



41° CONVEGNO NAZIONALE

Supply chain challenges...and opportunities in the European Folding Carton sector



○ ECMA – who are we?

○ European carton prospects – 2021

- $\circ~$ Past & future growth
- $\,\circ\,$ European Folding carton structure

• Current conditions prevailing in the European folding carton market

- \circ Longer term impact of the last 18 months on the folding carton market
- \circ Key trends within our sector and how they might develop over the next 5 years
- $\,\circ\,$ How brand owner and retailers needs might change for our sector

Who are ECMA?



- ECMA represent 500+ folding carton converters and cartonboard mills in 22 countries
- 70,000 staff / 82% of the European market
- Core focus to promote and defend cartonboard & folding cartons
- We engage with policymakers and work closely with other industry stakeholders



European Folding Carton Market 2020 – Volume & Value

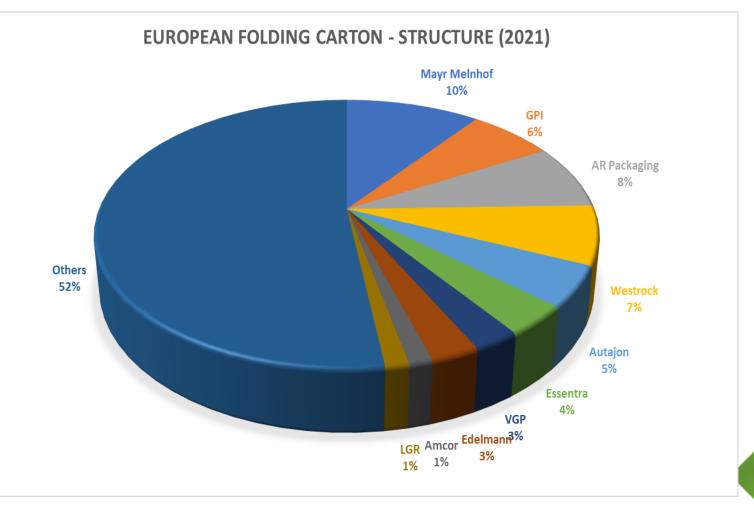
Summary Estimates & Forecasts of European Carton Production – 2015, 2020 & 2025 – 000 Tonnes & € Million

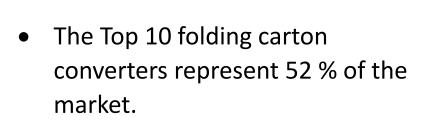
	2015	2020	2025	15 to 20	20 to 25
				% p.a.	% p.a.
Cartonboard Purchases: 000 Tonnes	5910	6784	8316	2.8	4.2
Carton Output: 000 Tonnes	5540	6312	7598	2.6	3.8
Sales by European Carton Converters: €m	11231	12177	14725	1.6	3.9



- The European folding carton market is 6.312m tonnes by volume and €12177m by sales value.
- Grew over last 5 years at +2.8% YOY by volume and +1.6% by sales value.
- Due to grow over next 5 years at +3.8% by volume and +3.9% by sales value.

European Folding Carton Structure - 2021





EUROPEAN

ASSOCIATION

CARTON MAKERS

- GPI / AR Packaging will become the largest FC converter in Europe.
- Mayr Melnhof is the only EU vertically integrated company within the Top 10 carton converters.



What has happened – 2020, 2021, 2022....



What happened for Folding Cartons in 2020?



Covid strikes Q1, 2020

- Food & Drink sales growth / some Foodservice, Luxury Goods & Duty Free sales decline
- $\circ~$ Supermarkets see strong sales
- Folding carton suppliers across Europe praised for their positive response & support for the supply chain (and recognised with "key worker" status)
- $\,\circ\,$ Supply chain issues starting to develop
 - \circ waste paper collection issues / subsequent shortages in recycled fibre
 - staff shortages due to Covid sicknesses
 - shortages of some basic goods (Pallets, Wood, Nails, etc.)
 - $\circ~$ Shipping costs from Far East increase
- $\,\circ\,$ Shortages of packaging for food and non-food goods start to emerge
- $\circ~$ Green transition...plastic to fibre

What happened for Folding Cartons in 2021...supply?



- Price of containers leaps from \$3k to \$18k halting supply of Chinese folding cartons & board
- 0 **Q1**
 - Logistics issues across Europe
 - o Brexit affects movement of goods at several ports and on-going distribution problems
 - Waste paper sold to non-EU mills (due to better pricing)
 - $\circ~$ Strong Retail and Brand owner demand for folding cartons
- $\circ~$ Mill lead times go out from 3 to 5 weeks to 12 to 15 weeks for new business
- o Rumours of shortages of mill stock spread (driving subsequent leap in orders)
- o Folding carton demand rises even further while extended lead times triggers more orders
- Demand for recycled fibre continues (for all paper packaging formats)



What happened for Folding Cartons in 2021...demand?



- Q1 2021 Covid stocks needed replacing, Brexit stock build needs replacing and strong demand maintained in selected End Use Markets = Overall leap in demand for Folding Cartons
- \odot Green transition plastic to fibre accelerates
- Purchase <u>orders</u> range from +10% to +30% in some months versus Q1, 2021!
- Strong demand maintained for food & drink packaging
- Board price inflation (some challenges passing costs through due to fixed price contracts)



What happened in other markets in 2021?...corrugated



- Brexit adds complexity into the supply chain (lorries carrying paper stocks are delayed, ports disrupted, paperwork delays slow down movement of goods, etc.)
- 4 new recycling mills come on stream in Europe <u>BUT</u> not enough recycled fibre to feed the new demand
- \circ Lead times for new boxes & sheet board leap from 5 to 7 days up to 10 weeks!
- First price increases for paper and board happens in January 2021; 4 more PIs since then and more announced
- \circ Demand running at +5% overall (i.e. even higher than for 2020)
- Recycled papers in short supply Q1 & Q2, virgin papers in short supply in Q3, 2021



What has happened for Folding Cartons in 2022?



○ Energy

- Hot Asian summers / cold European winters / covid reduces gas output = reduction of gas storage levels
- Russia invades Ukraine / embargos implemented by EU / NA
- Wholesale gas prices have increased 350% over the last 10 months
- Plastics / metal / glass packaging effected more than paper!

○ Supply & demand

- Mills announce further increases & energy surcharges
- $\circ~$ Folding carton demand is high
- o Orders for cartonboard is high most mills are full
- Lead times extended by up to 16 weeks
- $\circ~$ Some cartonboard shipping from Far East...

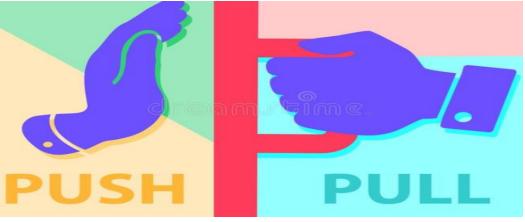
○ Green transition – its real!

• France (and Spain) legislate to ban plastic fruit & veg packaging



Brand owner & retailer push / pull factors





- EPR tax increases / ecomodulation
- Legislation
 - Plastic tax
 - PPWD /Essential Requirements

- Anti plastic sentiment
- Consumers demand sustainable packaging



Trends & forecast...



- Covid has delivered major changes to the way that we purchase products
- This has delivered major product mix changes for the folding carton market
- Folding carton companies are squeezed between demand from International Brand Owners and pressure from the major Paper Mill groups
- Demand for Folding cartons will remain high due to the GREEN wave (1 tonne of plastic out means approx. 4 tonnes of fibre to replace)
- Mills may be challenged to meet this GREEN demand.
- Increased focus to improve forecasting / avoid stock build
- More industry consolidation is likely



Sustainability – the facts



- European forests are growing by 2% net per year (equates to 1500 football pitches per day or an area the size of Switzerland since 1950)
- European forests and forest-based sector absorbs 20% of European GHG emissions
- Consumers prefer fibre packaging:
 - 62% say it is better for the environment,
 - 57% say it is easier to recycle and
 - 79% prefer fibre packaging over other packaging materials.
 - 88% of young adults OK to pay more for enviro packaging



Thank you & questions

