EUROPEAN FLEXIBLE PACKAGING UPDATE

Jan Homan (Honorary FPE Chairman)

FPA's Annual Conference 2019, Arizona

Who is Flexible Packaging Europe (FPE)

- 80+ member companies
- More than 400 production facilities
- 6 national associations also FPE members
- 9 FPE members listed in Europe's Top 10
- 5 FPE members in World's top 10
- About 80% of European flexible packaging turnover

Extract of FPE membership:

… and many more in Western, Central and Eastern Europe

Objectives and Key Activities

Compliance

- **Market Analysis**
- **Communication**
- **Sustainability**
- **Public Affairs**
- **Food Contact**
- **Networking & Conferences**
- **Global Issues**





POLITICAL AND ECONOMIC SITUATION

Political and Economic Situation

- Brexit (scheduled for 29 March 2019)

Brexit: Consequences for UK and EU

- Negative economic effects both in UK and EU
- Infrastructure not in place: customs, legislation, …
- Border to Ireland?

- Will EU be as united after Brexit?
- Potential dominance by southern European member states which might cause less budget discipline

Political and Economic Situation

- Brexit (scheduled for 29 March 2019)
- War in Ukraine (still ongoing)
- Immigrants from Africa and Middle East
- European Union moving to the right ?

Political Situation in Europe

More populistic parties (both left and right) with less support for Europe

Movement(s) without any political party

Political and Economic Situation

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- International trade relationships (USA, China and Europe)

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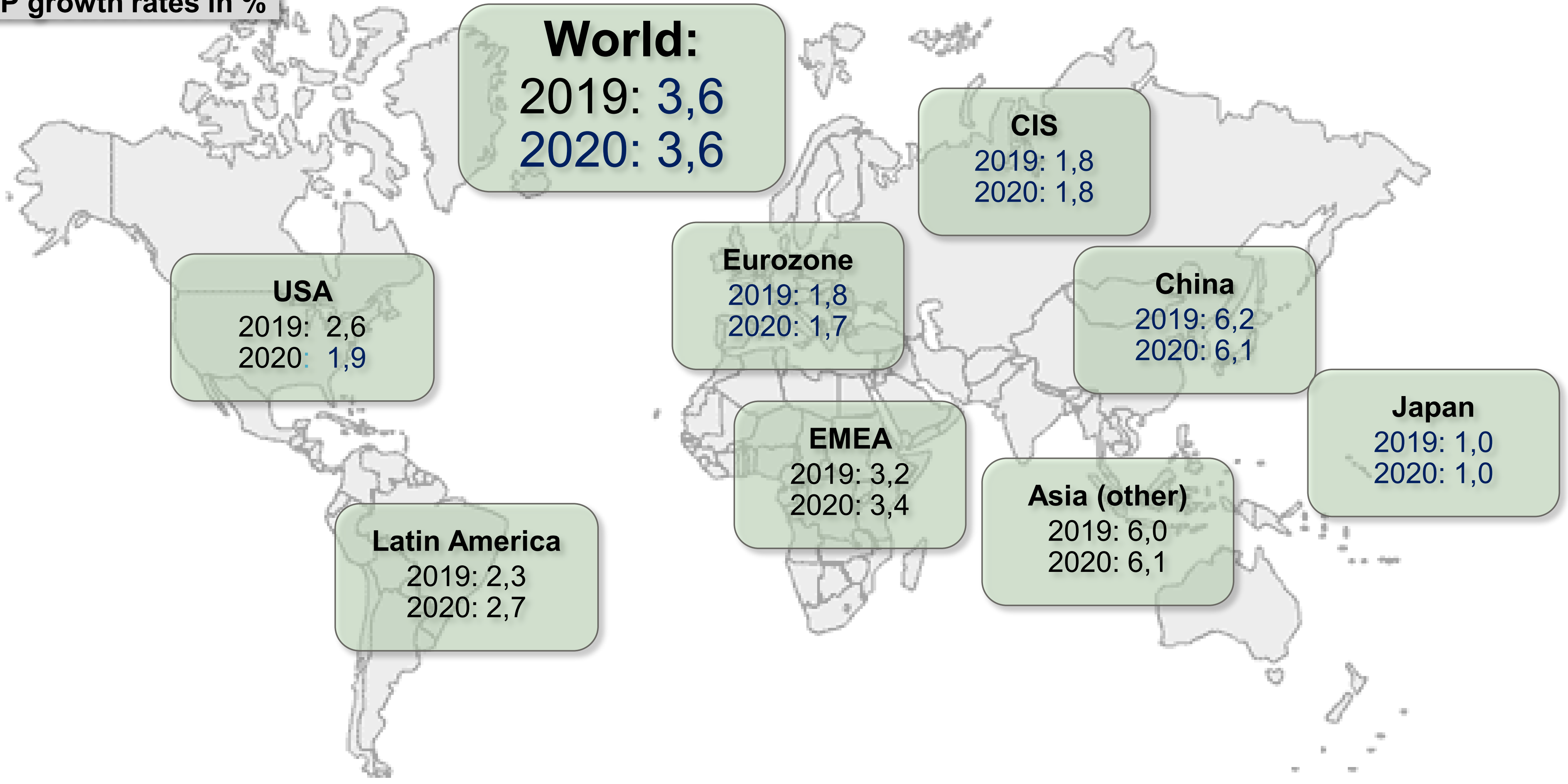
- European Union moving to the right ?
- International trade relationships (USA , China and Europe)
- Climate change impacts

Climate change: Weather conditions becoming more extreme

Global economic outlook

Expected GDP growth rates in %



Source: OECD / IMF January 2019

European economic outlook
“Growth moderates amid global uncertainties”

- GDP forecast reduced to 1.3% in 2019 and 1.6% 2020 (expected growth across all member states)
- Growth continues and is supported by improved labour market
- But development in some Member States was adversely affected by temporary domestic factors (e.g. disruptions in car production, social tensions and fiscal policy uncertainty)
- Inflation on moderate level around 1.5% (also revised downwards)
- Main risks remain from external factors: e.g. increased trade tensions and slowdown in emerging markets – possibility of a disruptive Brexit creates additional uncertainty

Sources: European Commission (Winter 2019 Economic Forecast) and others

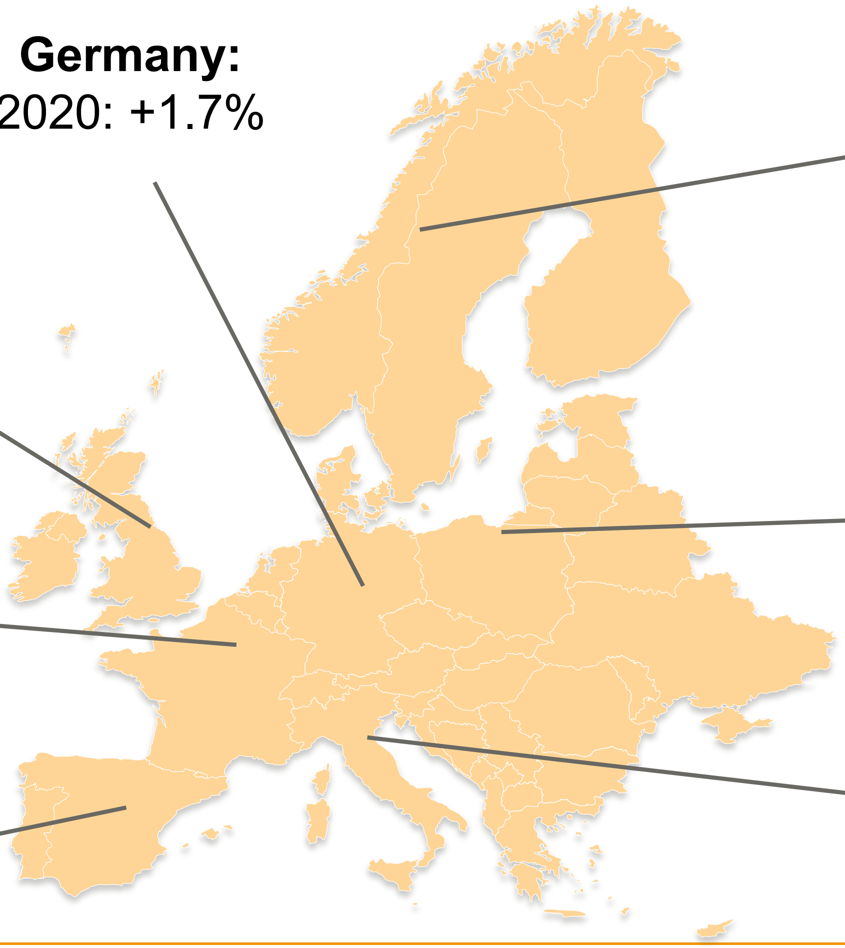
Economy in Europe: real GDP growth rates

EU (28):
2020: +1.7%

Germany:
2020: +1.7%

Sweden:
2020: +1.7%

UK:
2020: +1.3%



Poland:
2020: +3.2%

France:
2020: +1.5%

Spain:
2020: +1.9%

Italy:
2020: +0.8%

Sources: European Commission (Winter 2019 Economic Forecast)

GLOBAL AND EUROPEAN FLEXIBLE PACKAGING MARKETS

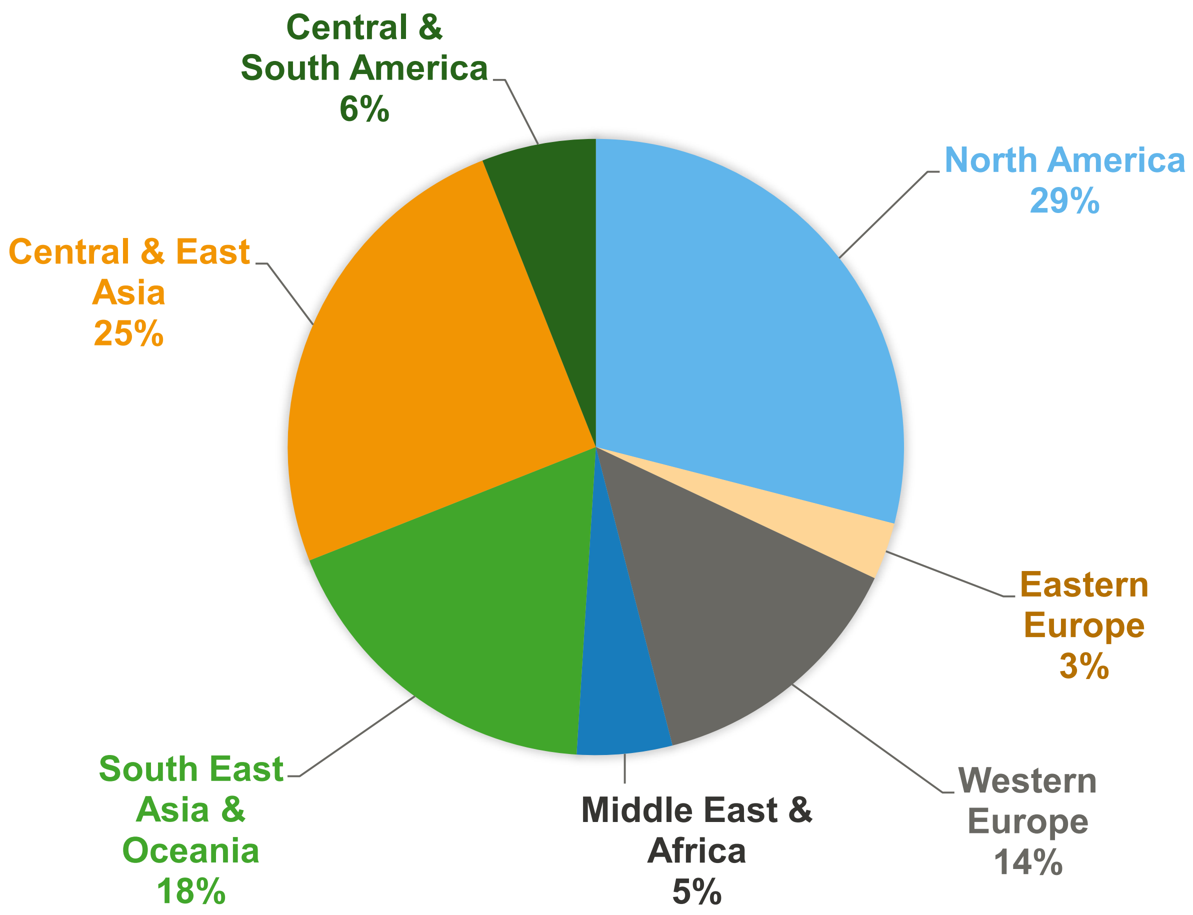
Definition of Flexible Packaging

Flexible Packaging is produced through adding value to a wide variety of substrate materials including plastic films, paper and aluminium foil – either separately or in combination – mainly for primary retail food packaging and non-food packaging applications.

This specifically excludes shrink and stretch films used for secondary packaging, carrier bags, supermarket and self-service counter bags, etc.

Global Flexible Packaging Market by Region 2018e

Total Market = $90.3 billion (+4.5% vs. 2017)

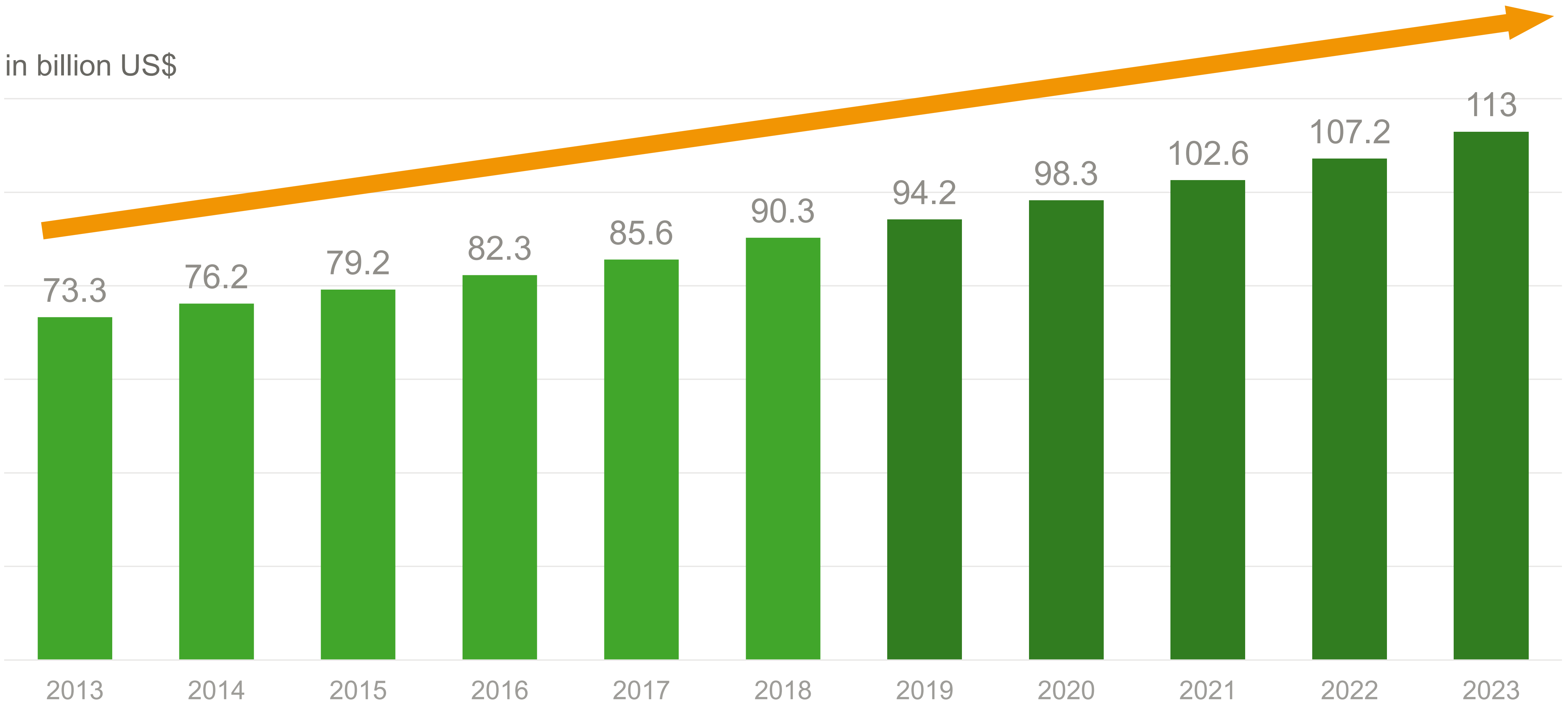


Estimated global market in 2023:

$113 billion

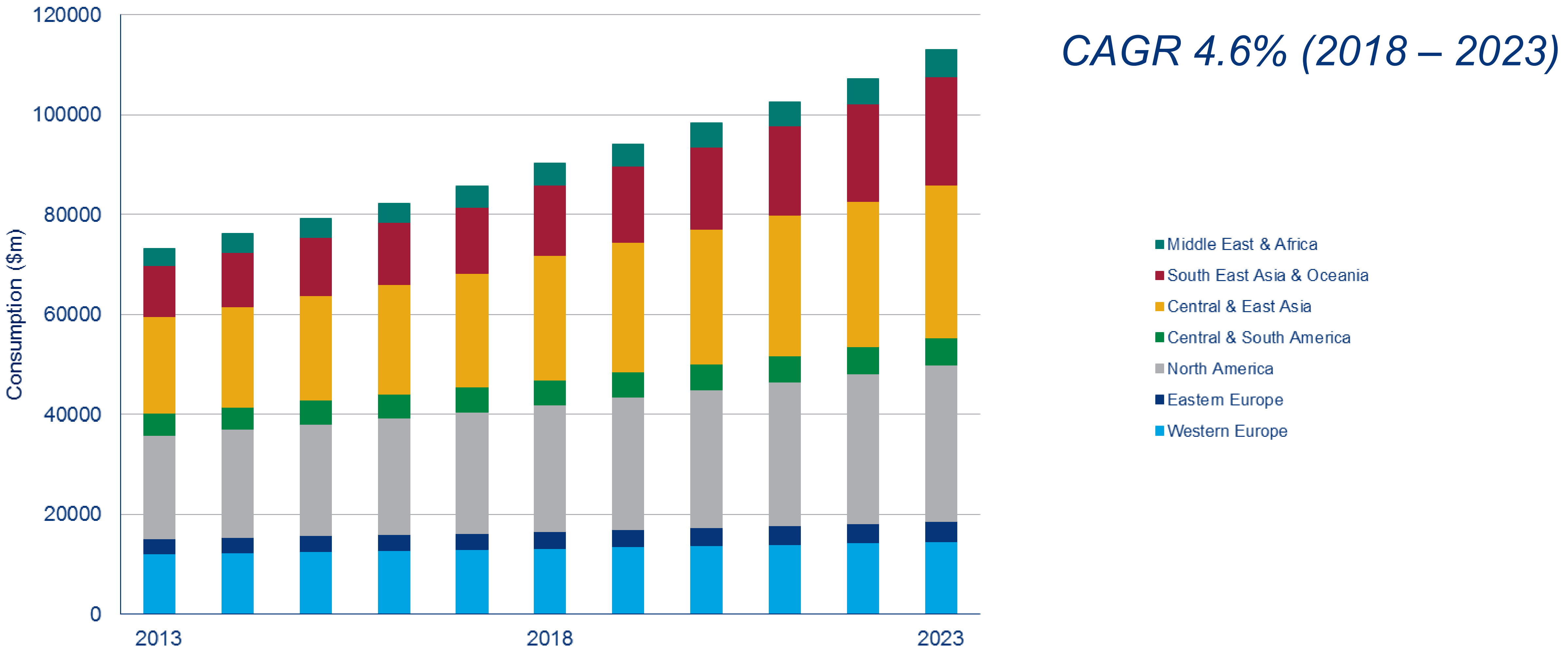
Source: Wood Mackenzie Chemicals / Industry estimates

Global Consumption of Flexible Packaging



Source: Wood Mackenzie / Industry estimates; 2019-2023 forecast

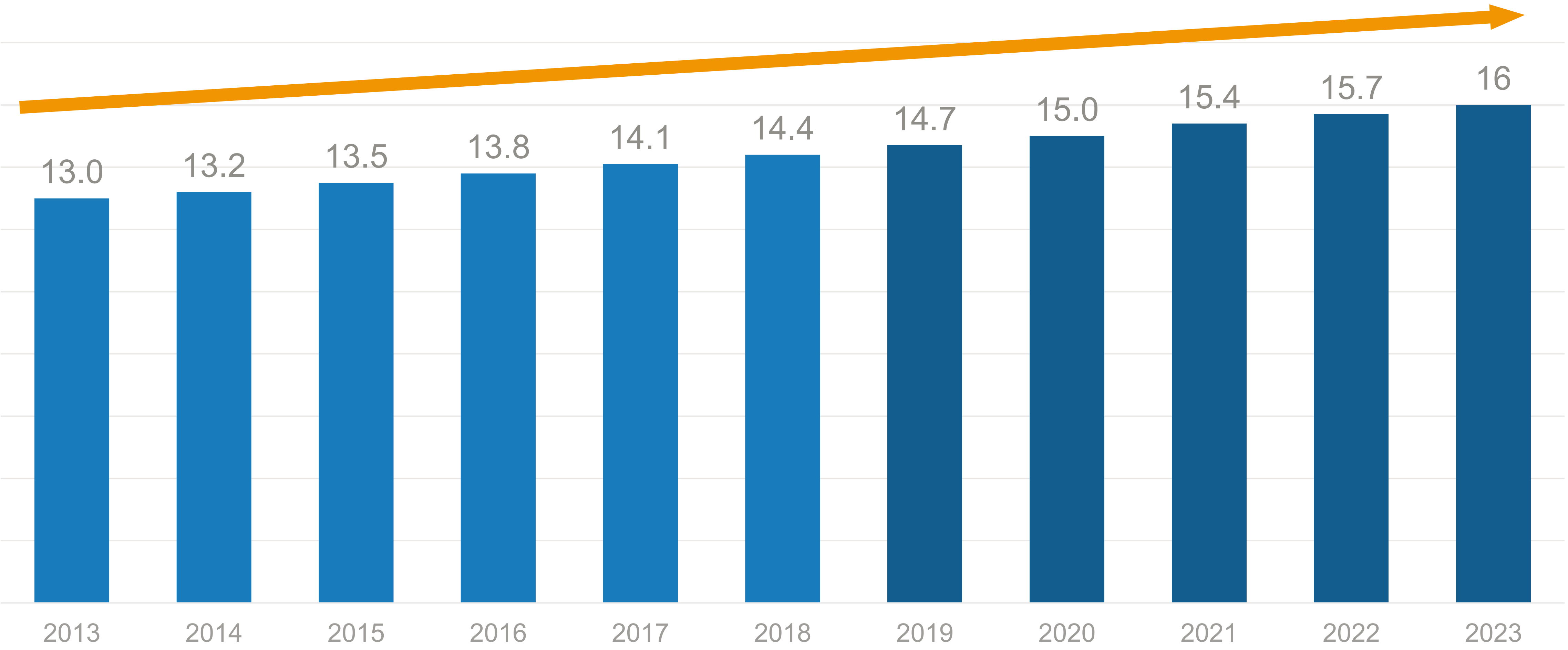
Global flexible packaging demand by region



Source: Wood Mackenzie Chemicals / Industry estimates; 2018-2022 forecast

European Consumption of Flexible Packaging

in billion €



Source: Wood Mackenzie / Industry estimates; 2018-2023 forecast

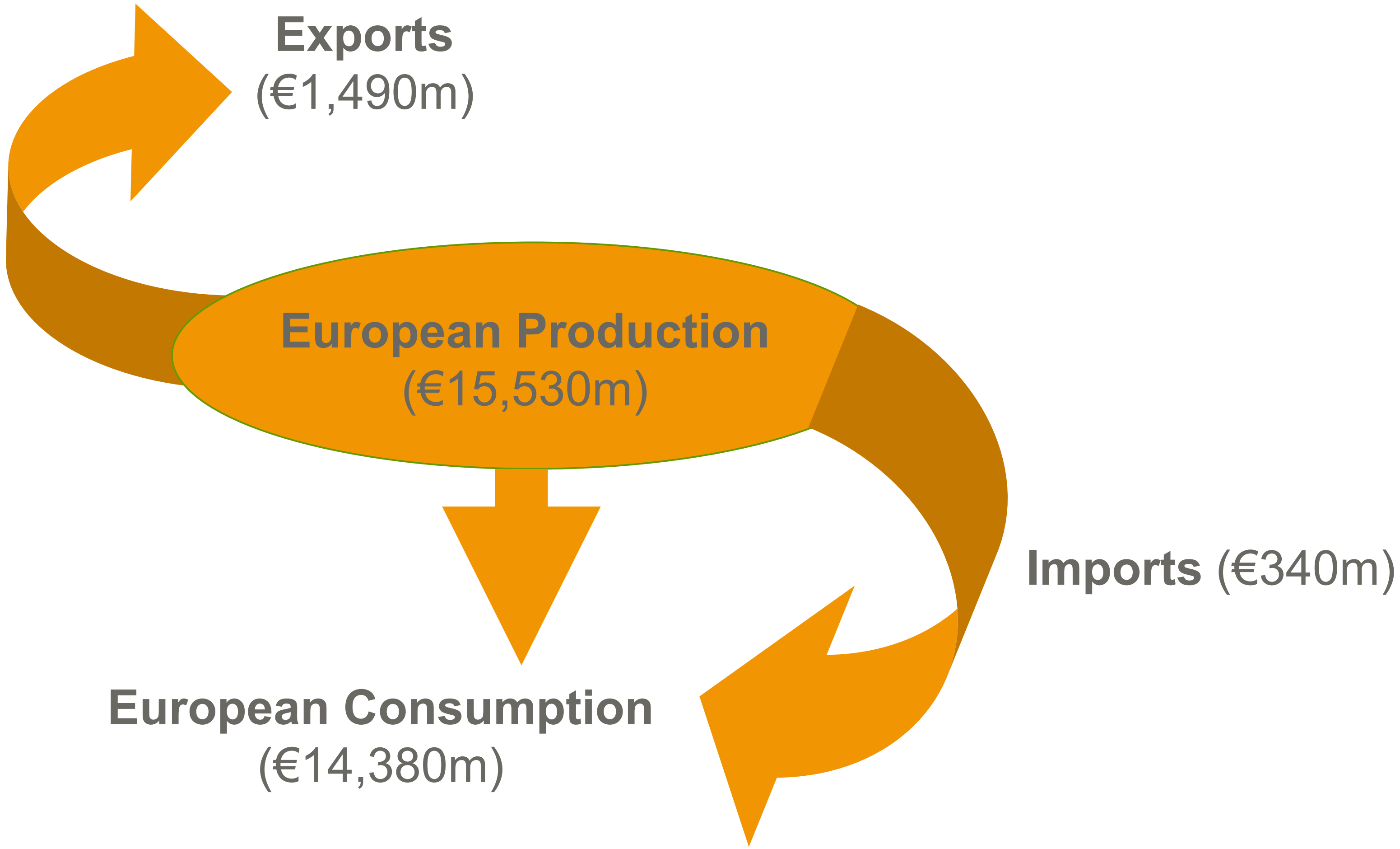
European Consumption of Flexible Packaging

in billion EUR	2017	2018e	% Change
Western Europe	11,220	**11,445**	2,0
Central and Eastern Europe	2,845	**2,935**	3,2
TOTAL EUROPE	14,065	**14,380**	2,2

Production: 15,5 billion EUR

Source: Wood Mackenzie Chemicals / Industry estimates

European Converted Flexible Packaging Demand, Production & Trade (2018e)



Source: Wood Mackenzie Chemicals / Industry estimates

European Converted Flexible Packaging Market Trends 2018

Western Europe

- Market value growth continuing at around 2% for the region as a whole
- Germany believed to be slowing to just below 2%
- Italian market growing at under 2% by value, broadly in line with the previous year.
- Turkish market up by around 3%. Currency devaluation creating more export opportunities
- UK demand growth of 2%+ but continuing Brexit uncertainty causing concerns over security of supply (imports account for more than one-third of the market). Some import substitution likely from H2 2019
- France and Spain 2%+ growth
- On-going broadly static demand in the Nordic countries
- Imports into Western Europe relatively small but growing, sourced primarily from Eastern Europe, especially Poland. Other imports from Asia (especially India) and the Middle East (especially Israel)
- Exports outside the region around 10% of production, mostly high specification materials to Eastern Europe, the Americas, Middle East & Africa, and Asia
- Above average flexible packaging growth by value in applications such as coffee, fresh produce, chilled foods/ready meals, pet food, and pharmaceuticals. Confectionery, one of the largest categories, continuing broadly static in value terms

Source: Wood Mackenzie Chemicals / Industry estimates

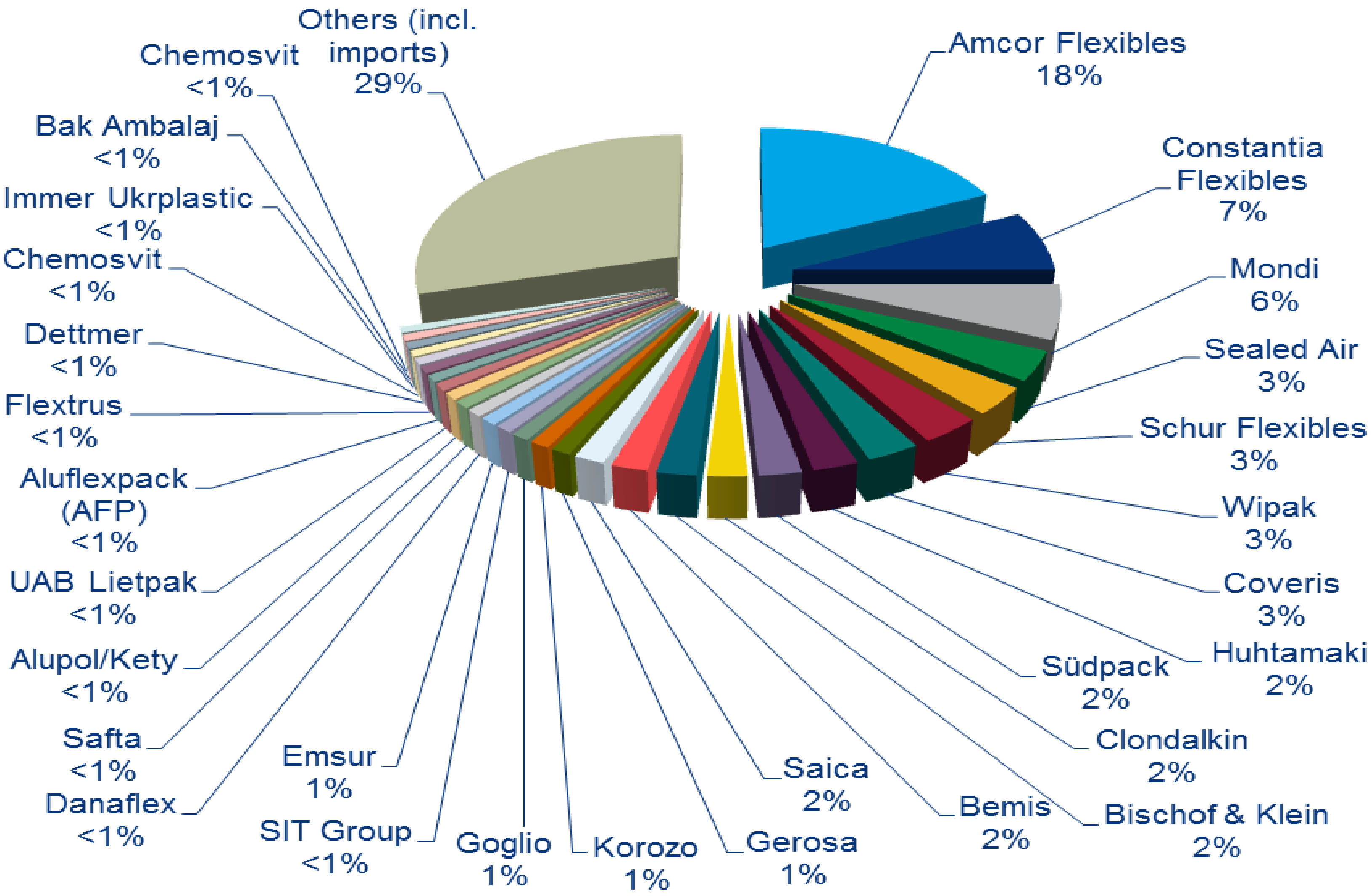
European Converted Flexible Packaging Market Trends 2018

Eastern Europe

- Market value growth of 3.2% in 2018, compared with around 5% five years earlier
- Growth around 3% in Russia. Ongoing import substitution in Russia has seen production continuing to grow faster than national consumption during the year
- Poland continues to have relatively strong growth although slowing to under 4% in 2018. Exports account for around one-third of production
- Regional imports are sourced mostly from Western Europe and also growing from Asia and Middle East
- Exports out of the region continue to grow, especially into Western Europe. More converters, especially in Poland, increasingly active e.g. Alupol as well as multinational players with local plants in Poland and elsewhere in Eastern Europe. More East European based converters, such as Immer Group/Ukrplastic (Ukraine), Chemosvit (Slovak Rep.), and Lietpak (Lithuania) targeting customers in Western Europe.

Source: Wood Mackenzie Chemicals / Industry estimates

The Leading European Flexible Packaging Players



Source: Wood Mackenzie Chemicals / Industry estimates

Flexible Packaging Mergers & Acquisitions

Purchasing Company	Company Acquired
Amcor	Bemis (planned to complete Q2 2019)
Schur Flexibles	Uni Packaging (France)
Constantia Flexibles	TT-Print (Russia)
Emsur (Spain)	Eximpack (Russia)
Rollprint (US)	Merging with Eurofoil TEO (Ireland) and Alliantz Flexible Packaging (Singapore) to form Paxxus
Tekni-Plex (US)	Beyers Plastics (Belgium)
Reflex (UK)	Fusion Flexibles and its subsidiary Mercury Packaging bought out of administration
Westrock (US)	Schlüter Print Pharma Packaging (Germany)
TPBI (Thailand)	Intelipac Paper Manufacturing (IPM) (UK)
Bemis	Evadix Labels and Evadix MPI (Romanian subsids. of Belgian polymer printing group Evadix
Sirane Group (UK)	B&G Products (UK)
Schur Flexibles	Condalkin‘s Cats, Haensel and Dimax businesses in Netherlands and Germany
Visionscape (UK)	Gelpack (UK) acquired out of administration
Berry Global, Inc.	RPC Group (UK) (Berry Global considering a bid?)

Source: Wood Mackenzie Chemicals / Industry estimates

Flexible Packaging sales in European retail (FMCG)

Unit growth rates in %

Forecast: 2019 vs 2018

	France	Germany	Italy	Spain	UK	Turkey	Poland	Russia	Total Europe
Total	**1,1%**	**0,8%**	**0,9%**	**1,4%**	**0,9%**	**3,9%**	**2,5%**	**1,5%**	**1,5%**
Confectionery	-1,2%	0,6%	-1,8%	1,9%	0,4%	1,3%	0,2%	0,8%	**0,6%**
Snacks	2,4%	3,2%	2,2%	3,5%	1,1%	4,3%	4,2%	1,8%	**2,4%**
Pet food	10,2%	3,1%	7,4%	4,6%	1,2%	19,5%	8,5%	5,4%	**4,5%**
Coffee	0,3%	0,4%	-1,2%	-0,9%	3,1%	5,2%	1,1%	0,5%	**1,1%**
Dairy	1,4%	1,1%	0,2%	0,4%	0,1%	8,9%	2,2%	5,4%	**0,9%**
Ready meals	1,0%	1,5%	0,5%	4,1%	2,7%	4,3%	4,2%	1,8%	**1,9%**

Source: Euromonitor International

CIRCULAR ECONOMY

Political Actions/Initiatives by the EU Commission

EU Plastics Bags Directive

EU Circular Economy Package (CEP)

Packaging and Packaging Waste Directive

EU Plastics Strategy

Single-Use Plastics Directive (SUP)

Green Public Procurement Guidelines

Multi Annual Financial Framework

…

EU Plastics Strategy

Official publication by Commission in Jan 18
Generally supported by EP resolution in Sep 18

Key objectives

1. Make recycling profitable for business
2. Curb plastic waste & Stop littering at sea
3. Drive investment and innovation
4. Spur change across the world

"By 2030, all plastics packaging placed on the EU market is either reusable or can be recycled in a cost-effective manner"

Single-Use Plastics (SUP) Directive

- Part of EU Plastics Strategy
- Targeting the 10 most found SUP products on EU beaches
- Includes:
  - "Crisp packets & sweet wrappers"
  - Beverage pouches also impacted (under SUP "beverage containers")

Table 2. Sampling numbers of top ten SUP items

Ranking	Item	Total number
1	Drinks bottles, caps and lids	24,541
2	Cigarette butts	21,854
3	Cotton buds sticks	13,616
4	Crisp packets / sweet wrappers	10,952
5	Sanitary applications	9,493
6	Plastic bags	6,410
7	Cutlery, straws and stirrers	4,769
8	Drinks cups and cup lids	3,232
9	Balloons and balloon sticks	2,706
10.	Food containers including fast food packaging	2,602

Single-Use Plastics (SUP) Directive

- A set of restricting/constraining measures

  Ban / Consumption reduction targets / Litter clean-up costs / Collection targets / Labelling requirements / Design requirements / Awareness raising measures …

- Accelerated legislative process (under one year)
- Main impact/ threat for flexible packaging applications

  Litter clean-up costs for brands and retailers in addition to normal waste management costs (collection, sorting and recycling) as per EU Packaging regulation

- Threat of going beyond by individual member states

New Plastics Economy (NPEC)

Global Commitment (GC)

- FPE endorsed Global Vision of a circular economy for plastics, where plastics never become waste
  - Eliminate all problematic and unnecessary plastic items
  - Innovate to ensure that plastics we do need are reusable, recyclable, or compostable.
  - Circulate all plastic items to keep them in the economy and out of the environment.
- Provide flex pack industry with image of responsible actor for a circular economy.
- In line with our sustainably strategy to improve performances & perception

- Co-signed by over 250 organisations

Global Commitment to eradicate plastic pollution at the source

26-10-18

*NPEC: Global project initiated by Ellen MacArthur Foundation (EMF)

New Plastics Economy (NPEC)

Global Commitment (GC)

MEDIA RELEASE

FLEXIBLE PACKAGING EUROPE

October 2018

Flexible Packaging Europe endorses Common Vision of the New Plastics Economy Global Commitment

Flexible Packaging industry takes active lead towards development of a circular economy

In line with its commitment to actively lead the way towards a more resource efficient society, Flexible Packaging Europe (FPE) has issued a strong endorsement of the New Plastics Economy Global Commitment led by the Ellen MacArthur Foundation (EMF).

The Global Commitment has a clear vision to create a future where plastic packaging is designed, used and the materials then made available again in the circular economy by 2025. This means they should not leak into the natural environment and, therefore, would continue to play an essential role in helping society live and consume sustainably.

Flexible packaging is one of the most resource efficient packaging formats due to its basic concept. That is to minimize at source the use of packaging material by intelligently selecting and possibly combining very thin films and foils to meet particular requirements and optimal performances. By applying prevention – the option at the top of the waste management hierarchy – material waste is avoided by using no more than necessary to develop the packaging solution in the first place.

Guido Aufdemkamp, Executive Director of FPE said, "The industry is already making significant progress 'closing the loop' to ensure flexible packaging plays an active part in the circular economy. But it also is important that the value of flexible packaging in a sustainable economy is recognised and fully appreciated."

In recognition that end-of-life is more challenging for flexible packaging, due to its very light weight and its material composition, the association has been at the forefront of instigating a number of initiatives. The CEFLEX collaborative project, in which the entire flexible packaging value chain is working to establish an infrastructure for collecting, sorting and recycling across Europe, will make flexible packaging fully relevant in a circular economy.

"Clearly it is important to maintain momentum to increase recycling. And we are one organization who called for a separate collection of all packaging to avoid any cherry-picking of materials, so that wider adoption of recycling is feasible," added Mr Aufdemkamp. "But it is important to realise that while packaging recycling is essential in a circular economy, it should not be a means to an end as the sole focus on packaging end-of-life can lead to undesired outcomes."

To this end, Flexible Packaging Europe welcomes the Global Commitment's aim to consider "the full-life cycle and systems perspective, aiming for better economic and environmental outcomes overall". This holistic and responsible vision is fully in line with the industry's approach to developing sustainable solutions.

Further information:

Henning Grimm, Manager Communications and Global Relations (grimm@flexpack-europe.org)

Flexible Packaging Europe's (FPE) members manufacture all types of flexible packaging. FPE comprises more than 80 small and medium sized companies as well as the major European producers of flexible packaging for all materials. These companies cover more than 85% of the European flexible packaging turnover. Also, six national flexible packaging associations are members of FPE ensuring consistency between national and European activities and lobbying. www.flexpack-europe.org

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October 2018

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Flexible packaging is one of the most resource efficient packaging formats due to its basic concept. […]
Material waste is avoided by using no more than necessary to develop the packaging solution in the first place

The CEFLEX collaborative project will make flexible packaging fully relevant in a circular economy

FPE welcomes the Global Commitments to consider "the full-life cycle and systems perspective, aiming for better economic and environmental outcomes overall".

CEFLEX is the industry initiative to improve recycling of Flexible Packaging

Circular economy

CEFLEX was launched to improve the end-of-life-performance of Flexible Packaging to make it even more relevant in the circular economy.

Collection, sorting and recycling

This will be achieved by combining optimized packaging design and improved infrastructure for collection, sorting and recycling.

Entire value chain

CEFLEX involves the leading companies along the entire value chain material producers, converters, fillers, brand owners, recyclers and many others (www.ceflex.eu).

Across Europe

The objective is to increase collection, sorting and recycling of Flexible Packaging across Europe and to develop end markets for the recycled materials.

CEFLEX (initiated by FPE)

- CEFLEX started in January 2017
- 120+ companies and associations
- Representing the WHOLE flexible packaging value chain (material producers, film producers, flexible packaging converter, brand owners, retail, waste management and others)
- Combined global turnover of 800+ Bn €
- 80+% of the producers/converters of flexible packaging in Europe
- 4 of the top 5 Global Consumer Goods companies (2018)

CEFLEX' Vision for the Circular Economy

Project CEFLEX Vision

By 2025 there will be an established collection, sorting and reprocessing infrastructure/economy across Europe for flexible packaging

– based on end-of-life technologies and processes which deliver the best economic and environmental outcome for a circular economy

Flexible Packaging supports sustainable production and consumption

Food preservation
It helps to contain and preserve food throughout the chain and enables proper and safe delivery to the consumer.

Part of food chain
Flexible Packaging is an essential part of the food chain.

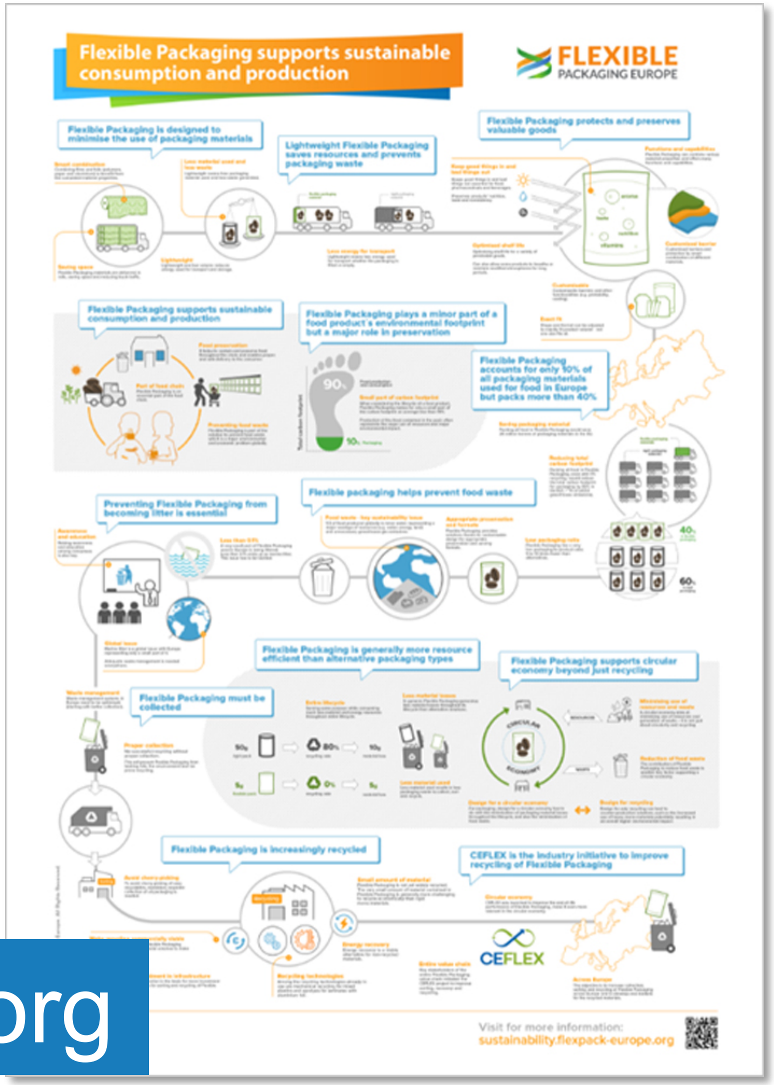
Resource efficient
Flexible Packaging is generally more resource efficient than alternative solutions due to its very light weight.

Preventing food waste
Flexible Packaging is part of the solution to prevent food waste which is a major environmental and economic problem globally.

FPE’s Key Sustainability Messages

Multilingual

- Infographics
- Poster
- Fact sheet
- Pocket guide
- Website



www.sustainability.flexpack-europe.org

THE (EUROPEAN) OUTLOOK OF FLEXIBLE PACKAGING

Conclusions

- European industry in dynamic development
- Flexible packaging with steady market growth
- Flexible packaging is the most resource efficient packaging format
- The industry has challenges to communicate the advantages of flexible packaging

Global Flexible Packaging Executive Forum 2020

- **At the location of Interpack 2020**
- **Friday, 8 May 2020 (8.30-10.30am)**

Hosted by:

Messe Düsseldorf

Organized by:

FLEXIBLE PACKAGING EUROPE

2017:

- 130 delegates
- 55+ converters
- 5 continents

Co-sponsored by:

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