Packaging in Catalonia

May 2018

Sector snapshot

Catalonia Trade & Investment

Generalitat de Catalunya
Government of Catalonia

The Packaging Sector in Catalonia: sector snapshot

ACCIÓ
Government of Catalonia

Elaborated by
Strategy and Competitive Intelligence Unit (Catalonia Trade & Investment)
and Cluster Development

Barcelona, May 2018

Contents

1. The packaging sector

Description of the packaging sector

Science and art of presenting in the best conditions for storage, distribution, protection, sale and use.

Value chain and map of stakeholders

SUPPLIERS TO MANUFACTURERS OF PACKING

MANUFACTURERS OF PACKING AND PACKAGING

TECHNOLOGY AND RESEARCH CENTRES

UNIVERSITIES AND TRAINING SCHOOLS

RECYCLER

- Raw Material
- Semi-manufactured product
- Tooling
- Resins, adhesives

- Labels
- Packaging
- Protection
- Packing
- Closures

Materials

- Cardboard
- Plastic
- Glass
- Metal
- Wood

INDUSTRIAL PACKING AND PACKAGING USER

PACKER

BRAND OWNER

Dept.: Technical, marketing, packaging, environment, purchasing

RETAILER

- Food distribution
- Pharmaceutical distribution
- Online platforms

CONSUMER

MACHINERY MANUFACTURERS

- Manufacture of packing
- For packing
- End-of-life and machinery
- Engineering consultants

DESIGN SERVICES AND OTHERS

SERVICES FOR MANUFACTURERS
(copackers, handling, etc.)

PARTNERSHIPS AND CLUSTERS

FAIRS AND CONGRESSES

MAGAZINES AND PUBLICATIONS

PUBLIC INSTITUTIONS

Source: Cluster Development

The packaging sector on a global scale

USD 839 bn
Global market (2015).

Growth of 3.5%
in the packaging sector on a global scale, CAGR between 2015 and 2020.

Main regions

- **Asia** it is the first global consumer with **38.4%**, followed by **North America** and **Europe** with **22.3%** and **20.8%** respectively.
- The per capita consumption in **North America** and **Europe** is **4** and **2** times **higher than** the **world average.**

Main materials

- **Paper** and **cardboard** are the most commonly used materials and account for **38%.**
- **Plastics** were the most rapidly growing materials between 2010 and 2015. **Flexible plastic** is the fastest growing (**4%**), as a replacement for other traditional materials.

Trends

- **Industrial users** are the first receivers, but the **pharmaceuticals and food sectors** are growing most.
- Despite increased consumption in the developed countries, there are differences compared to the emerging countries as there is growing **sensitivity to the environment.**

Sources: EIC (ACCIÓ) based on *The Future of Global Packaging to 2020* and Top 10 Trends & Drivers of Future Packaging Demand, Smithers Pira.

2. The packaging sector in Catalonia

Mapping of the packaging sector in Catalonia (I)

The packaging sector is characterized by a large number of companies with their **own products** and a diverse value chain. **The high presence of clusters, associations and trade fairs strengthens** the sector, increasingly focused on responding to the demands of the food, cosmetics or pharmaceuticals industries.

753
COMPANIES
(2015)

- **66% of the companies** are concentrated in the **packing and packaging segment.**
- **96%** of the **companies** in the packaging sector are **small and medium-sized enterprises.**
- **71%** of the companies manufacturing packing and packaging target the **food market, 42%** the **cosmetics** market and **32% pharmaceuticals.**

40,000
EMPLOYEES
(2015)

- **50%** of **employees** are concentrated in the segment **of packing and packaging, 26%** in the **machinery** sector, and **22%** are **suppliers.**

€7,100 M of
INVOICING
(2015)

- It accounts for **3.4%** of the total **Catalan GDP.**
- **65% of invoicing** is by companies in the **segment of packing and packaging, 20%** by **suppliers** and **12%** in the **machinery segment.**

Source: Cluster Development based on SABI, 2015

Mapping of the packaging sector in Catalonia (II)

Segmentation of a diverse sector

SUPPLIERS SEGMENT

€1,396.7 M
INVOICING (2015)

- It is a highly diverse segment, due to the differences between the production chains of different materials.
- There is a significant weight of large business groups like **BASF** or **Dow Chemical**, especially in the case of manufacturers of plastic.
- **Plastic production** accounts for **73%** of **invoicing.**

MACHINERY SEGMENT

€868.9 M
INVOICING (2015)

- **Average growth of 7.3%** annually between 2010 and 2015.
- The **machinery for packaging** accounts for **44% of the invoicing** of the companies of this segment.

PACKING AND PACKAGING SEGMENT

€4,573 M
INVOICING (2015)

- **Average growth of 3.2%** annually between 2010 and 2015.
- A large part of production focuses on **the non-industrial end user**, especially in the food, cosmetics and pharmaceuticals industries.
- **50%** of the **companies** work primarily with **plastic** due to the high demand for plastic packaging by the food industry.

SERVICES SEGMENT

€187.2 M
INVOICING (2015)

- They are engaged mainly in the **design of packaging** and **packing for third parties**, etc.
- There is a **large number of professionals** for the design of packaging, etc.
- They are companies with **few employees** that also give services to other sectors.

Source: Cluster Development based on SABI, 2015

Ecosystem of the packaging sector in Catalonia

**Partial illustrational table*

Technology and Research Centres
CVC · Planta de Tecnologia dels Aliments UAB · Beta · Eco-Pol-tech · IQS · Centre Català del Plàstic · LEITAT · BIP · CD6 · eurecat

Universities and Training Schools
IQS · ELISAVA · UPC

RECYCLER

SUPPLIERS TO MANUFACTURERS OF PACKING
- Raw Material: GCR Group · Alier sa
- Semi-manufactured product: kp · DS Smith
- Tooling: Matrix · intecma
- Resins, adhesives: Lubrizol · SunChemical

MANUFACTURERS OF PACKING AND PACKAGING
- Labels: Enplater
- Packaging: Menshen
- Protections: IPE
- Container: font Packaging Group
- Enclosures: Porexpan

Materials
Cardboard, Plastic, Glass, Metal and Wood

MACHINERY MANUFACTURERS
Comexi · Giave · Volpak · Bossar · Tavil · ABB · VAHC Engineering Solutions

PACKING AND PACKAGING USER

PACKER
BRAND OWNER
Dept. Technical, marketing, packaging, environment, purchasing

RETAILER
- Food distribution
- Pharmaceutical distribution
- Online platforms

CONSUMER

Design services and others
diadeis · morillas

Services for manufacturers *(copackers, handling, etc.)*
Fruselva · Liven

Associations and clusters
Packaging Cluster · ADP · Enginyers Industrials de Catalunya · amec

Fairs and congresses
Hispack · graphispag · InnoPack

Magazines and publications
News Packaging · Envasprés · IDE · infoPACK

Public institutions
ACCIÓ · Generalitat de Catalunya

Note: The use of these brands is for information purposes only. The brands mentioned in this report belong to their respective owners and under no circumstances are they the property of ACCIÓ. This is a partial representation for the purpose of illustrating the companies that belong to the packaging sector ecosystem in Catalonia, but other companies may exist that have not been included in the study.

Source: EIC (ACCIÓ) based on Cluster - Development

The competitiveness of the packaging sector in Catalonia

Attractive to foreign investors

Catalonia is **the best region in the South of Europe with regard to investment** for the years 2018 and 2019
(FDI Int, 2018)

The main sectors targeted by packaging...

The pharmaceuticals sector has received **47.5% of the FDI projects** of the Spanish State.

The food and beverage sector has received **31% of the FDI projects** of the Spanish State.

Open to international trade

79% of the companies in the sector **export** and **10% have a subsidiary abroad.**

The average **export ratio** over invoicing for the sector is **34%.**

- **Machinery companies** with ratios of around **80%.**
- **Packing and packaging companies** with ratios of **30%.**

Innovative and enterprising

1.46% of its GDP dedicated to R&D.

9,282 innovative companies (**22.2%** of the total for Spain).

ACCIÓ, the agency **with the best support for R&D** within the investment attraction strategy *(FDI Strategy Awards, 2017).*

Clusters and associations of the packaging and related sectors.

Barcelona...

5th City in Europe with regard to scientific academic output
(Knowledge Cities Ranking, CPVS, UPC, 2017).

Source: EIC (ACCIÓ) based on fDi Markets. Cluster Development, INE.
Note: FDI (Foreign Direct Investment).

Catalonia, the best location for the packaging sector

STRATEGIC LOCATION AND ACCESS TO MARKETS

- Catalonia is **well connected** with the world and is **easily accessible**.
- With **200 international destinations in 57 countries**, Barcelona airport is just 15 km from the city centre, has **100 operating airlines** and is regarded as the **best airport in the South of Europe.**

CONGRESS AND OTHER TRADE FAIRS

- Barcelona is the third city in the world for international conferences, only behind Berlin and Paris (ICCA, 2016).
- Catalonia is home to some of the most outstanding international technology events, such as the **Mobile World Congress**, which makes Barcelona the permanent global centre for mobile technologies.
- Catalonia hosts several **fairs associated with the packaging sector** such as Graphispag, Hispack and InnoPack.

A COMPETITIVE SECTOR

- Presence of associations and clusters such as the **Packaging Cluster** or the **Design Cluster**, which strengthen the sector.
- A rich and diverse **system of universities** and **research centres** that enriches a sector that targets customers of various industries.

INNOVATION AND ENTREPRENEURSHIP

- With the Eurecat Technology Centre Catalonia is well positioned to promote technology transfer and collaboration between the university, industry and the administration.
- **A leading region for startups in Europe**, Catalonia has more than 1,200 startups and has business incubators and accelerators of the first order.

BUSINESS MINDSET

- Catalonia is **always open to business** and has active government policies that support and complement the strength of the private sector.

POLE OF ATTRACTION FOR LOCAL AND INTERNATIONAL TALENT

- Presence of **talent from all over the world** thanks to its high quality of life, its cosmopolitan atmosphere, its entrepreneurial track record and the availability of qualified, multilingual personnel.

UNBEATABLE LOCATION AND QUALIFIED PERSONNEL

- Catalonia has a wide range of **office spaces.**
- With high level professionals from all over the world, Catalonia has **skilled, talented workers** with **lower costs** than other places, such as Madrid, London, Berlin or Paris.

Source: EIC (ACCIÓ)

3. Trends and innovation in the packaging sector

Global trends in the packaging sector

CONSUMER

Seniors
In 2014, **17%** of the European population was **over 65**, in **2060** it will be in the region of **30%**.

Baby & Kids
This is a segment of consumers that drives innovation especially in relation to **product safety**.

Singles
There is increased consumption of **ready-made products**, **single-dose products**, and products are being packaged that never had been previously.

E-commerce
Online trade is **constantly growing**.

CHANNEL

New players
Increased weight of **online sales platforms** that come into competition with large **traditional retailers**, forced to redefine their strategies and channels.

Multichannel
The **logistics system** depends on the sales channel, which implies **different packaging requirements**.

Retailers
Increased shelf life of products / Cost reduction / Increase in Ready To-Retail packaging / Opening online channel.

Online platforms
Product safety / Consumer perception.

BRAND OWNERS

Concentration of business
In sectors such as food, a **small number of companies dominate** most brands.

Short series
The increased range, promotions and market test require short series and **reducing time-to-market.**

Extended shelf life
Need to seek new **alternative packaging solutions** to multilayer because they have allowed greater safety and longer expiry dates.

COMPETITION

Concentration of business
The packaging and packaging machinery sector is dominated by large business groups that grow through mergers and takeovers of companies, such as, for example: **International Paper, Amcor, Smurfit Kappa, Ball, Mondi, Coesia** or **IMA Group**, among others.

New technologies
Digital printing/Digitalization of the value chain (4.0)

SUSTAINABILITY

Increased consumer interest in **sustainable products**, especially among **the younger population**.

Reduction in the volume of packaging generated and **redesign** of products and packing by distribution brands.

Trade-off between functionality and sustainability. Products like plastic lengthen products' shelf life, but are difficult to recycle.

The customer demands more sustainable products but the **cost differential is a hindrance.**

Source: EIC (ACCIÓ) based on Cluster Development

Technological innovation in the packaging sector in Catalonia

New technologies related to the packaging sector

3D printing

Manufacture of packaging or parts for machinery by means of 3D printers.

Active, smart packaging

Packaging to increase the shelf life of products, monitor their freshness, display information about their quality, improve their safety and convenience.

Edible packaging

Edible packaging, to replace disposable plastic packaging for food

Soluble packaging

Water-soluble packaging that decomposes in the sea.

Anti-bacterial packaging

Packaging that not only protects against possible bacteria but also actively works against them.

Self-cooling and self-heating packaging

Packaging capable of heating or cooling its contents independently.

Multi-sensory packaging

Packaging that brings new sensations (aroma, sound, etc.) that current packaging does not.

Non-stick packaging

Packaging whose contents do not stick to the packaging allowing consuming the entire contents.

Source: Cluster Development.

4. International benchmarking

International Benchmarking

Detection of main world packaging clusters

	Packbrige	FoodRegio	BreizPack	Korea Packaging Association	Cluster de Innovación en Envase y Embalaje	Atlanpack	Imprim'Luxe
Area	Packaging	Food with packaging workgroup	Packaging	Packaging	Packaging	Packaging	Labels
Initiative	Private	Private with public support	Private	Private with public support	Private with public support	Private with public support	Private with public support
Country	Sweden	Germany	France	South Korea	Spain	France	France
Year founded	2010	2007	2009	1991	2007	1997	2013
Members	189	68	50	97	53	54	48
Value chain	Complete	Complete	Complete	Complete	Complete	Complete	Complete
Governance	Own structure	Own structure	Own structure	Own structure	Own structure	Own structure	Own structure
Team	6 people	9 people	2 people	-	2 people	3 people	-
Phase of the initiative	Advanced	Advanced	Advanced	Advanced	Advanced	Advanced	First month
Web	www.packbridge.se	www.foodregio.de	www.breizpack.net	http://kopa.or.kr/en/	www.clusterenvase.com	www.atlanpack.com	www.imprim-luxe.fr

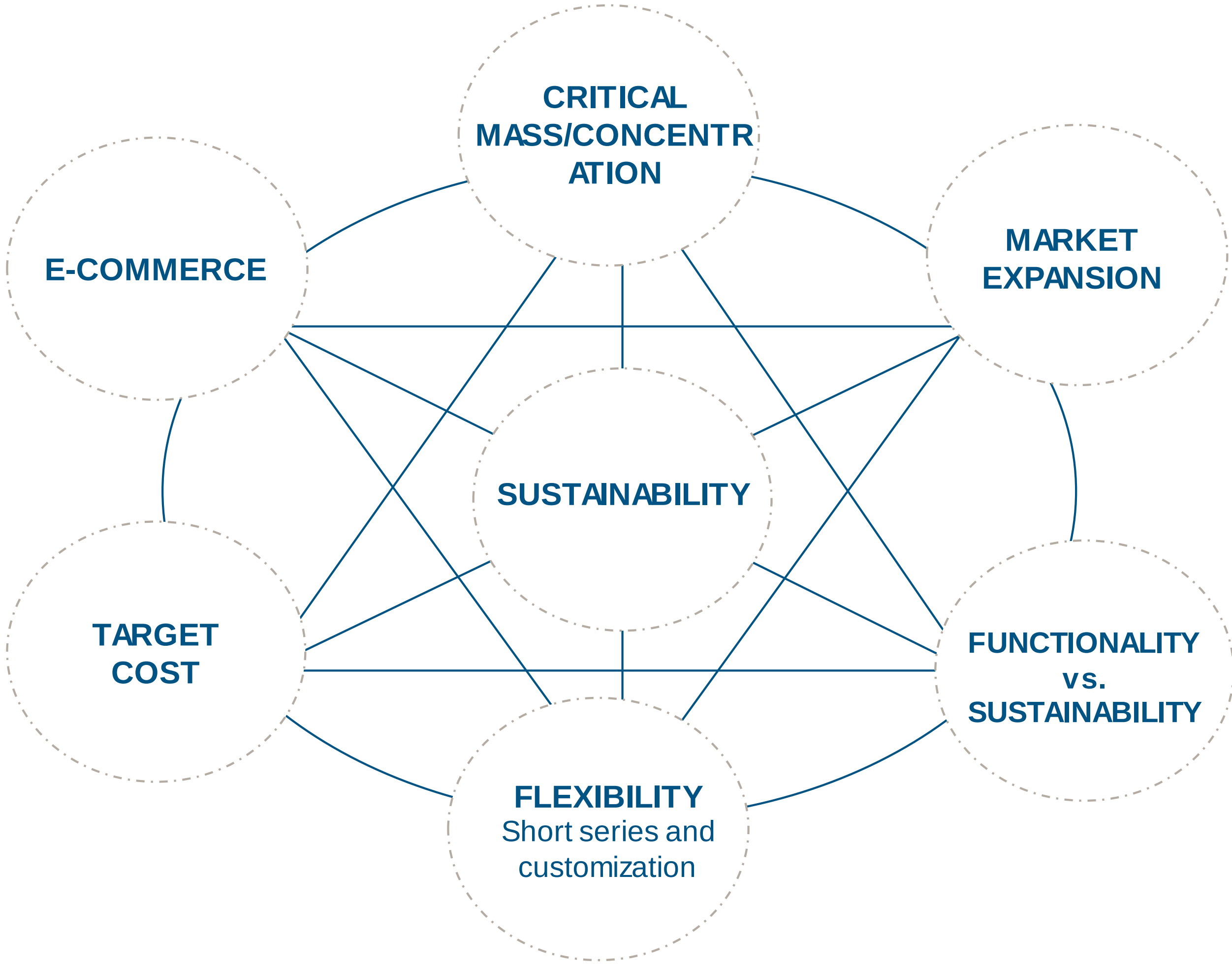
Source: websites of the respective clusters

Catalonia Trade & Investment

Generalitat de Catalunya
Government of Catalonia

5. Strategic challenges

Strategic challenges of the sector



Source: Cluster Development

ACCIÓ

Passeig de Gràcia, 129
08008 Barcelona
www.accio.gencat.cat
www.catalonia.com
@accio_cat
@catalonia_ti

Consulta l'informe complet aquí:

http://www.accio.gencat.cat/ca/serveis/banc-coneixement/cercador/BancConeixement/el_sector_del_packaging_a_catalunya

Més informació sobre el sector, notícies i oportunitats:

http://www.accio.gencat.cat/ca/sectors/packaging/

Catalonia Trade & Investment

Generalitat de Catalunya
Government of Catalonia