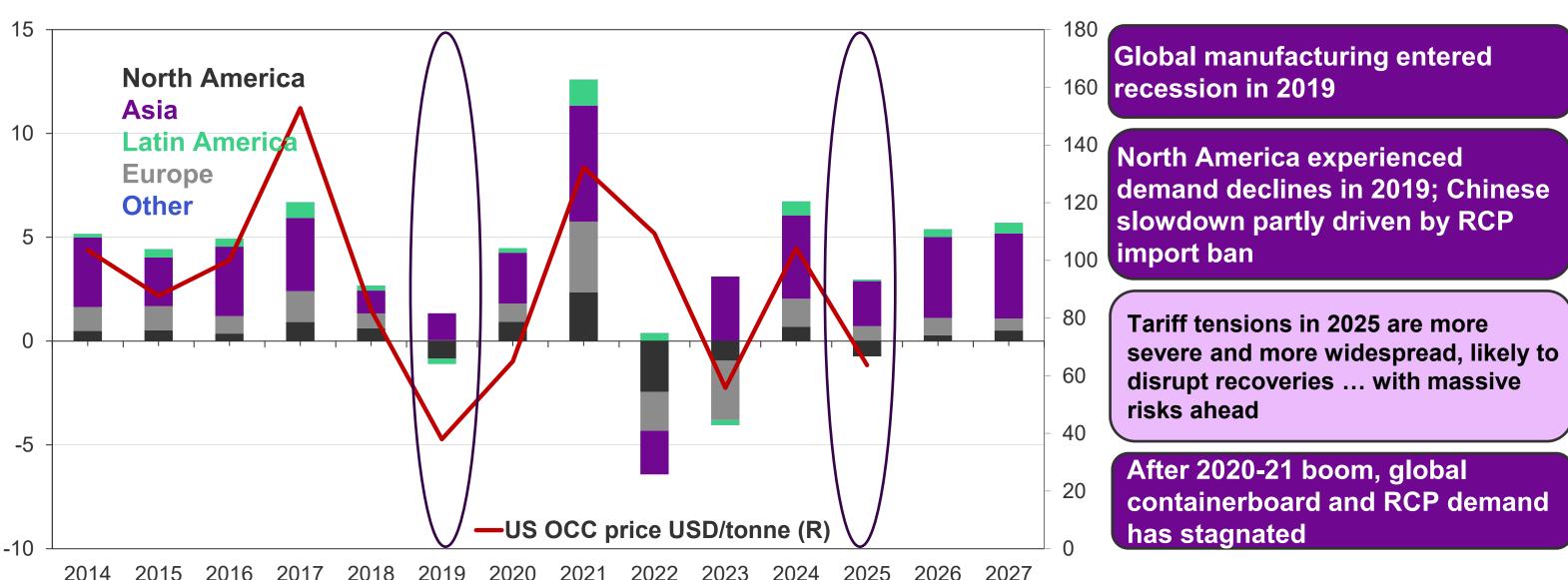


Previous Trump trade tensions contributed to packaging and RCP weakness in 2019, especially in US



Global containerboard demand growth

Million tonnes

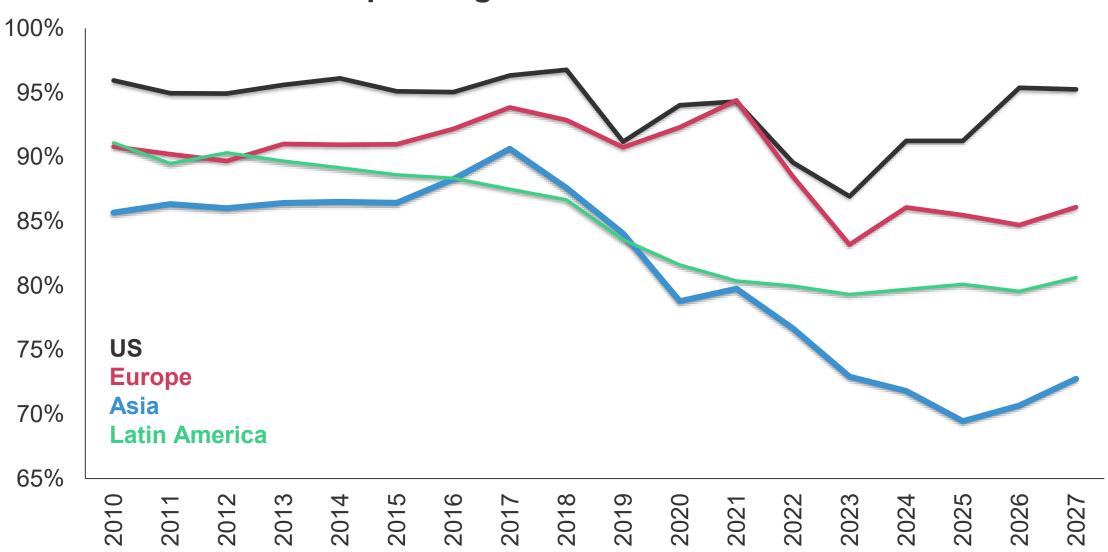


Source: Fastmarkets World Containerboard Forecast.

For rest of world, no end to severe oversupply in sight



Global containerboard operating rates



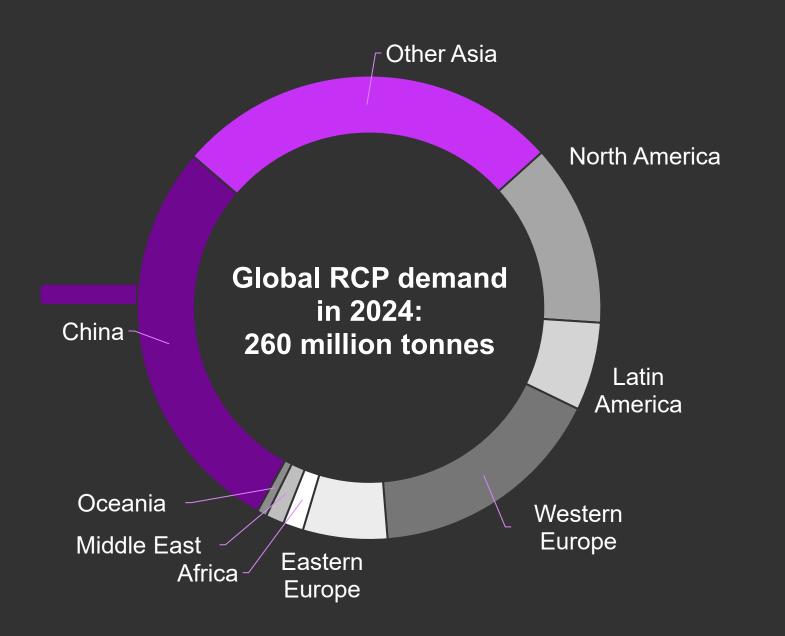
2025 closures created clear path for North American operating rate rebound

European capacity expansion still faster than demand

Asian operating rates will fall below 70% in 2025

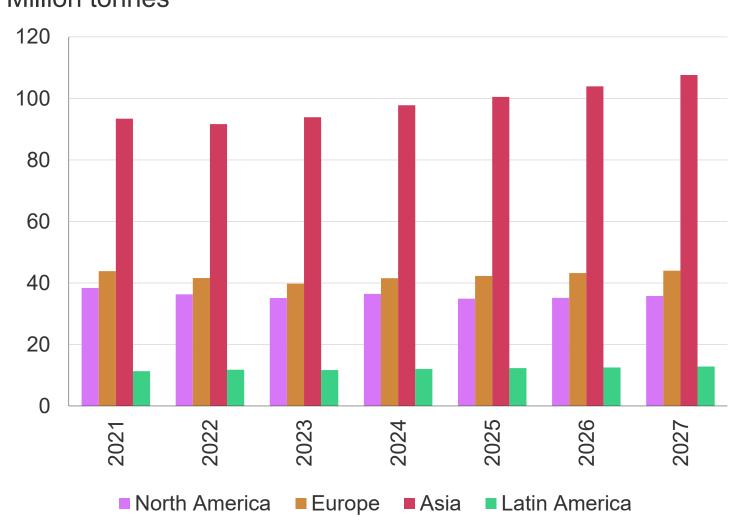
Source: Fastmarkets *World Containerboard Forecast*; updated with preliminary forecast incorporating August IP announcements.

Asia accounts for more than half of global RCP demand...



...and will reman the main engine of future RCP demand growth

Regional containerboard productionMillion tonnes

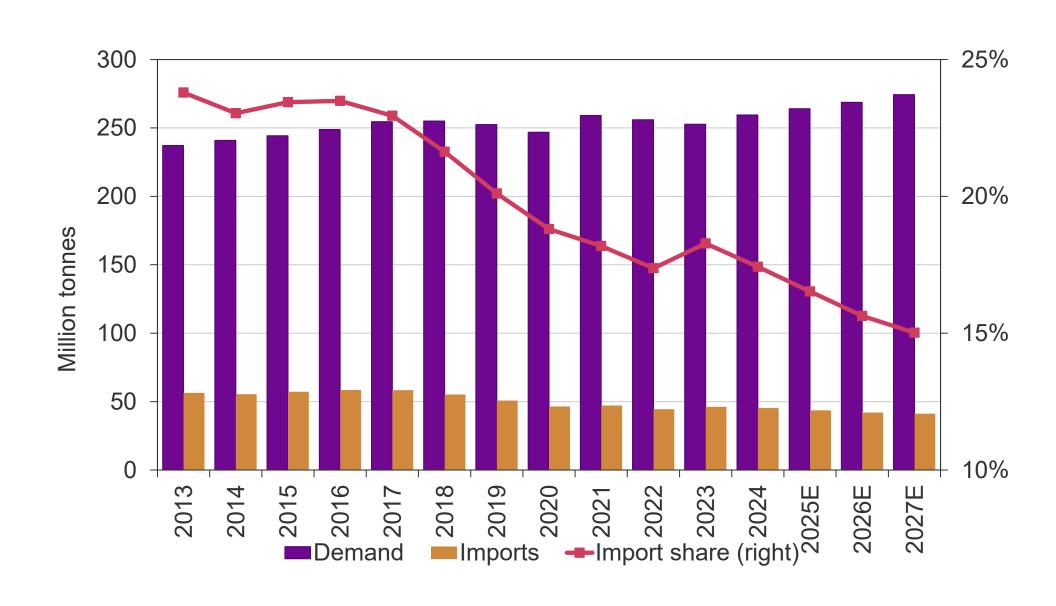


Source: Fastmarkets World Containerboard Forecast.

International trade will continue to play a critical role in global RCP markets



- Major exporting regions will increase domestic consumption, limiting the volume for export markets
- Asia will remain a major importer but will expand domestic collection to reduce reliance on imports
- Policy landscape
 - Shifting consumer goods trade flows, influenced by trade policies, could further reconfigure global RCP trade patterns: more exports of goods, more imports of OCC?
 - Restrictions on RCP imports/exports



Exports of goods



China, Southeast Asia, India

Imports of OCC





Will more OCC get lost in some new destinations??

Summary



- Global RCP market awaits stabilization or a revival in demand from the paper packaging sector
 - Significant trade policy and geopolitical risks; over supply issues
- Shifting patterns in consumer goods manufacturing and trade, driven by policies, are fundamentally altering global RCP streams -> rethink of RCP sourcing and trade strategies?
 - Policies on RCP trade





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