



## SPOT ON FLEXIBLE PACKAGING

**Thomas Jungreithmeir**, Oaklins' flexible packaging specialist, is pleased to share some high-level industry intelligence in this Spot On.

"This edition is focused on packaging innovations. Factors such as increasing demand for sustainable packaging across the globe and advantages of PEF over PET are expected to be the key trends stimulating market growth.

Valuation trends remain positive in the flexible packaging space overall, especially for companies that concentrate on growth application markets such as pharmaceuticals. M&A activity in the industry is characterized by a strong cross-border focus and characteristics of the packaging market remain unchanged (number of deals, size of deals)."

### MARKET TRENDS

- Transaction environment keeps up with past years
- The key characteristics of the packaging M&A market remain unchanged
- New packaging innovations will further boost market development

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### TOP PLAYERS

Company	Country	Revenues (US\$m)	Revenues in % of top 10
Mondi Plc.	 	13,248	17.44 %
Amcor Flexibles	 	12,865	16.94 %
Reynolds Group	 	12,839	16.91 %
CCL Industries	 	8,945	11.78 %
Sealed Air	 	7,265	9.57 %
Huhtamaki	 	4,878	6.42 %

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### SEGMENTS & INNOVATION



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### M&A ACTIVITY



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### Transaction environment keeps up with past years

- After several active years, the high-level M&A pace is continuing. Therefore the decrease in closed deals in 2017 (based on our Mergermarket analysis) was not reflective of the long term trend.
- The key characteristics of the packaging market remain unchanged: very active M&A environment, large deals, as well as a huge number of deals.
- Strategic buyers are similarly active compared to previous years, contributing to almost three quarters of M&A transactions in the packaging industry, with financial investors participating in mostly larger transactions.
- We have noticed a trend of reorganization and strategic reorientation which is now, and will be in the near future, followed by divestments of non-core activities and add-ons in the core business areas.
- The packaging industry is still attractive for financial investors as the trend towards consolidation remains active and strong, but valuations are currently just slightly below peak levels.
- Another part is played by new and developing innovations such as polyethylenefuranoate (PEF), a bio-based alternative packaging material to (PET), which should boost the market even further.



**Thomas Jungreithmeir**, Flexible Packaging Specialist, Oaklins

"Material innovations are crucial to the global packaging and particularly the flexible packaging industry. Trends such as bio-based alternatives will be a major topic and companies that have dedicated capex for research and innovation will ultimately have sustained success. In this context, it is also more than likely that smaller innovative companies will be the focus of M&A activities of the larger industry players."



## Top players

### The top ten players dominate the market and are globally active

The most active market participants in mergers & acquisitions are Austrian/South African based Mondi Plc., Australian group Amcor and US-based Reynolds Group.

The market leaders are fully integrated providers, including raw material sourcing, film extrusion/production, lamination, printing, coating and other treatments, cutting and pouch-making.

Company		Country	Revenues (US\$m)	Revenues in % of top 10
Mondi Plc.			13,248	17.44%
Amcor Flexibles			12,865	16.94%
Reynolds Group			12,839	16.91%
CCL Industries			8,945	11.78%
Sealed Air			7,265	9.57%
Huhtamaki			4,878	6.42%
Sonoco Products Co.			4,803	6.32%
RPC Group Plc.			4,554	6.00%
Bemis Company Inc.			4,099	5.40%
Winpak Ltd.			2,447	3.22%
<b>Total</b>			<b>75,945</b>	<b>100%</b>

Source: Orbis BvD, ThomsonReuters, Oaklins research  
\* latest available (and/or 2016), total group revenues (no flexibles split), FX rate EUR/US\$ 1.22

# Packaging segments & innovation

## Paper, board, rigid and flexible: 70% of total packaging sales

Flexible packaging products are made of plastic films. Raw materials for plastic films are polymers such as polypropylene, polyethylene, nylon and polyester, produced using extrusion. The next step in the production value chain is treatment such as printing,

coating, metallizing or lamination of these films. The final production step is the conversion of the treated films. They are converted into their final shapes through winding and slitting, sealing and adhesive binding. This is generally called bag or pouch-making.

Flexible packaging total sales account for over US\$90 billion

Flexible packaging	Rigid packaging	Clamshell packaging	Blister packaging	Paper & board packaging
				
<ul style="list-style-type: none"><li>• Food packaging takes the major part with around 75% of the European converted market</li></ul>	<ul style="list-style-type: none"><li>• Used for food, beverages, pharma and personal care</li><li>• Raw materials used are PET, PE, PVC and PP</li><li>• Includes tubs, pots and jars etc.</li></ul>	<ul style="list-style-type: none"><li>• Packaging of hinged halves of plastic shells</li><li>• Product can be opened and closed</li><li>• Raw materials include polystyrene, polyester, PVC, foam sheets</li></ul>	<ul style="list-style-type: none"><li>• Interesting end-markets and highly demanding products</li></ul>	<ul style="list-style-type: none"><li>• Paper &amp; board (including paper bags and cartons)</li><li>• Specific packaging such as tea tags and envelopes for tea packaging material</li></ul>

**i** Other packaging segments include beverage cans, glass packaging

**i** The three largest segments (paper & board, rigid and flexible) account for an estimated 70% of the total market size

Sources: PCI Film Consulting, PR Newswire, World Packaging Organisation, Oaklins Research

### Innovation in packaging: bio-based alternatives for packaging

Plastic used across international value chains for food & beverage packaging currently represents a staggering two-thirds of the world's plastic waste. Commonly nicknamed with the far more respectable acronym of PET, is a resin used to create a variety of products, including plastic bottles, and is portrayed as a partly recyclable alternative to conventional plastic. According to a trade organization the National Association for PET Container Resources, about 34% of the plastic bottles manufactured worldwide are derived from this source. Unfortunately, many products – including PET-derived plastic bottles – are still populating landfills at a disheartening rate. According to the Container Recycling Institute, only one-third of all PET-based plastic bottles actually make it into a recycling stream. Consequently, many companies in the packaging industry are seeking to develop new environmentally-preferable alternatives for packaging. In 2011, soft drink manufacturer PepsiCo proudly trotted out what it claims is the world's first PET bottle that is 100% plant-based and renewably-sourced. It is made from a series of bio-based raw materials, including corn husks, switch grass and pine bark. In 2012, competitor Coca-Cola initiated the first phase of a massive project, Plant Bottle, which is made using bio-PET where the ethylene glycol-starting monomer is made from renewable sources. The Plant Bottle contains approximately 30% bio-based carbon. Since then, Coca-Cola has established three R&D partners (Virent, Gevo and Avantium) in a bid to produce a 100% bio-based Plant Bottle. The next piece of the puzzle is to find a synthetic route to bio-based terephthalic acid (PTA). The Avantium YXY approach uses C6 sugars to produce furanics, then furandicarboxylic acid, which when polymerized with bio-EG will form bio PEF, a totally new, 100% bio-based polymer. YXY is a trademark of Avantium in the Netherlands. In fact, the global polyethylene furanoate (PEF) market demand was estimated at 11,700 tons in 2016. Factors such as increasing demand for sustainable packaging across the globe and advantages of PEF over bio-based PET are expected to be the key trends stimulating market growth. Almost half of the worldwide production of PEF was demanded in the Asia-Pacific region, compared to nearly a quarter in Europe and a sixth in the USA, leaving 10% spread over the rest of the world. While Pepsi's Green Bottle and Coca Cola's Plant Bottle are made of plant material, it is important to note they still contain



plastic. Compostable plastics contaminate the recycling stream and thus are not recyclable, but the plant-based PET bottle mimics its traditional counterparts and thus can be accepted at all mainstream recycling centers. In 2018, PepsiCo again announced that it will launch the first-ever 100% compostable, plant-based packaging for Lay's and Kurkure snacks products this year. Nestlé are also aiming at 100% reusable and recyclable packaging by 2025. In addition, Tipa Corporation may have the answer to this issue with its biodegradable qualities and viable packaging alternatives. Their main goal is to create effective plastic packaging solutions that are highly sustainable. Technically oriented to an orange, the segments are packaged in a protective multi-layer peel, which once discarded, proceeds to decompose and leave no toxic residue. Tipa Corporation offers coextruded transparent and high-transparent or coated/metalized cast films, which are sealable and printable on both sides or laminated for printing, typically used for packaging of fresh produce, bakery, grain-mill products or bags.

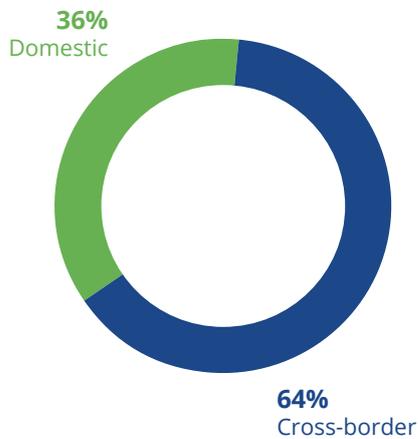
Another sustainable and affordable packaging alternative may be algae-based packaging. Boiling up seaweed results in a gelatinous substance called agar. This can be used to create textures that can replace bubble wrap and foam packaging. For instance, Cereplast Inc.'s venture, Algeplast, aims to develop 100-percent algae-based packaging by the end of 2018. In addition, bananas, coconut, softwood forestry by-products, as well as grasses and cereal stalks, all have the potential to become bio-plastics. Some materials can be heated, melted and injected into moulds, which is crucial if they are to compete with petroleum-based plastics.

Sources: Bio-based World news, Bloomberg, Company Websites

## M&A activity in Europe 2015 – H1 2018

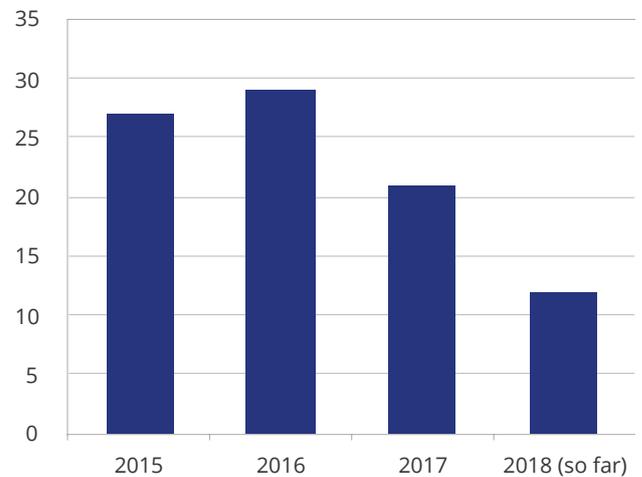
- In H1 2018, 12 deals were closed in Europe. This is promising for the full year.
- Cross-border deals make up the major share of European transactions.
- Over the past three years, the market has seen two highs in both 2015 and 2016. In 2017, European M&A activity slightly cooled down, and from our view on the market, 2018 will be in line with last year's activity.

Transactions 2015–2018



Source: Mergermarket, Oaklins research

Number of transactions by year



Source: Mergermarket, Oaklins research

*“To generate growth despite the industry’s growth rates being largely tied to GDP growth, flexible packaging companies have been quite aggressive in their acquisition efforts. The market and consolidation efforts are focused on a global playing field, as the large share of cross-border deals also indicates.”*

## Selected Oaklins' flexible packaging transactions

 has been acquired by  M&A SELL-SIDE Consumer & Retail	 has been acquired by  US\$18m M&A SELL-SIDE Business Support Services/Other Industries	 has been acquired by  M&A SELL-SIDE Other Industries/Private Equity	 has been acquired by  M&A SELL-SIDE Business Support Services
 has been acquired by private individuals M&A SELL-SIDE Other Industries/TMT	 has acquired  US\$288.5m M&A BUY-SIDE Consumer & Retail	 has been acquired by  M&A SELL-SIDE Other Industries	 ZIMMA provided a Fairness Opinion FAIRNESS OPINION Consumer & Retail/Other Industries

## Case study

  
 has been acquired by  
  
 M&A SELL-SIDE  
 Consumer & Retail

Papyrus Norge AS (Papyrus), a Sweden-based manufacturer and supplier of graphical paper, office paper, packaging products and consumables, has expanded its business in Norway with the acquisition of Arto Emballasje AS. The price and terms of this transaction have not been disclosed.

Arto Emballasje is specialized in the wholesale of industrial packaging. The company sells primarily to customers in the Oslo area. Arto Emballasje is going to continue operating under its current name, but it will be an important supplement to Papyrus' commitment in Norway and Europe.

Papyrus is a leading European merchant in paper, facility supplies and industrial packaging. The company is currently present in 22 countries across Europe, with its head office located in Göteborg, Sweden. The company has a clearly defined strategy with the aim of becoming the market leader for industrial supplies and packaging in the Nordic region. The acquisition of Arto Emballasje is fully in line with this strategy.

Oaklins' team in Norway acted as the exclusive financial advisor to the shareholders of Arto Emballasje in this transaction.

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professionals

60   
offices

40   
countries

5,000+   
transactions

15   
sectors

### Oaklins offers a comprehensive range of services

- M&A advisory (buy and sell-side)
- Growth equity and equity capital markets advisory
- Debt advisory
- Corporate finance services

### Oaklins industry specialists

Flexible packaging is one of our focus areas. Combining comprehensive sector knowledge with global execution has led Oaklins to become the most experienced M&A advisor in the flexible packaging sector, with a large contact network of the most relevant market players worldwide. This results in the best possible merger, acquisition and divestment opportunities for flexible packaging companies.

If mergers, acquisitions or divestitures of businesses or business units are part of your strategy, we would welcome the opportunity to exchange ideas with you. Please find our contact details below.



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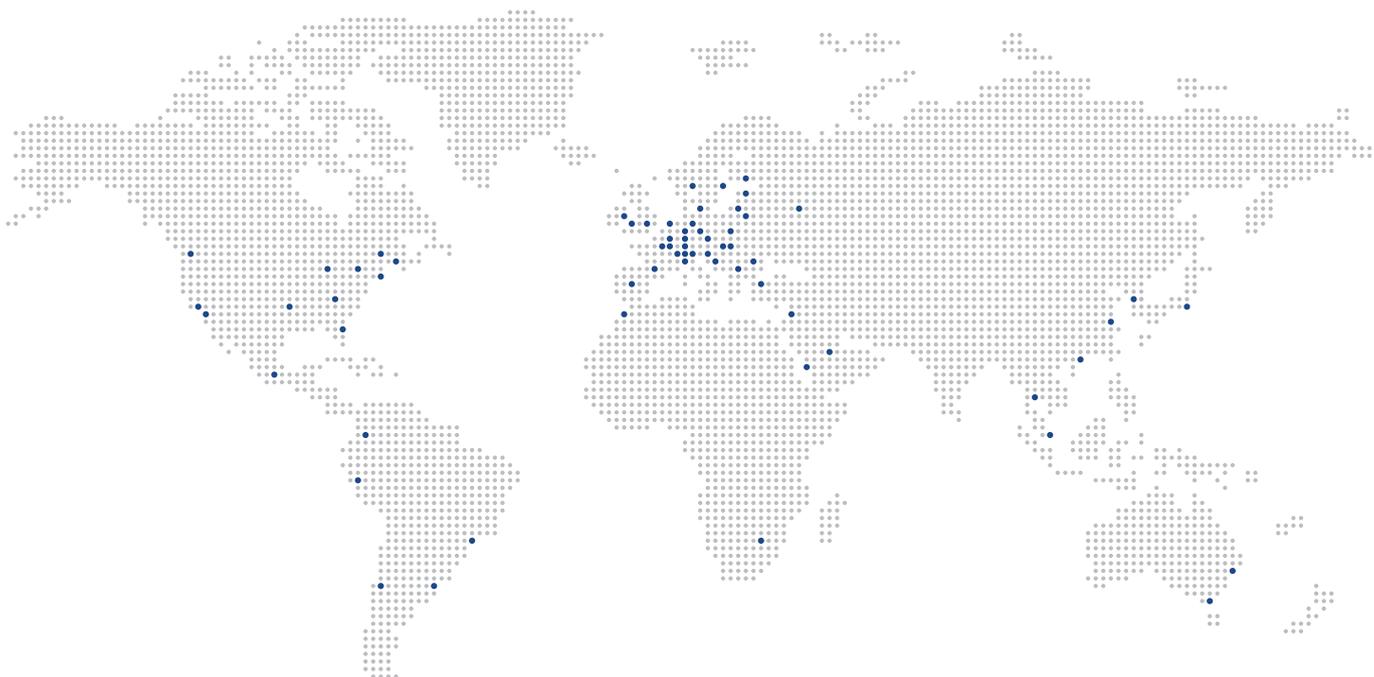
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