

Packaging Cluster Annual Report 2018



**PACKAGING
CLUSTER**

ANNUAL REPORT 2018

CONTACT

C/ de la Innovació, 2
08225 Terrassa (BARCELONA)
Tel. (+34) 93 788 23 00
info@packagingcluster.com

Welcome from the Board

The **industrial sector** accounts for **19.7%** of the Catalan economy, above the average in the 28 member states of the European Union and close to the target set by Europe for industry to contribute a fifth of wealth by the year 2020. The **packaging** sector plays a fundamental role as it generates **3.4%** of **GDP** in Catalonia.

However, to continue being competitive and to tackle the challenges posed by digitisation it will be necessary to invest in the medium and long term in policies which favour R&D&i. This is an area where we are far from the necessary figures. Catalonia invests just **1.47%** of **GDP in R&D**. This figure has decreased over the last decade and is moving further away from the 2% European target for 2020.

We have a strong industrial base which contributes greatly to the economy and we should invest in to allow it to continue to add value in a globalised and interconnected world. This is where the clusters policy will have the greatest impact.

Investing time in connecting ideas and people. Investing in exploring success stories and trends to stay ahead of change. Investing in transformative projects. Three areas which can be affected individually but which might just work in a speedier and more targeted manner in a cluster setting.

Therefore, the Board has drawn up the **Strategic Plan 2019-2021** with the aim of being a leading organisation in Southern Europe in the world of packaging as a leader in socio-economic competitiveness and driving forward projects in specific fields such as **the circular economy and shared value**.

We are currently faced with a paradigm shift, in which it is collaborative work **that moves the benefits of creating shared value beyond the economic realm to promote social and environmental progress**. The classic role of companies is thus redefined to expand beyond the traditional model of creating value for shareholders and applying corporate social responsibility for the purposes of gaining social returns. At the cluster we want to be an agent for change to help companies in the new transition.

2018 was full of activity for us, with a total of **66 activities**: 35 of them were targeted at members and 31 where we participated actively as an organisation to help position the sector and the companies and entities we represent, whether locally or internationally.

Concurrently, we have also moved into new areas such as the **entrepreneurial programme** (connecting start-ups with pilot projects with industrial companies) and by forming a new **sustainability group** to ease the transition to the 2030 targets set by the European Commission. Additionally, there was a lot of activity in the **projects** area, with **9** approved in 2018. This will involve the **participation of companies from different sectors**, as it is at the crossroads of knowledge that we will create the new ecosystems of the future.

Happy reading!

Artur Costa Barrés
President of the Packaging Cluster

1

Packaging Cluster

1. Strategic Plan
2. Value chain
3. Strategic axes
4. Team
5. Board directors

2

Economic Equilibrium

1. 2018 Profit and loss account
2. Balance 2017-2018

3

Sector del packaging

1. Update estratègic
2. Tendències globals del sector
3. Estudi del consumidor digital

4

Activities

1. Activities for members
2. Activities as a cluster
3. News
4. Highlighted

5

Tanning

1. Postgraduate
2. PEA
3. In Company course

6

Projects 2018

1. Finished
2. In progress
3. Approved
4. Strategic change projects, sub-challenges and project ideas



ANNEXED

Members & Collaborators

1. Members
2. Collaborators

Packaging Cluster



Set up by Catalan companies in 2012, today the cluster consists of 65 active members*2 (including companies, knowledge centers and other entities that work in the packaging industry).

With the aim to achieve new opportunities of bargain, further the competitiveness, potency a comely ecosystem and reinforce the sector.

The Packaging Cluster, is recognized by the program Catalonia Clusters of ACCIÓ, for the Agrupaciones Empresariales Innovadoras, (AEI), as a European level, with the accreditation of the ClusterManagement Excellence. On the other hand, it forms part of the mesh Clusters.cat And the platform ECCP¹

¹ European Cluster Collaboration Platform | www.clustercollaboration.eu

1.1. Strategic Plan

The Strategic Plan 2016-2018 came to an end this year. It enabled the cluster to position itself as an impact cluster; reach a critical mass of **75 members**, participate in different **projects at state and European level**, as well as drive forward sector specific **training**.

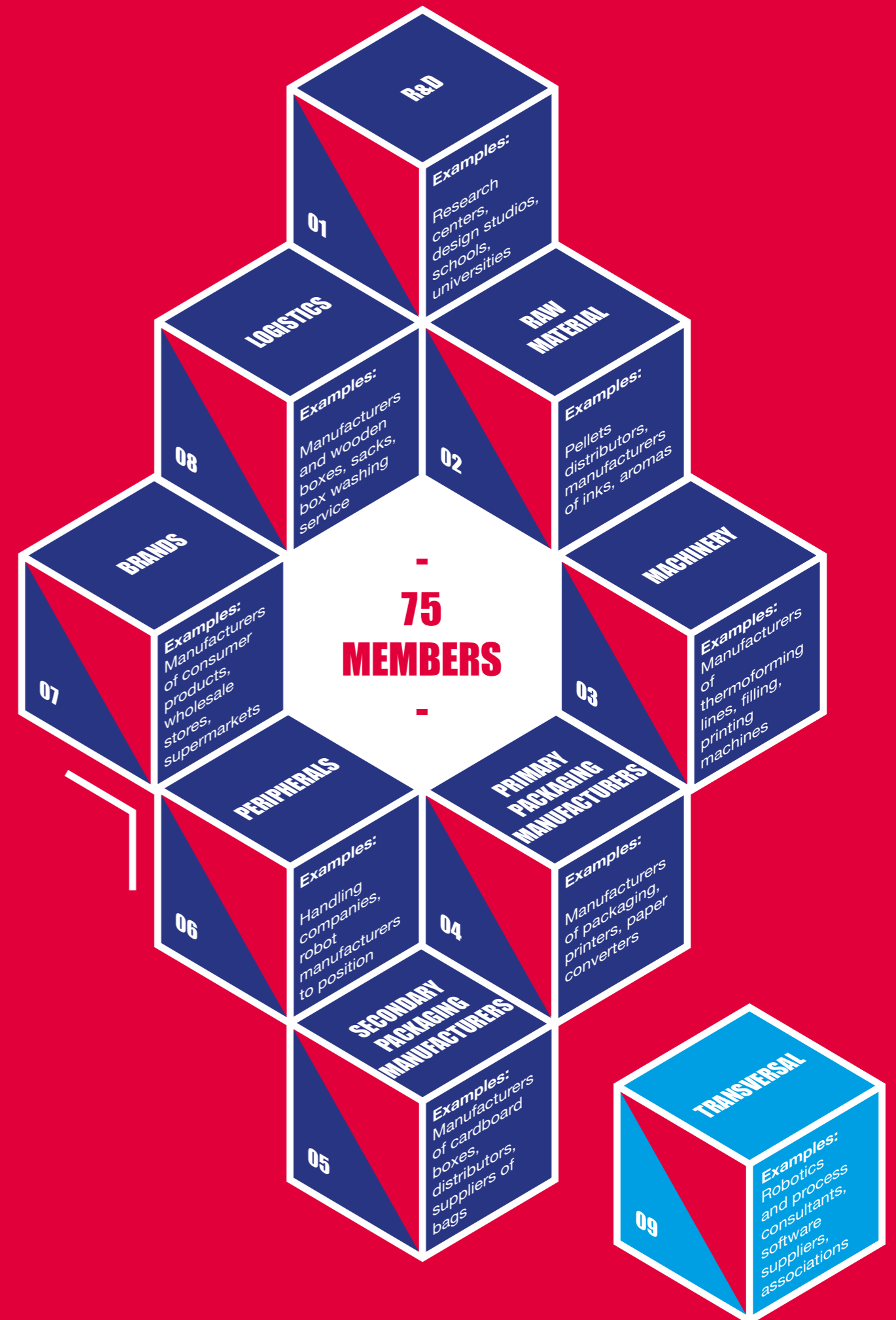
This year, the new strategic plan 2019-2021 puts forward new challenges to be tackled in the transformation which the sector requires to improve the competitiveness of the ecosystem of the packaging sector.

This will be done at the same time as we also build the organisation into a leader in Southern Europe in the world of packaging. Therefore, we can summarise the new goals of the coming three year period as:



1.2. Value Chain

<p>R&D (01)</p> <p><i>Entities that promote research, development and innovation.</i></p> <p>Generation of ideas to initiate projects, develop briefings for advanced proposals, selection of materials or development of a brand's conceptual design.</p>	<p>Raw Material and Inter-medayte Products (02)</p> <p><i>Manufacturers, suppliers and/or distributors of raw materials and intermedayry products.</i></p> <p>Acquisition of the raw material to start a product.</p>	<p>Machinery Manufacturers (03)</p> <p><i>Manufacturers, suppliers and/or distributors of machines.</i></p> <p>Acquisition of machinery to convert the raw material or handle and package final containers.</p>
<p>Primary Packaging Manufacturers (04)</p> <p><i>Manufacturers, suppliers and/or distributors of primary packaging, which is in contact with the product and taken home by the consumer: plastic containers, paper, cardboard, glass, aluminium, as well as lids, covers, labels, banderols or carton, etc. This also includes the manufacturers of the material prior to its processing (cardboard plates, flexible film reels, plastic or glass bottles, etc).</i></p> <p>Acquisition of the primary packaging to protect, preserve, transport or communicate the product.</p>	<p>Secondary Packaging Manufacturers (05)</p> <p><i>Manufacturers, suppliers and/or distributors of secondary packaging, which is not in contact with the product and may or may not be taken home by the consumer.</i></p> <p>Acquisition of secondary packaging to group primary packaging into more manageable units.</p>	<p>Peripherals and End of Line (06)</p> <p><i>Manufacturers or suppliers of elements used to inspect the packaging, or packaging handlers and co-packers.</i></p> <p>Acquisition of secondary elements such as rays, vision, positioning, etc., to optimise processes. Outsourcing of external companies for the handling and assembly of packaging products.</p>
<p>End User, Brands and Distributors (07)</p> <p><i>Packers and/or developers of the final product for the consumer, or wholesalers and retailers of containers and packaging.</i></p> <p>Provision of the final product to the consumer.</p>	<p>Logistics (08)</p> <p><i>Manufacturers, suppliers and/or distributors of material for product distribution.</i></p> <p>Tertiary packaging. Outsourcing of services to carry out the entity's logistics processes, or acquisition of tertiary packaging as the company's own direct cost.</p>	<p>Transversal (09)</p> <p><i>Other entities.</i></p> <p>Consulting and outsourcing with companies whose "Core Business" is not necessarily the packaging sector, but whose activity complements the business.</p>



1.3. Strategic Axes

To improve the sector's competitiveness, our work follows 6 courses of action, which combine areas such as business strategy, market intelligence, R&D, innovation, internationalisation and training.



STRATEGIC

AREAS

R&D Projects

Generation of R&D projects at a national and international level.
Synergies and creation of consortiums with complementary companies and knowledge centres in order to improve companies' business.

The Packaging Cluster comprehensively manages the entire project. It is also an instrument that is used to disseminate projects with guarantees, making sure they reach the client sectors via its own dissemination channels, in addition to accessing general and specialised press with the goal of making the obtained solution scalable.

Intercluster workshops

Interaction with other clusters to detect and solve specific packaging needs and demands in other client sectors. In Catalonia, the cluster entities, with more than 2,200 associated companies, are the leading business networks in terms of innovation and strategy.

The Intercluster Workshops are conducted by developing a specific methodology in order to successfully achieve the objectives. These workshops can result in R&D projects or specific actions, with the goal of contributing even greater added value to the business of packaging companies, working with client companies that have real needs and challenges, and that are willing to adopt the solution

Technical and innovation workshops

The dissemination of cutting-edge knowledge, technological innovations and market trends is essential in terms of making cluster companies pioneers and thus ensuring they stay ahead of other leading solutions in the packaging world.

Thus, some of the sessions that take place include conferences on sustainability via the circular economy, Industry 4.0 with the automation of Big Data and the Internet of Things, the management of innovation with concrete solutions, or consumer trends and consumer behaviour with focus groups.

Internationalization and global positioning

The fact that we are assembled as a key cluster allows us to interact with other homologous entities at the international level, jointly analyse future trends, and work together on concrete challenges that are in need of solutions.

Each year, different projects and missions are carried out, taking advantage of leading sector conventions or technological sessions by European clusters, with the aim of strengthening relationships in the medium and long term that will increase the economy's internationalisation and allow cluster members to be positioned as providers of advanced solutions.

Reflection and strategic change

Discussion and exchange of knowledge with the entire value chain in order to generate a strategic vision that will enable us to make progress in the generation of new and better business for the industry.

The entity is a catalyst of useful market intelligence information by commissioning and disseminating specific market studies, trends in the packaging sector, opportunities for new international markets, new technologies to apply in the sector, exchange of good practices, and new challenges that are demanded by both the consumer and brands.

The cluster is the vehicle that allows us to align different members of the value chain in order to produce changes in the strategy of companies, while simultaneously generating a multiplying effect for the entire industry.

Training and talent acquisition

Ongoing professional training in the Packaging Industry and the acquisition of knowledge by new industry experts, as well as in transversal sectors, is something that enriches the entire value chain. From within the cluster, we want to encourage and promote this type of training through three different training courses: Postgraduate Degree in Packaging Engineering, in-classroom teaching at the UPC School; online training through the Packaging Expert Accreditation (PEA); Custom In-Company Courses.

1.4. Team

Àlex Brossa Enriqué
Cluster Manager

Telecommunications Engineer and MBA



Entity's Chief Executive. Experience in innovation project management and competitive improvement for the industry. Promotor of cluster initiatives to improve the business network.

Mar Bonet Roldán
Project Manager

*Industrial Design Engineer,
Postgraduate: Project Management and
Packaging Engineering*



Head of national and European projects. Experience in packaging R&D developments. Developer of R&D initiatives to improve sector competitiveness.

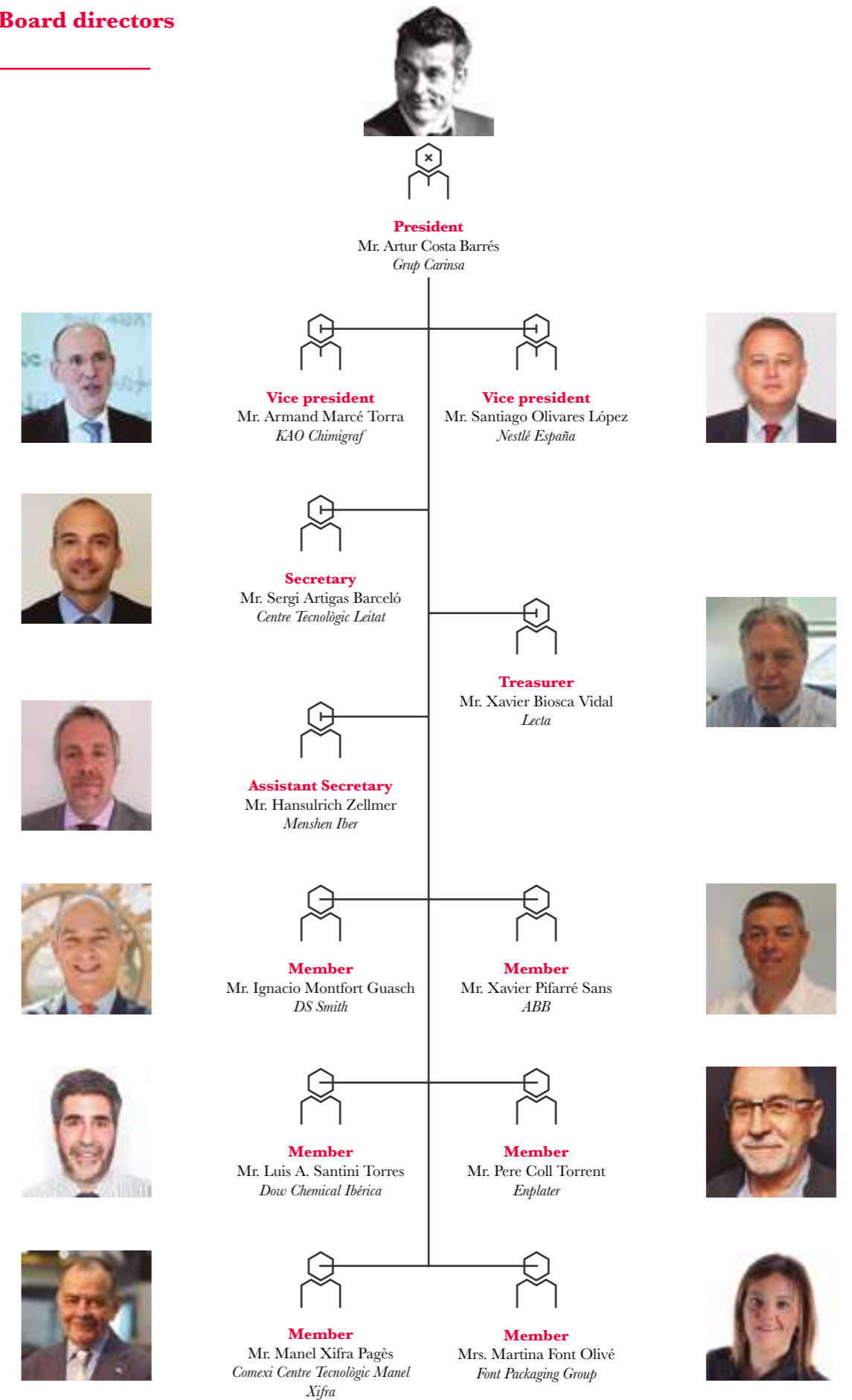
Mireia Andreu Robert
Project Manager

Industrial Design Engineer



Head of entity projects. Specialized in sustainability and Packaging, experience product analysis, market research and product development in the packaging sector.

1.5. Board directors



Economic Balance Sheet

The financial results of the Packaging Cluster have shown annual growth since it was created in 2012. This year the organisation's **budget** has **increased** once again as a result of **project and member growth**, which guarantees the **solidity** and **efficient running** of the organisation.

The packaging sector in Catalonia has a turnover of €7.1 billion and employees more than 40,000 workers. Therefore, the same

professionalism applied in business sector management is also applied in **sound economic management**.

The current Board prioritises **investing all resources for the benefit of the members** and business network it represents whilst also **ensuring professionalism in management** so as to be self-sufficient in financial terms.

It should be noted that 2018 saw income exceed **€300,000**

for the first time, which places us amongst the leading Catalan clusters in terms of turnover. Currently, income is generated by products (50.9%), followed by fees (43.85%), and finally by services (5.25%). It is hoped that fees will become the main source of income and that income from services will increase.

2.1. Profit account

The organisation's accounts are in good health. Currently, fixed income (membership fees) cover the organisation's fixed costs, which ensures that income from projects, activities, and training can be reinvested in these areas.

It should be noted that the organisation has made a profit every year since 2014, with an increase in its own funds, which currently total €71,142.09 which enables the servicing of debts to the public bodies which co-finance the organisation's projects and activity.

	2018	2017
INCOME	303.230,13 €	190.822,18 €
Membership Fees	132.965,27 €	113.629,15 €
Activities	55.952,32 €	35.950,29 €
Projects	109.182,54 €	29.840,24 €
Training	5.130,00 €	11.402,50 €
ESPEDITURES	295.909,54 €	185.233,37 €
Operation	186.152,25 €	126.653,48 €
Activities	48.829,65 €	18.532,62 €
Projects	49.041,50 €	34.552,25 €
Training	11.886,14 €	5.495,02 €
Gross Margin operations	7.320,59 €	5.588,81 €
Amortization & other activities	2.212,82 €	1.478,16 €
OPERATING	5.107,77 €	4.110,65 €

	2018	2017
ASSETS BALANCE	181.173,10 €	130.242,78 €
Noncurrent assets	2.680,36 €	3.559,38 €
Current assets	178.492,74 €	126.683,40 €
LIABILITIES BALANCE	181.173,10 €	130.242,78 €
Net worth	71.142,09 €	66.034,32 €
Noncurrent liabilities	0,00 €	0,00 €
Current liabilities	110.031,01 €	64.208,46 €

Equity	71.142,09 €	66.034,32 €
---------------	--------------------	--------------------

Packaging sector



The Packaging Cluster provides market intelligence to the packaging sector and periodically conducts various studies on trends, social challenges, and innovation to help companies transition to winning business strategies that help them to understand present and future conditions.

3.1. Strategic Upgrade

Catalonia, a territory with a lot of industry experience, has a high concentration of manufacturing companies, a fact that can be seen in their elevated contribution to the economy, with industry representing 20.6% of the GDP, already exceeding the EU's target for 2020 (20%). And the packaging industry plays a vital role in all of this.

This impact is also reflected in the fact that the packaging sector is one of the ten areas with the greatest amount of growth in Europe

(Advanced Packaging) and is one of the Catalan economy's six areas of specialisation (Paper & Packaging)*1.

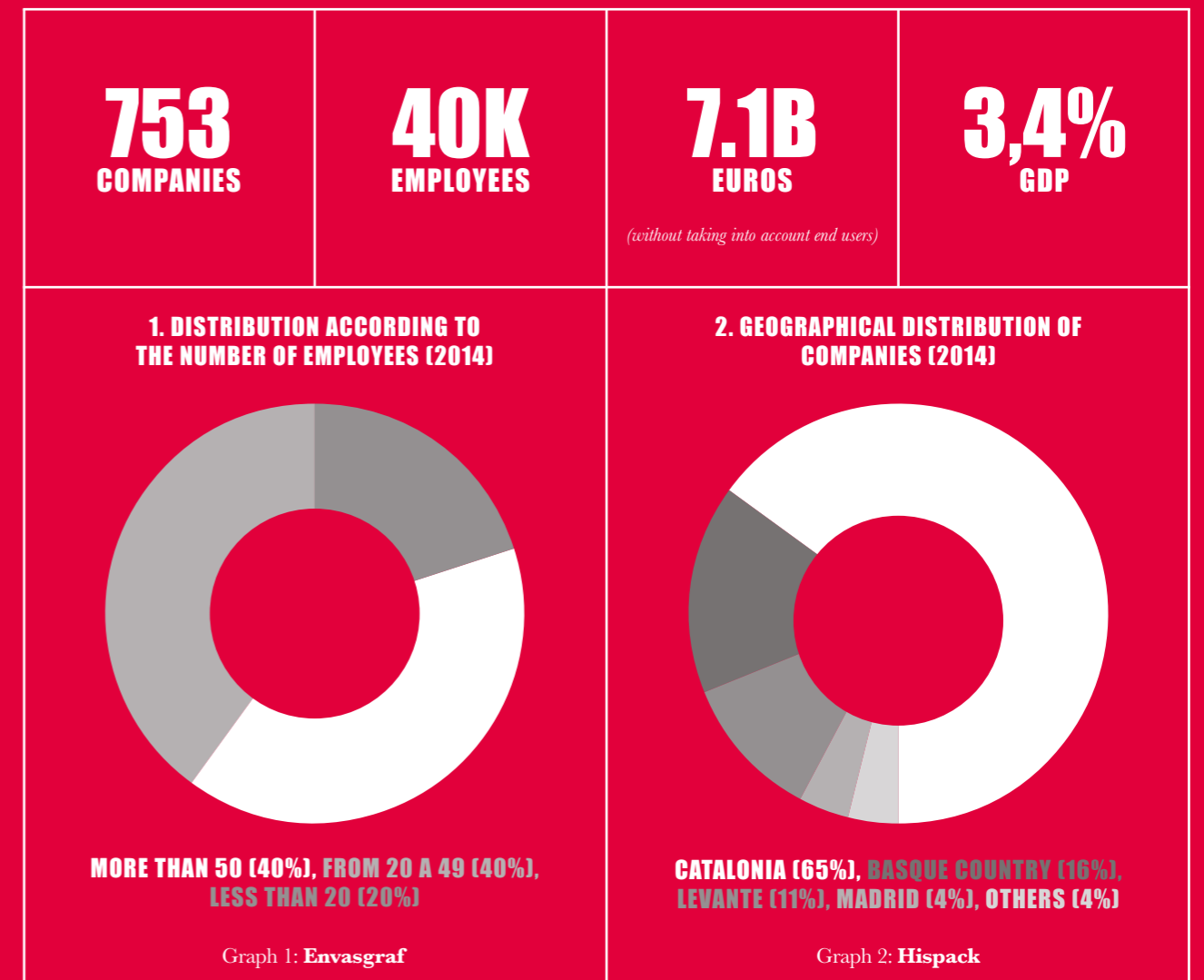
Packaging is present in different economic sectors, including the chemical, food or pharmaceutical, which primarily generate consumer goods for the food, pharmaceutical, beverages and cosmetics sectors.

Catalonia, the exemplar autonomous community when it comes to packaging, leads the number of machinery manufacturer and export

companies.

Together with the autonomous communities of Valencia and Madrid, they account for around 70% of the companies, while Catalonia also accounts for 43% of turnover.

The existence of a **packaging cluster** is due to the location of many companies in the sector that are distributed throughout Catalonia.



*1 European Cluster Observatory

K = Thousands (x1.000), B = Billions (x1.000.000.000)

3.1.1. Global sector trends

Changes in the consumer	Channel Changes	Changes in the Brand Owners	Competence
<ul style="list-style-type: none"> — Seniors — Baby & Kids — Singles — E-Commerce — Sustainability 	<ul style="list-style-type: none"> — Appearance of new players — Multi-channelity implies new logistics — Retailer trends: <ul style="list-style-type: none"> » Sustainability » Increased product life » Cost reduction » Increase in <i>Ready-to-Retail packaging</i> » Online Channel Opening — Trends of online platforms <ul style="list-style-type: none"> » Sustainability » Product safety » Consumer perception — Purchase criteria 	<ul style="list-style-type: none"> — Business concentration — Extension of the useful life of the product — Global purchases — Short series — Focus on closure systems and dispensers — New and more sustainable materials — Pharma as a segment with more growth — Long-term sustainability objectives — Internal organization — Purchasing criteria 	<ul style="list-style-type: none"> — Business concentration — Sustainability, eco-design and recyclability — New technologies: <ul style="list-style-type: none"> » Digital printing » Digitalization of the Value Chain (Industry 4.0 and IoT) » Other innovative technologies — Product to service

3.2. Digital consumer study

Digitisation has empowered consumers and given them a central role. The means of empowerment are hyper-information, the power of choice, being able to satisfy desires immediately, and the power to act as influencers.

At present, multiple digital channels share the same space throughout the purchasing process.

This circular process sees the relationship with the client begin before the purchase is made and continue afterwards.

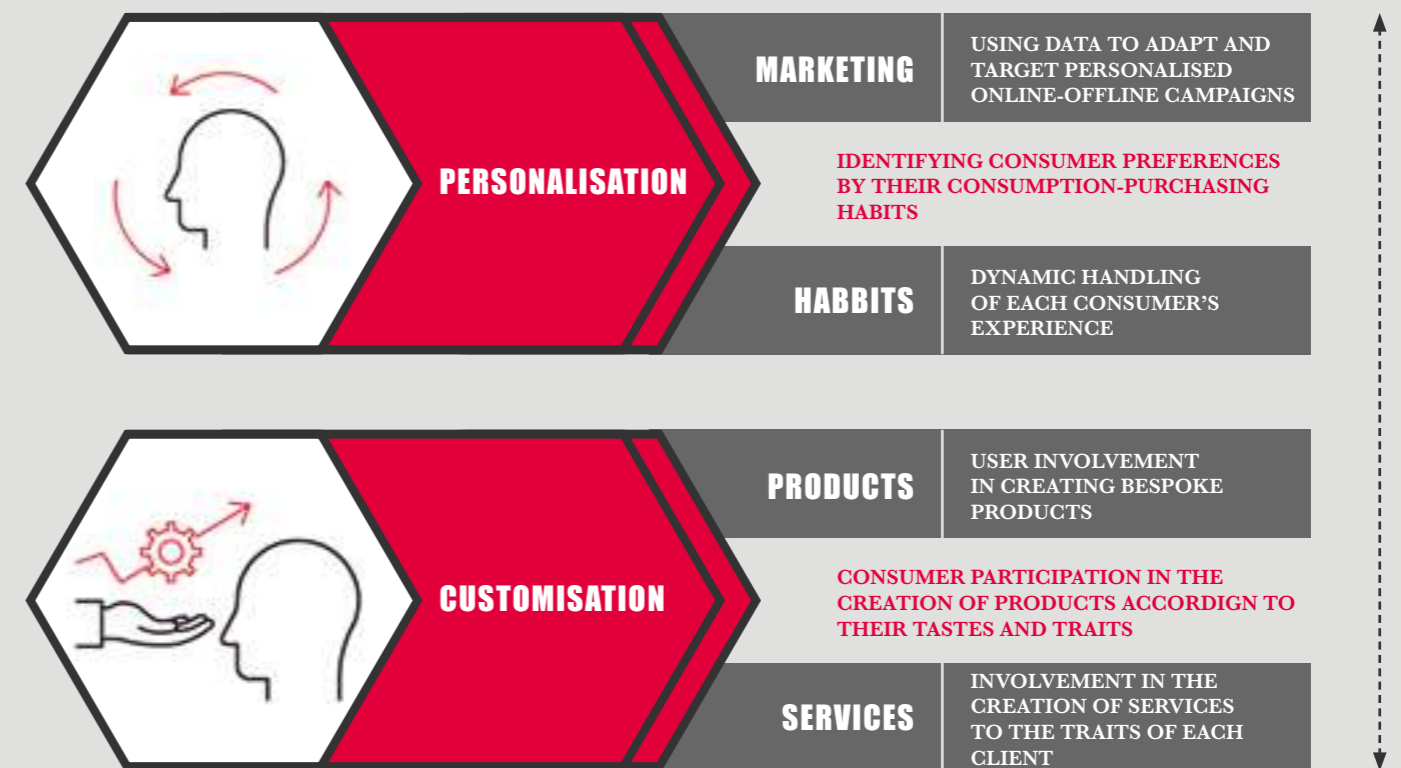
With regard to packaging, we find highly diverse functionality. In the case of the packaging used in-store it plays a significant role featuring an emotive aspect. However, packaging in online channels has secondary and strictly functional role.

There is a growing demand from consumers to merge elements of offline packaging with the online world, with the need to provide the packaging with an emotive aspect and added value.

Consumers consider delivery security to be one of the most important aspects of the packaging alongside the materials, unboxing, look, and customisation.

Packaging plays a key role, not only in the decision to purchase but also in the user experience and product satisfaction.

In the long-term it also has effects such as improving brand recognition and positioning.



This study was conducted by IPSOS with collaboration from four food clusters, and the Packaging Cluster.

To gather the information, more than 800 surveys were carried out, 5 experts from the main leaders were interviewed, and an online community of 10 shoppers was

monitored over 10 days.

Activities



In 2018 35 activities were carried out for members and we participated in 31 as an organisation. This is a total of 66 activities, which enables us to position the sector as important and a leader in Catalonia.

The 6 strategic areas the cluster works on grant us new professional relationships (networking), new projects and/or business, and greater

sectoral knowledge (market intelligence).

That is why all the activities that were carried out and in which we participated actively as either members or a cluster fall under one of the areas mentioned above.

4.1. For members:

february (days and 17)

- 1 Conference on Business Growth and Strategic Change
- 2 Packaging challenges and trends in the cosmetics sector

march (days 6, 19-21)

- 3 Intercluster Session with Habitat Cluster and Logistics Cluster
- 4 3rd BSR session. Visit to the FoodExpo Fair in Denmark

april (days 5, 16, 16 and 25)

- 5 Course on packaging standards and regulations
- 6 The consumer leads digital change in the food and drink sector. Alimentaria fair
- 7 “Design Thinking” Workshop at IESE Business School
- 8 1st meeting of the Sustainability Group

may (days 3, 8-10, 15, 24, 25 and 29)

- 9 Session on the Development of disruptive products
- 10 Hispack Fair (Collective stand)
- 11 IX National packaging awards. Valencia
- 12 Session about Value Position Design and Lean Start-up
- 13 End User Market Viewpoint with the Beauty Cluster
- 14 Packbridge Startup Challenge Competition. Malmö, Sweden

june (days 6, 8, 18, 25, 28 and 29)

- 15 1st Hinojosa Open Day
- 16 Session on Agile Project Management
- 17 VI Packaging Cluster Annual General Meeting
- 18 2nd Meeting on Sustainability
- 19 AdPack2: welcome Seminar
- 20 Session on the search for financing for Start-ups

july (days 11, 16 and 24)

- 21 3D possibilities with HP workshop
- 22 AdPack2.Webinar “Introduction to active and intelligent packaging”
- 23 AdPack2 Webinar “Environmentally friendly”

september (days 19, 20, 25 and 27)

- 24 Manual Thinking Workshop
- 25 Top Packaging Summit Packbridge. Malmö, Sweden
- 26 AdPack2. Webinar “Traceability, protection and information”
- 27 XI Intercluster meeting with international expert

october (days 4, 10, 18-19 and 25)

- 28 Packaging conference in Penedès with ACCIÓ
- 29 AdPack2. Webinar. “Quality over everything”
- 30 VI Packaging Cluster Strategic Dive Conference
- 31 Presentation of “The digital consumer in the food and beverage sector”

november (days 8 and 28)

- 32 Adpack2. Webinar “New materials and modern technologies”
- 33 End User Market Viewpoint with FoodService

december (days 11 and 14)

- 34 3rd Meeting on Sustainability
- 35 VI Edition of Strategic Change Cases at IESE

4.2. As a cluster:

february (day 20)

- 1 Clusters go International Conference

march (days 12, 13, 14 and 27-28)

- 2 Vallès Circular showcase session
- 3 Networking lunch with the Packaging and Packing Cluster
- 4 Advanced Factories congress and exposition, Barcelona
- 5 EU cluster policy learning and matchmaking event, Kiev, Ukraine

april (day 19)

- 6 Intercluster meeting with clusters from Lombardy

may (days 4, 23, 23, 30 and 31)

- 7 Cluster & Branding Marketing Masterclass
- 8 Shared Value Conference, ACCIÓ and the European Commission
- 9 Adventure Café VI Sabadell Entrepreneurship Forum
- 10 International Intercluster Meeting with Colombia
- 11 Plastic management in the circular economy

june (days 1, 27, 28)

- 12 Ideas generation programme for the circular economy, PRUAB
- 13 First meeting of the European FoodPackLab project
- 14 Eco-innovation in the food sector

july (days 6 and 12)

- 15 New packaging solutions for fresh food - UAB Event
- 16 Cluster Manager strategic dive

september (days 19, 19, 25 and 26)

- 17 Hula Hoop, the circular design experience
- 18 New trends in packaging, CECOT
- 19 Biopolymer session. Packnet, Madrid
- 20 Connected Industry 4.0 Congress, Madrid

october (days 4-5, 15-19, 30, 30 and 30-1 nov.)

- 21 European financing opportunities, Brussels
- 22 Fact-finding mission to the United States and Canada
- 23 Sustainability in Packaging Europe Conference Smithers Pira
- 24 Clusters Conference - regional specialisation initiatives (RIS3) on Advanced Manufacturing
- 25 Circular Economy HotSpot, Scotland

november (days 5, 5-9, 12-16, 22-23 and 31)

- 26 Strategic Training Week NY
- 27 International Intercluster session between Catalonia and South Korea
- 28 Fact-finding mission to China
- 29 Cluster matchmaking meeting in Zagreb
- 30 Ambito B30 circular strategy

december (day 4)

- 31 INNOVE innovation projects session

4.3. New developments 2018

- 1 Sustainability Group (description of the 3 sessions)
- 2 Start-up acceleration programme (description of the programme and activities)

4.4. Featured

The activities carried out, along with the large turnout and response of professionals in the sector, increasingly validate the work being done by the cluster and its impact. Below, we have highlighted both new and ongoing initiatives that successfully create spaces for dialogue and discussion.

4.4.1. For the members

Conference on Business Growth and Strategic Change



The Packaging Cluster brought together different packaging companies at ACCIÓ as part of the Business Growth and Strategic Change Conference in order to aid diversification into new market segments.

Albert Sanahuja, founder and chairman of **Decopack Europe**, set out the evolution of the company, which has trebled turnover in just 4 years as a result of focusing the company and its staff on a **customer-centred approach** and high innovation and quality in all its products.

Next, **Jorge Gutiérrez**, Sales Director at **TEB Grup Cooperatiu**, also explained how they were able to overcome the financial crisis, with significant growth from that period onwards, by reinventing the

cooperative, which led to entering into new sectors such as food, cosmetics, automobiles, and switching to **manufacturing products and creating services in new areas of activity**.

Finally, **Xavier Armengol**, OEM director at **Schneider Electric**, gave an account of future social and industrial challenges such as **hyperconnectivity and data, which will transform the businesses of today**. He also highlighted the importance of having a true understanding of client needs as a means of growing with them and demonstrated the evolution of the company which has traditionally been linked with electric power distribution and automation in an environment in which **software is now king**.

Intercluster session with Habitat Cluster and Logistics Cluster



As part of the Strategic Projects Programme which the Logistics, Habitat, and Packaging clusters are promoting, a meeting was held to work on three areas: **new business models, sustainability, and e-commerce**. This intercluster event welcomed more than **60 professionals** from companies in all three sectors.

The meeting began with a series of lectures on packaging. **Ignacio Cubiñà** (EIG) laid out the advantages of **Cradle to Cradle®** as a design and verification methodology in the circular economy, showing specific examples and opportunities for the habitat sector. He was

followed by **Aleix Fortuny** (BIP-Leitat) who discussed aspects of eco-design to keep in mind, as well as factors to be taken into account when we sell online, given that B2C Packaging is vastly different to its B2B form. Finally, **Jordi Fiestas** (Brafim) rounded off the packaging section with his explanation of the different stages of the logistical process and how to optimise packaging.

The session continued with lectures from **logistics** experts. **Sergi Fresno** and **Joan Boix** (Seur) showed the different consumer trends that are transforming deliveries and discussed the importance of aspects such as ultra fast deliveries, the monopoly of e-commerce, and the challenges posed by the last mile.

The logistics section ended with a discussion on optimisation from **David Costa** (Nektria) in which he showed the possibilities offered by big data in the optimisation of the paths to e-commerce services. Finally, **Oriol Salas** (Sama Group) spoke of the key elements involved in last mile delivery for large products.

The session was also an opportunity to network and meet directors from companies in complementary sectors, which ended with an activity from **Manual Thinking** to work on specific challenges.

3rd BSR session. Visit to the FoodExpo Fair in Denmark



On 19th March 2018, a delegation of companies from Barcelona flew to Billund, Denmark to participate in the third and final meeting organised

by the Catalan clusters AINS, the Packaging Cluster, and the Danish FoodNetwork. The participating companies were Packintube, Hamer Packaging, and Pedragosa.

On the first morning there was a visit to the FoodExpo Fair in Herning. This is the largest food fair in the Nordic countries and shows trends in food, machinery, and packaging for the following years. **FoodNetwork**, as a cluster and network of companies in the food and packaging sectors, had a joint stand with some of its members.

That afternoon we visited **LegoHouse**, a place to take inspiration from the company's innovative and creative process. The business has been able to adapt to the increasingly demanding and digital environment of its clients, both for adults and children alike. The guided tour around the 6 areas (the tree of creativity, the masterpiece gallery, red zone, blue zone, green zone, yellow zone, and history collection) gave us the chance to get some ideas and take on board different aspects for our own organisations.

There were three visits on the second day. First, we went to **Agustson**, a supplier of fish products such as smoked fish, cod, caviar, and prawns. Here we were able to take in the cleaning, smoking, and packaging process for smoked fish. We have to make mention of the commitment to food safety and hygiene evident at the production plant, which also shows the different certificates the company holds. 90% of its produce is exported.

Afterwards, we paid a visit to one of Denmark's largest supermarket chains, **Bilka** to analyse the market and discover new products and different types of packaging.

Finally, we headed to **Erhno Flexible**, the main producer and supplier of flexible packaging for the food sector. The various flexographic printers, two of which are from the Girona company **Comexi**, enable them to work on large and small print orders

for products mainly for the dairy sector.

This mission brought to an end the **2FoodPack project**, which has resulted in transnational and cross-sector partnership programmes between the members of the clusters involved with the aim of smoothing internationalisation and the development of cross-sector capabilities.

Course on the main packaging standards and regulations



On 5th April we held a food safety training day for the third year running. The course was delivered by **AENOR**, which, for the first time, was also assisted by **Mettler Toledo**. The course, titled **“Principal certifications for food packaging and contamination control in packaged products”**, was split into two parts.

In the first part, **Alfonso Herrero**, auditor and **AENOR** expert, explained the three food packaging standards **BRC-IOP**, **FSSC 22000**, and **IFS PAC Secure** that enable the identification and control of dangers which may adversely affect food safety.

In the second part, **Levi Corbacho** and **Jordi Verges**, technical managers at **Mettler Toledo** introduced two contamination control tools for packaged and bulk products: magnetic field detectors and x-ray detectors.

These training sessions bring together manufacturers of the final packaging,

laboratories, research centres, raw material producers, and end (food) product manufacturers. They also feature various skill profiles such as packaging engineers, production managers, R&D technicians, quality control managers, and many more.

Hispack 2018 Fair (Collective stand)



From 8th to 11th May the Fira Barcelona, Gran Via venue hosted another edition of Spain's biggest packaging industry trade fair. 1,100 exhibitors from 30 countries took part in this edition, which was spread over 5 halls. This year's successful Hispack attracted almost 40,000 visitors.

The Packaging cluster was able to actively participate in the fair with a joint stand with **Packbridge** from Malmö, and the **Valencia Packaging Cluster**. 6 member companies from the cluster participated in these joint stands; **3D Click**, **E21 DESIGN TECHNOLOGIES**, **IP Triana**, **Menshen**, **MILIMÉTRICA PRODUCCIONES**, and **Technologies Applied to Innovation (TAI Smart Factory)** as well as other companies from the other clusters involved. As a result of this partnership, the Packaging Cluster won recognition from the **Barcelona Trade Fair** as a partner organisation in the 17th edition of Hispack.

We had 29 members exhibiting in the 3 halls at the fair. Most of them were in hall 2 which was focused on raw materials, packaging materials, and accessories.

The **digitisation of the industry, sustainability, logistical**

efficiency, and **improving the packaging user experience** were the main topics at the latest Hispack fair.

The Hispack activities area hosted 120 conferences, workshops, and sessions, of which we participated in 2. In the first, we looked at how to promote collaborative innovation through Clusters, strategic challenges, methodologies, and financing tools. We also discussed the success story of Font Packaging and TAI Smart Factory with the Production of integrated packaging in real time project.

The second activity was a round table on sustainability, titled “The call for a sustainable future”, which saw great interest in seeing the industry transition into the circular economy.

In the **sustainability** area, we also participated by setting out the projects the cluster has pushed forward in the field, such as **monomaterial packaging** for the meat sector and the **industrial symbiosis project** with the textile sector.

End User Market Viewpoint with Ainea and Martiderm



On 25th May, ACCIÓ hosted the 5th Market Viewpoint which is organised biannually by the Packaging Cluster in partnership with the Beauty Cluster.

This time it was Martiderm and Ainea Perfums’s turn. They laid out each of the challenges facing packaging which need to be tackled, which were then worked on jointly by the attending companies from the

two areas (packaging and cosmetics).

Laura Viñeta (Brand Manager) and Leonor Guerrero (Trade Manager) presented the challenges on behalf of Martiderm, as did Sofia Cavagnaro (Marketing and Communications) for Ainea Perfums. They also showed sector trends as well as those for their specific area of business.

The session was also used to conduct a Business to Business activity with all the attendees to promote networking. Finally, a Design Thinking methodology workshop was used to work on the challenges previously presented. Attendees were split into teams to make plasticine prototypes for the issues under discussion.

First Open Day in Hinojosa



The cluster aimed to promote open days to stimulate networking and the exchange of knowledge between companies in the sector. Hinojosa was the first company to open its doors at its headquarters in Pals del Penedès.

During the session we had a lecture on the concept of Shared Value, which explained how company strategy can be transformed to create value for society. The first, more technical part, discussed the origins of the Shared Value concept whilst the second part gave examples of real cases. The talk was given by Albeto Pezzi, director of the clusters area at ACCIÓ, and Marc Sansó, strategic consultant at ACCIÓ.

In the second part, José Manuel Aguiló, general director of Hinojosa Pals, gave us a presentation on Hinojosa, which he used to explain

the company’s current position, its initiatives, and the company values. Straight after the talk, there was a visit to the plant where we were able to see first-hand the manufacturing process for corrugated cardboard.

These types of sessions help us to get to know the different key companies and people who make up the Packaging Cluster. They are also of great use in fostering networking, discovering and discussing concepts of interest such as Shared Value, and getting a first-hand look at cluster members’ industrial and business processes.

VI Packaging Cluster Annual General Meeting



More than 70 professionals from the packaging sector participated in the Packaging Cluster Annual General Meeting, which took place on 18th June at ACCIÓ’s headquarters.

Joan Romero, Chief Executive Officer of ACCIÓ, welcomed attendees by highlighting that “challenges such as the circular economy, industry 4.0, and smart packaging are key issues for the continued competitiveness of the sector”. Later, the organisation’s chairman, Artur Costa, addressed members, emphasising that “the success of a cluster lies in the people representing it” and stating his desire to reshape the role of organisation chairman during his tenure.

Afterwards, the organisation’s new members came before the general meeting. The 15 new companies which have joined since the last general meeting (Brafim, Capsa, Industrial Bolsera, Inka Palet, NG Plastics, Rieusset, RSD Engineering,

Side, Stímulo, TMI, Trading Films, Virospack, and Yaskawa) made introductory speeches to the attendees.

The assembly was also an opportunity to share the overview of activities and projects undertaken recently and upcoming scheduled activities. In total there were approximately 50 annual activities, including sessions for members and others, both nationally and internationally, in which the organisation was an active participant aiming to connect and position the sector. Likewise, all attendees were given the 2017 Annual Report, which offers a summary of the previous year.

Finally, the 2017 Annual Accounts, audited by Gestem, were approved. The 2018 Budget was also approved. This has shown notable growth given the good results achieved by the members and the projects the organisation has secured.

The session concluded with a talk on talent. Jordi Serran, Founding Partner of Future for Work, fired up the audience with the challenges posed by the new world, highlighting the importance of organisational agility to adapt to changes.

Top Packaging Summit Packbridge. Malmö, Sweden



The Packaging Cluster travelled to Malmö (Sweden) with ColorSensing and 3DClick to present their new business model in Northern Europe.

The Top Packaging Summit is the leading annual event held by the Packbridge Cluster in Malmö,

Sweden. The Packaging Cluster participates in the event as a result of our partnership with our counterpart. This year we did so alongside two leading start-ups.

This year’s programme also included the final of the Packbridge Challenge, which saw ColorSensing and 3DClick as two of the ten finalists.

Over the course of the event we were able to listen to various lectures related to Packaging. The main focus of the talks were Sustainability and the Circular Economy.

Marie Malmberg, CEO of Packbridge, in her introduction to the event, spoke of Europe’s plastic problem and the need for responsible actions to move away from the culture of comfort towards a more circular economy in the Packaging setting.

Additionally, Kevin Vyse, from the Marks & Spencer chain, discussed the evolution and change the Packaging industry has undergone since its beginnings and the problem of following a linear economic model. He put forward the example of M&S’ 2020 proposal under which it seeks to be more socially responsible by following the global sustainable targets set by the United Nations.

VI Strategic Dive Conference



The Packaging Cluster brought together more than **100 professionals** from the packaging industry at the **VI Strategic Dive Conference**, which was held on 18th-19th October in Sant Cugat dels Vallès (Barcelona) with the

support of ACCIÓ. The meeting focused on four topics of interest: the circular economy, innovation management and methodologies, strategy and market trends, and new business opportunities.

Likewise, an innovation workshop was held using the Gamestorming methodology to come up with new ideas for projects on sector trends such as smart packaging, sustainable packaging, active packaging, e-commerce and delivery, and servitisation. The activity was also a good opportunity for attendees to network.

In total, there were nine lectures on strategic topics, a round table with entrepreneurs, an innovation activity to co-create new projects, and a visit to a strategic partner to learn more about technological developments in printing.

The **Cluster Chairman, Artur Costa**, welcomed attendees and highlighted that “*the success of a cluster depends fundamentally not only on the companies that form it but also on the people that represent it: driven, energetic people eager to promote its current and future projects*”.

Hector Robles, founder of DOMO, began the series of talks at the Strategic Dive with his explanation of the Honest Strategy movement: The 3 keys for 21st century companies are success, happiness, and business sustainability. Afterwards, Isidre Esteve, motorbike racer and founder of the Isidre Esteve Foundation, signalled key elements such as teamwork, preparation and training, confidence, and the desire to learn as the basis for achieving goals.

The second part of the morning focused on the circular economy. **Constance Ißbrücker**, Environmental Affairs Manager at European Bioplastics, detailed the current state and future of bioplastics, which now offer real possibilities for use in different applications. Afterwards, **Javier**

Peña, ELISAVA executive and Scientific Director at Materfád, demonstrated the evolution of materials, showing examples and the real possibilities of producing packaging using innovative and sustainable materials.

The afternoon, in turn, was taken up with an innovation activity, using the methodology from the Gamestorming book, which sought to promote project ideas amongst attendees. **Jordi Cusidó** of Garage Lab acted as moderator. Finally, the day ended with a visit to the Hewlett Packard demo centre. As well as being a cluster member, the company was one of the event's partner organisations.

On the second day, **Begoña Hernández**, sales director at Mecalux, was the first to give a speech. She discussed how to use innovation as a means of differentiation and highlighted empathy and creativity as essential tools. Afterwards, **Jordi Armengol**, business manager at Ferrovia, detailed the current state of packaging recycling, with specific data and legislation, and focused on areas to improve in the transition to the circular economy.

The Strategic Dive was used to present a study conducted by the organisation, alongside other food clusters, into the impact of digitisation on the food sector. **Adriana Presas**, Consultant at IPSOS, laid out the main findings.

The Dive finished on the area of new business opportunities. Firstly, **Anna Busquets**, COO of DIME Network, highlighted instruments to stimulate new business opportunities for start-ups and clients. Then **Ricard Castellet**, COO of Barcelona Tech City, discussed entrepreneurship, showing the excellent worldwide positioning Barcelona enjoys. He rounded off with a debate featuring **Marc Bigas**, CEO of Skutide, **Martina Font**, Founder of Kartox, and **Jordi Berguinzo**, CEO of Recircula.

VI End User Market Viewpoint with FoodService



The VI Market Viewpoint took place on 27th November at IRTA's facilities (Torre Marimon, Caldes de Montbui). It was organised by the FoodService Cluster and the **Packaging Cluster** and featured more than **30 companies** from both value chains.

The Intercluster meeting discussed specific challenges to improve packaging systems in the food sector, specifically in areas such as **logistics, food safety, and sustainability**.

The session began with a presentation from IRTA in which **Begonya Marcos** introduced **active and smart packaging** as tools to improve food safety. Afterwards, packaging companies presented Elevator Pitches. 6 companies displayed various projects, ideas and technology open to the food sector which included **antioxidant laminates, NFC labels** for consumer interaction, as well as other packaging possibilities now offered by **augmented reality**.

Finally, a debate was held on each of the three areas under discussion. The FoodService companies set out issues and ideas to be resolved. The organising bodies acted as moderators whilst all those in attendance were able to participate and make their own contributions. The clusters detailed the conclusions and all the attendees described their interests in the set of issues raised with a view to **creating specific activities and projects** in each of the areas.

4.4.2. As a cluster

EU cluster policy learning and matchmaking event, Kiev, Ukraine



The Packaging Cluster took part in an EU-Ukraine cluster policy event in Kiev (Ukraine) on 27th and 28th March, which included both EU and Ukrainian clusters.

The aim of this meeting was to **boost connections, collaboration, and matchmaking** so that all member companies of the corresponding clusters could participate in EU invitations to tender, which would allow them to benefit from internationalisation services such as trade missions, market intelligence, research, the creation of new products and so on.

50 cluster members and companies linked to the clusters from all over Europe came together at the meeting, with an especially strong Ukrainian presence. The clusters in attendance included **17 technology and information technology clusters, 6 agro-food clusters** (which included us), **12 renewable energy, building and construction clusters**, and **3 clusters** from the **textile** sector.

Shared Value session, ACCIÓ and the European Commission



On 23th May Dr Ulla Engelmann, Head of the European Commission's clusters, social economy, and entrepreneurship unit visited ACCIO to gain first-hand knowledge of the country's cluster ecosystem, as well as the high-impact projects in the area of Shared Value.

Accordingly, the three clusters representing the ecosystem, presented various projects and activities currently being undertaken in Catalonia. Specifically, **Enric Pedrós** (FEMAC - agricultural production cluster), **Sara Gabarrón** (CWP - water cluster), and **Àlex Brossa** (**Packaging Cluster**) explained the shared value projects.

Lastly, the session featured a debate between all the attendees so as to promote and accelerate projects in the field of Shared Value, with the possibility of conducting a pilot project to identify relevant indicators and subsequently scale it up through impact-creating tenders.

International Intercluster Meeting with Colombia



30 clusters from Catalonia and Colombia took part in the 5th **International Intercluster**

Meeting in Barcelona. The meeting aimed to boost links and strategic alliances between clusters in the two countries. The event is organised by ACCIÓ in partnership with the Colombian Clusters Network and the Bogotá Chambers of Commerce.

Best practices and partnership opportunities were exchanged with the Colombian organisations. The cluster representatives were able to present their projects and take part in networking activities to search for joint business opportunities. The session was also an opportunity for the different discussion groups to analyse the impact of clusters on companies, the role of start-ups, and the importance of talent in the area.

19 Catalan clusters and **11 Colombian clusters** took part in the meeting.

1st Meeting of the EU FoodPackLab project



The first meeting of the FoodPackLab project took place at the end of June in Barcelona in the clusters area, which was the perfect setting for a meeting of this type.

The FoodPackLab project, financed by the European Commission COSME programme, is the result of a strategic partnership between 5 clusters that bring together various activities, industries, and countries. Cooperation is centred on internationalisation by making time and space available to different interested parties so they can work on innovative solutions to one of the most important challenges that society is facing today: **food safety**.

The 5 clusters involved in the project are SECPhO, Spanish photonics cluster, Optics Valley, French photonics cluster, Food Processing Initiative and Food Regio, from the food sector in Germany, and the Packaging Cluster, from the Catalan Packaging sector.

The first session enabled us to familiarise ourselves with the different points of view in the project, share goals, where we want to go with the project, and assess what the next steps should be. We were also able to see different issues and positioning strategies from the different sectors in their technology and how it is applied. This showed us that every company from the different sectors involved in the project can contribute very useful expertise.

Fact-finding mission to the United States and Canada



The AdPack2 team, made up of the representatives of the 6 European clusters InovCluster, Plastiwin, SCS, Nanoprogress, BlaticNet Plasmatec, and the Packaging Cluster undertook the first **Fact-Finding Mission to Chicago and Toronto**.

We visited the PackExpo fair in Chicago where there were more than 2,500 exhibitors. Over the three days each cluster met with various bodies to explain their current project and seek out interest and possible partnerships. Amongst the companies that were visited were the **Universities of Indiana, Michigan, and Clemson**, which offer degrees in **Packaging Engineering** and subjects in

active packaging, packaging trade associations from all over the world such as World Packaging Organisation, CCTI, IMFA, ABRE, and APPMA, and other small and medium packaging manufacturers, especially packaging machinery manufacturers.

Various companies and organisations in the packaging sector in Toronto were visited. The three companies visited were WG Pro-Manufacturing Inc., **co-packers of food products bearing BRC Safety certification** and producers of a line of nut-free melba toast, and Congebec and Conestoga Cold Storage Limited, both of whom are **providers of logistical and frozen product storage solutions**, given that the Northern area of Toronto (known as GTAA) has the greatest concentration of distributors of such frozen products in the whole of North America.

There was also a visit to the Food & Consumer Products of Canada (FCPC), trade association which **brings together more than 150 companies in the sector** and acts as a bridge between its members, governmental policies, and trade activity. Finally, we met with another trade association PAC (Packaging Consortium), **our counterpart packaging cluster in North America**. PAC invited a dozen of its members to take part in the meeting (**including Atlantic Packaging, Tuku Inc, Canadian Food & Wine Institute of Niagara College, the Institute of Graphic Communication and Printing, Jones Packaging, Sun Chemicals**). Also present was the chairman of the IntelliPack group, **a partnership of PAC members for the development of active and smart packaging using electronic ink and other materials**.

Circular Economy HotSpot Scotland



Circular Economy HotSpot Scotland was an international meeting with more than 400 attendees from government, company, and organisational spheres displaying their policies and activities for the development of the circular economy. The Packaging Cluster was able to participate as an affiliated member of the Catalonian Circular Economy Observatory.

Miranda Schintger of the Ellen MacArthur Foundation spoke of the Circular Economy in cities. Various speakers discussed where we are currently in terms of the **circular economy**, the importance of **cooperation, new business opportunities**, environmental initiatives for cities, and good practices on the circular economy undertaken in Scotland.

At the end of the meeting, the **Catalan** bid to host the **2020 congress** beat those from Canada, Denmark, Taiwan, and Slovenia for the right to host the next edition.

In 2018 35 activities were carried out for members and we participated in 31 as an organisation. This is a total of 65 activities, which enables us to position the sector as important and a leader in Catalonia.

The 6 strategic areas the cluster works on grant us new professional relationships (networking), new projects and/or business, and greater sectoral knowledge (market intelligence).

That is why all the activities that were carried out and in which we participated actively as either members or a cluster fall under one

of the areas mentioned above.

Strategic Training Week NY



16 Catalan clusters travelled to **New York** to explore partnerships with this leading ecosystem. The trip was part of the **VII Strategic Training Week**, an initiative organised by ACCIÓ, the agency for business competitiveness at the Department of Business and Knowledge. It was organised through the New York and Washington D.C. **Foreign Offices of Trade and Investment**.

The Catalan clusters taking part in the initiative were the **Catalan Water Partnership, the Beauty Cluster, MODACC, the Kids' Cluster, the Packaging Cluster, Railgrup, Indecat, CENFIM, EDUTECH, ClusterMAV, Innovi, the FoodService Cluster, the Catalan Audiovisual Cluster, Solartys, the Catalan Mental Health Cluster, and FEMAC**.

On the trip, the representatives of the Catalan clusters held over 60 individual meetings with members of the New York ecosystem, such as **Google**, the **Parsons** design school, a local **EdTech** accelerator, and the **Council Member for transport from the City Council**. They also took part in meetings at the offices of the World Bank and the **Inter-American Development Bank** in Washington D.C. with the organisations' sector managers for **transport, water, health, agricultural technology, educational technology, solar energy, and housing**.

Moreover, the participants received specialist training on strategy from **Columbia University professor and innovation expert** Rita Guther McGrath and **Cornell University** professor Samuel Bacharach, expert in organisational management. They were also given training on cluster development from Eric Hansen, one of the founders of TCI Network, a network specialising in cluster support. Likewise, cluster managers held networking meetings with Catalan directors working in the North American ecosystem. Furthermore, those in the field of consumer goods went on a retail tour to gain first-hand knowledge of the nature of leading points of sale in the city such as the Chelsea Market and Strand Bookstore, as well as consumer behaviour in New York.

Fact Finding Mission to Shanghai



The second **Fact-Finding Mission to Shanghai**, China featured a collective and individual schedule for the 6 clusters who bring together **770 companies in the European Active and Smart Packaging value chain**. This second Fact-Finding Mission, which is part of the AdPack2 project, was organised by the ACCIÓ Shanghai office.

On Tuesday 13th we were at the **Shanghai Science Hall** where all the day's meetings were held. We began with **Omar Puertas**, partner at the Cuatrecasas law firm. Omar gave us an explanation of legal and practical aspects of doing business in China. Afterwards, we met with representatives of the Board of Directors of Shanghai Packaging Technology Association, which also included the chairman

Zhuang Yingjie and the general secretary **Song Wenxian**. After we all introduced ourselves and broke off for lunch, a round table was held to find synergies between all the attendees and the companies they **represent**, which for Shanghai Packaging Technology totals more than **450 companies**.

The second day began with a collective trip for all the clusters to two faculties at Shanghai University for Science and Technology; the **School of Materials Science and Engineering** and the **College of Communication and Art Design**. In both cases, we were welcomed with open arms as they showed us their laboratories and all the tools and machinery that the students can use. In the afternoon, the AdPack2 consortium split into two groups to press on with the schedule. On the hand, the more food orientated clusters, the **Cluster Inovcluster** from Portugal and the **Packaging Cluster**, went to the FHC Fair (Food and Hotel China) to discover the trends and opportunities in these sectors in China. Whilst the other 4 more technology focused clusters (**NanoProgres, BalticNet Plasmatec, SCS, and Plastiwin**) visited Shanghai Tongji University.

To round off the three day schedule, on Thursday 15th there were visits to two international companies present in China. Goss Graphics Systems, which supplies presses and finished printing machinery for magazines, newspapers, catalogues, packaging, and other printing areas, gave us a tour of their manufacturing plant. We were impressed by how clean and tidy it was, which they have achieved by using the 5S methodology to improve teamwork and production and eliminate waste in their processes. Sealed Air Asia, a supplier of flexible film solutions, received us in a Showroom where they have different machines they use for demonstrations of their materials and show off the final product.

Cluster matchmaking meeting in Zagreb



The European cluster collaboration platform ECCP, backed by the European Commission (EC), jointly organized with PwC an event in Zagreb (Croatia) to explore shared areas of interest for cooperation between different value chains and markets.

Five member clusters of the ACCIÓ Catalonia Clusters programme took part in the meeting. Foodservice Cluster, Indecat, CEEC, Habitat, and the Packaging Cluster.

The event also featured individual meetings between the more than **65 participating clusters** from **21 countries**: 6 Balkan countries and 15 from the European Union. Ulla Engelman, head of the EC's social area, highlighted the presence of the Catalan clusters: *"Impressive representation of Catalan Clusters – wishing you good matches & opportunities to grow"*. It was also a useful forum to exchange opinions with the technical managers of EC cluster policies.

Participation in the event lays the ground for participation in upcoming tender processes for **European projects** strengthening cluster organisations and member companies, it **connects** clusters internationally through networking with bodies and **positions the country and its sectors on the European scene**.

4.4.3. New developments 2018

Sustainability Group



This year, after various requests from cluster members, a working group was created to discuss sustainability.

The sustainability group was established at the beginning of the year with the aim of discussing various sustainability issues such as: **Packaging legislation and sustainability, Energy efficiency, Circular packaging** (eco-design, new materials, eco-products, and eco-services) and **Corporate Social Responsibility**, and **technology and innovation forecasting** in sustainability.

The purpose behind the group is to keep abreast of and spread sustainability in the broadest sense.

There were 3 meetings this year. The first meeting discussed which main areas the Cluster wished to target to help in the area of Sustainability. A working activity was used to identify the issues.

The second meeting looked at Corporate Social Responsibility, explained the new **European strategy on plastic regulation**, and discussed the tender for **circular economy projects** from the Waste Agency of Catalonia as well as seeing several project proposals which have since been accepted and are now about to begin.

The last meeting focused on **solutions to improve recycling**. Experts on waste management such

as the Catalan Recovery Trade Association and Ecoembes came to speak to us about the issues they find with the waste they receive. There was then an energetic debate between packaging producers and managers about future problems and possible solutions. There was a great turnout at the third meeting.

These three sessions were made possible by the members Quadpack, Virospack, and Lubrizol, respectively, who opened the doors of their companies to host these sustainability sessions. They also explained to us how they are tackling these sustainability issues in their companies. Some are more focused on Corporate Social Responsibility, whilst others are undertaking more sustainable projects in their production processes. All these examples provided members of the working group with ideas to take into their own jobs.

In line with the Sustainability group, we joined organisations driving forward the Circular Economy such as the **Catalonian Circular Economy Observatory** and **Vallès Circular**.

We believe that as a cluster we must continue working to emphasise the extremely important issue of sustainability.

Start-up acceleration programme for the Packaging sector



Under the framework of ACCIÓ's entrepreneurship programme, 5 start-ups linked to packaging were selected: ColorSensing, Kartox, RecirculaSolutions, 3DClick, and

Enotop.

They were selected after a study of Catalan start-ups operating in the area of packaging. 20 were identified, of which 8 enrolled in the programme.

This project included four training sessions which were open to all members. They set out various creation strategies such as **Blue Ocean Strategy, Design Thinking, CANVAS** and the **AGILE** system. Different financing options for Start-ups and small companies were also explained.

At the end of the first collective sessions, which gave the Start-ups the chance to get to know the Cluster and the companies that form it, various individual guidance sessions were held to help accelerate the companies according to their needs. These events, just like the training sessions, were carried out in partnership with Garage Lab.

The acceleration project has seen 3 of the 5 start-ups secure public financing for their projects. Two of these finance raising processes were handled by the cluster.

We hope that we can consolidate this **ACCIÓ-backed project in the cluster as a value proposition** for both members and recently founded companies in the sector. We aim to be a link between the industrial packaging sector and start-ups.

Enganged!

Do you want to participate in our activities?

Check our plan of activities and agenda.



Training



Ongoing professional training in the packaging industry, as well as the acquisition of knowledge by new industry experts, enriches the entire value chain and all related transversal sectors such as the food, cosmetics, pharmaceuticals and cleaning products sectors.

From within the cluster, we promote and encourage training through three different modalities: face-to-face, online and custom programmes within companies



5.1. Postgraduate degree in packaging engineering: packaging technology

2015 marked the launch of the first edition of the Postgraduate Degree called “Packaging Engineering: Packaging Technology”. This face-to-face course, which had students from different professional sectors, both recent graduates and executives, is taught at the Tech Talent centre of the UPC.

The postgraduate training model integrates lecture classes, which take advantage of the experience and knowledge of the cluster members who teach many of them; and other practical classes at the facilities of different companies in the sector.

5.2. Course “Packaging Expert Accreditation” (PEA)

The push for non-classroom training given to students from different companies and entities, is now possible thanks to the Packaging Expert Accreditation course, which validates the student’s knowledge from a professional career.

The PEA course covers topics such as materials, manufacturing processes, applications, and introduction to packaging processes and logistics through different case studies.

The course, which is aimed at active professionals who want to consolidate and certify their knowledge, intends to contextualise the knowledge gained through daily practice, acknowledge their professional career and update their knowledge with the latest trends and technologies in the sector.

5.3. In-Company Courses

A third area that has been put into operation has been that of In-Company training courses at companies, which makes it easier to combine training with the daily tasks of their employees, thus fully optimising their resources. This type of training is very specific and often intermittent and is carried out at the company itself.

This course provides the entire industry with the possibility of completing an “In Company” Packaging and Management training course, which is tailored to the needs of the company. In some cases, a hybrid model can even be made by personalising the online training course at the company, in order to educate the business world to the greatest extent possible.

Projects



This section presents those projects that are promoted within the Packaging Cluster network that either ended in 2018, are in progress or were approved during the same year, and which have been the recipients of grant allocations.

Relationships of trust between the members are generated within the cluster environment and with the various activities, who carry out projects without any type of public support and with a clear focus on market and business.

6.1. Approved during 2018

0 VERTIDOS

2018

Experimental development to improve the use and control of wastewater

Consortium:
Hinojosa / E21 / ADASA /
Packaging Cluster / CWP

Budget: 180.807,37 €

Call:
Agrupación Empresarial Innovadora.
IET/1009/2018. Ministerio de
Industria, Energía y Turismo.

BIO-ENV

2018

Production of biodegradable injected PP tubes

Consortium:
IP Triana / Packaging Cluster

Budget: 34.610,74 €

Call:
Proyectos de fomento de la economía
circular. TES/859/2018. Agencia de
Residus de Catalunya.

COL.LPLATFORM

2018

Plataforma colaborativa entre 5 clusters alimentarios

Consortium:
INNOVI / FoodService / Clúster
Gourmet / Food'n Nutrition Cluster
/Packaging Cluster

Budget: 60.857,00 €

Call:
Iniciatives de reforç de la
competitivitat. EMC/2263/2018.
Agència per a la Competitivitat de
l'Empresa, ACCIÓ.

COMPARTIM

2018

Shared Value Project

Consortium:
Packaging Cluster / 3 empresas
socias

Budget: 14.385,00 €

Call:
Iniciatives de reforç de la
competitivitat. EMC/2263/2018.
Agència per a la Competitivitat de
l'Empresa, ACCIÓ

Ayuda: Finançat 100% per part
d'ACCIÓ

COOLPACKAGING

2018

Development of a modular packaging to keep the temperature controlled inside

Consortium:
Inprou / Eurecat / Packaging
Cluster

Budget: 137.014,00 €

Call:
Agrupación Empresarial Innovadora.
IET/1009/2018. Ministerio de
Industria, Energía y Turismo.

FOODSENSING

2018

Feasibility study for smart labels for fresh packaging

Consortium:
ColorSensing / IPE/ INNOVAC /
Packaging Cluster

Budget: 17.094,00 €

Call:
Agrupación Empresarial Innovadora.
IET/1009/2018. Ministerio de
Industria, Energía y Turismo.

GOLDEN BUBBLES

2018

Development of labels with removable adhesive

Consortium:
Graficas Varias / Codorniu / Forns /
Lecta / Lubrizol / Packaging Cluster
/ INNOVI

Budget: 30.220,96 €

Call:
Agrupación Empresarial Innovadora.
IET/1009/2018. Ministerio de
Industria, Energía y Turismo.

PACTEX 2.0

2018

Industrial symbiosis project between the textile and packaging sector

Consortium:
NG Plastics / LIASA / AEI Tèxtils /
Packaging Cluster

Budget: 43.203,50€

Call:
Proyectos de fomento de la economía
circular. TES/859/2018. Agencia de
Residus de Catalunya.

RECIRCULA

2018

Device incorporated in the containers that interacts with the citizen offering incentives for recycling

Consortium:
Re-circula Solutions / Packaging
Cluster

Budget: 34.610,74 €

Call:
Proyectos de fomento de la economía
circular. TES/859/2018. Agencia de
Residus de Catalunya.

6.2. In process

3D CLICK 2017

Feasibility study of an online tool for the packaging sector

Consortium:
3D Interactives Solutions (3D Click) / Industrial Sagarra (Packintube) / Packaging Cluster

Budget: 20.500 €

Call:
Iniciatives de reforç de la competitivitat. EMC/2263/2017. Agència per a la Competitivitat de l'Empresa, ACCIÓ.

ADPACK 2.0 2017

European Strategic Cluster Partnership for Advanced Smart Packaging

Consortium:
Cluster Nanoprogress (CZ) / Cluster BalticNet PlasmaTec (GE) / Cluster InovCluster (PT) / Cluster Solutions Communicantes Securisées (FR) / Cluster Plastiwin (BE) / Packaging Cluster

Budget: 598.175 €

Call:
Cluster Go International.
COS-CLUSINT-2016-03-01.
Competitiveness of Enterprises and SMEs Programme (COSME).
European Commission.

EMPREN 2017

Implementation of an entrepreneurial acceleration program in the packaging field.

Consortium:
Packaging Cluster / Start Ups

Budget: 32.795 €

Call:
Iniciatives de reforç de la competitivitat. EMC/2263/2017. Agència per a la Competitivitat de l'Empresa, ACCIÓ.

FOODPACKLAB 2017

Photonics-Packaging partnership for food innovation.

Consortium:
Cluster Secpho (CAT) / Cluster FoodRegio (GE) / Cluster Optics Valley (FR) / Cluster Food Processing Initiative (GE) / Packaging Cluster

Budget: 266.460 €

Call:
Cluster Go International.
COS-CLUSINT-2016-03-01.
Competitiveness of Enterprises and SMEs Programme (COSME).
European Commission.

UPCYCLING 2017

Development of multilayer plastic containers to be recirculated in a circular economy.

Consortium:
Eco Intelligent Growth (EIG) / Hochland / Packaging Cluster

Budget: 40.240 €

Call:
Call: Projectes de foment de l'economia circular. TES/859/2017. Agència de Residus de Catalunya.

6.3. Ended during 2018

MONOPET 2016

Envase monomaterial reciclable para productos cárnicos.

Consortium:
Cluster Innovacc / La Vola / Enplater / Noel / Packaging Cluster

Budget: 45.710 €

Call:
Projectes de foment de l'economia circular. TES/1275/2016. Agència de Residus de Catalunya.

PACTEX 2016

Establishment of synergies between the textile and packaging industries for the exchange of raw materials and resources.

Consortium:
AEI Textils / Packaging Cluster

Budget: 21.510 €

Call:
Projectes de foment de l'economia circular. TES/1275/2016. Agència de Residus de Catalunya.

CODIMmm 2017

Study of the digital consumer shared with food sector clusters.

Consortium:
Clúster Innovi / Clúster de Nutrició i Salut / Clúster Gourmet / Clúster Foodservice / Packaging Clúster

Budget: 54.035 €

Call:
Iniciatives de reforç de la competitivitat. EMC/2263/2017. Agència per a la Competitivitat de l'Empresa, ACCIÓ.

COFIPULP 2017

Compostable hard single serve coffee pods.

Consortium:
Hamer Packaging / Eco Intelligent Growth (EIG) / Packaging Cluster

Budget: 40.045 €

Call:
Projectes de foment de l'economia circular. TES/859/2017. Agència de Residus de Catalunya.

DISTINTS 2017

Development and manufacture of an automatic ink dispenser for the label industry with 4.0 technology.

Consortium:
Graficas Varias / E21 Design Technologies / Packaging Cluster

Budget: 84.360 €

Call:
Agrupación Empresarial Innovadora. IET/1009/2016. Ministerio de Industria, Energía y Turismo.

DOSIGEL 4.0 2017

Smart dispenser of gelatine capsules.

Consortium:
IP Triana / Eurecat / Packaging Cluster

Budget: 126.580 €

Call:
Agrupación Empresarial Innovadora. IET/1009/2016. Ministerio de Industria, Energía y Turismo.

PALHAB 2017

Collaborative project on sustainability in logistics and packaging in the habitat.

Consortium:
Clúster Logistic / Clúster Habitat / Packaging Clúster

Budget: 11.150 €

Call:
Iniciatives de reforç de la competitivitat. EMC/2263/2017. Agència per a la Competitivitat de l'Empresa, ACCIÓ.

QPLANT 4.0 2017

Production of integrated packaging in real time.

Consortium:
Font Packaging / Tecnologías Aplicadas a la Información (TAI) / Packaging Cluster

Budget: 72.865 €

Call:
Agrupación Empresarial Innovadora. IET/1009/2016. Ministerio de Industria, Energía y Turismo.

TVIST 2017

Development of an interactive industrial system in the production and manufacturing process used by personnel with disabilities.

Consortium:
Grup Cooperatiu TEB / Carinsa / Packaging Cluster

Budget: 111.175 €

Call:
Agrupación Empresarial Innovadora. IET/1009/2016. Ministerio de Industria, Energía y Turismo.



6.4. Strategic change projects, sub-challenges and project ideas

Circular economy and sustainability	Ecodesign	Food Waste
	<ul style="list-style-type: none"> — Improved analysis of the container's Life Cycle — Reduced carbon footprint and improved energy efficiency 	<ul style="list-style-type: none"> — Increased expiration date — Improved welding (ultrasounds, adhesives) and coatings
Package and business model innovation	Convenience	Active Packaging
	<ul style="list-style-type: none"> — Improved usability for the elderly — New single-dose formats 	<ul style="list-style-type: none"> — O₂ Absorbers — CO₂ Control — Moisture absorbers — Removal and absorbers of taste and/or smell — Antimicrobial packaging
Industry 4.0 and Smart Factory	Automation	Internet of Things
	<ul style="list-style-type: none"> — Faster format changes — Improved industrial processes 	<ul style="list-style-type: none"> — Production optimisation — Joint procurement platforms

Advanced Materials	Sustainable Growth	Creation of Shared Value
<ul style="list-style-type: none"> — Commitment to biomaterials — Application of nanomaterials 	<ul style="list-style-type: none"> — Lighter and more flexible packaging — Substitution of complex materials for mono-materials 	<ul style="list-style-type: none"> — Increased recycling rates — Reuse of containers
Smart Packaging	Impulse of the New Economy	Design and Branding
<ul style="list-style-type: none"> — Indicators of time and temperature, radio frequency and gas — Biosensors 	<ul style="list-style-type: none"> — Creation of collaborati-ve economy businesses — Creation of B2C businesses to serve the consumer — Collaboration with other value chains for new businesses 	<ul style="list-style-type: none"> — Impulse of branded packaging — Consumer-packaging interaction (Augmented Reality)
Collaborative Robotics	Digital and 3D Printing	E-Commerce
<ul style="list-style-type: none"> — Improved productive efficiency and logistics — HMI Interaction Software (Human Machine Interface) 	<ul style="list-style-type: none"> — Customised packaging — Improved print quality 	<ul style="list-style-type: none"> — Mobile application development — Standardisation of formats in secondary packaging — Big data and personalised product offerings based on needs

Members & collaborators



Members of the Packaging Cluster come together in order to increase their individual competitiveness and, at the same time, improve the quality of their environment.

The cluster allows them to share a space where each one has all the tools they need to improve their competitive strategy; a challenge that often feeds on cooperation with the other members seeing how all together they represent the same value chain.

Below we offer a brief description of each of the 75 companies that made up the Packaging Cluster in 2018. As well as the cluster's collaborating entities that support and strengthen the sector

*Annexed 1. Members

I+D+i

Technological center Manel Xifra Boada

Comexi offers services for the flexible packaging market in 4 main areas: training, consulting in plant processes, innovation, and technological development and testing in their industrial laboratory. In the centre you can find more than 13 machines that provide printing, lamination, cutting and peripheral equipment solutions, all dedicated to the industry of converted flexible packaging.



Eurecat

Eurecat is the Technology Centre of Catalonia, the result of the integration of Ascamm, Barcelona Media, Digital Barcelona, Cetemmsa and CTM. As a Technology Centre, it acts as a bridge between the world of knowledge and the economy, providing innovative and differential technology in order to respond to the needs of innovation and strengthen the competitiveness of its client companies.



IRTA

The Institute of Agrifood Research and Technology is a research centre owned by the Government of Catalonia, ascribed to the Department of Agriculture, Livestock, Fisheries, Food and Natural Environment. Innovation in the packaging sector with the aim of prolonging the useful life and safety of food are IRTA's main areas of work.



Leitat and BIP

Leitat is a Technological Institute that specialises in improving the competitiveness of companies through the transfer of knowledge, technology and R+D+2i projects. The Barcelona Institute of Packaging (BIP), was born within the centre as a proposal to stimulate training, research, innovation and technology transfer in the field of packaging.



Raw Material and Intermediate Products

Carinsa

Carinsa is a group of 3 companies whose business activity is centred around the creation, production and sale of aromas for human food and beverages, pet food and fragrances for detergents and cosmetics.



Dow Chemical Ibérica

Dow Chemicals, driven by the market, the portfolio of industry-leading speciality chemicals, advanced materials, agricultural sciences and plastics, offers a broad range of technology-based products and solutions to customers in approximately 180 countries and in high-growth sectors such as the packaging, electronics, water, coatings and agricultural sectors.



Galloplast

Galloplast is a company that develops and manufactures colour concentrates for plastic. Thanks to its professionals and top-level facilities, they can design colours for all sectors, one of which is the Packaging sector.



Kao Chimigraf

Kao Chimigraf has focused its activity on the Graphic Arts sector since 1970. They have continued to specialise in the production of water-based, solvent and UV inks for Flexography, Gravure, Digital Systems, Ink-Jet and Serigraphy. They offer pigment dispersions (Chips) and auxiliary products.



Lecta

Lecta is one of the leading manufacturers and distributors of specialty papers for labels and flexible packaging, coated paper for publishing and other printing media of high value-added. It offers a wide range of diverse, sustainable and innovative products.



Lubrizol Advanced Materials

Lubrizol Performance Coatings are innovators in surface coatings (resins and adhesives). With decades of experience in dispersion, adhesion, surface protection and rheological viscosity control, Lubrizol has become a supplier for various industries, among which we can highlight the paints and coatings industry, printing inks, plastics, paper for specialised applications, textile and packaging.



Samtack

Samtack is a manufacturer of sealants for the metal containers and adhesives industry, both hot melt (hot glue) and water-based adhesives (cold glue), specialising in the graphic arts and packaging sector, as well as in the production of custom adhesives.



Trading Films

Trading Films sells, distributes and handles thermoplastic polymers for 4 main business areas: flexible packaging, industrial, graphic arts and labels. It also offers services such as cutting, microperforation, macroperforation and reaming of some materials.



Machinery Manufacturers

Aranow Packaging Machinery

Aranow is an international company specialising in the design and manufacture of packaging equipment for any type of product in stick pack packaging, which allows its customers in sectors such as pharmaceuticals, dairy, food and beverages, cosmetics and the chemical industry to reduce downtime, meet their increasingly high production demands and adapt their products to the latest distribution demands.



Dosimaq

Dosimaq's main activity is the construction of packaging and dosing machinery mainly for the food, chemical, cosmetics and pharmaceutical industries. They offer packaging automation solutions that range from small productions to projects that are adapted to the larger company.



Hamer

Hamer Packaging Technology has been manufacturing equipment for the plastics industry for more than 30 years. The range of equipment manufactured by HAMER consists of moulders for the manufacture of disposable plastic containers, as well as automatic and semi-automatic lines for the manufacture of blister packs.



Hewlett Packard

Hewlett-Packard joined the Packaging Cluster through its division of computers and printers, and more specifically through HP Indigo, its digital printers. The two types of presses (commercial and labels/packaging) have the capacity to perform tasks for different applications: commercial, packaging labels, photographic applications or editing applications are just a few of the many examples.



Intecma

Intecma specialises in the manufacture of all types of tools for automatic FFS packaging machines, as well as their modification, repair and maintenance.



Limitronic

Limitronic is a Spanish manufacturer of high resolution industrial ink printers with traceability and product identification solutions. Its range of Limitag printers apply identification marks such as linear barcodes, 2D codes such as QR-Code or ECC200 Datamatrix, preferred consumption dates, batches, complete information on ingredients or logos in full colour.



Posimat

Posimat is a world leader in the manufacture of handling systems for empty plastic bottles: unscramblers, silos, air conveyor, mass conveyors, etc. Posimat has manufactured more than 3,800 units, which can be found across the globe.



SIDE

SIDE has three business areas: Engineering: supply of engineering and electrical panels for industrial automation projects, specialising in machinery manufacturers and end customers; Distribution: supply of industrial electronic products for industrial automation solutions, and; Machinery: design, manufacture and sale of machines for bottle blowing, specialising in PET and technical bottles.



TMI

TMI is a company that designs and manufactures complete bagging, palletising and baling installations. The company has a wide range of automatic and semi-automatic industrial machinery to pack any product type, which is applicable to any industrial sector.



Primary Packaging Manufacturers

CCL Label

CCL Label is a converter of self-adhesive labels and extruded film materials for decorative, functional and informative labels, providing solutions for the home and personal care, premium foods and beverages, health, and automotive industries. It also produces sleeves and decorated plastic tubes for premium brands in the personal care, cosmetics and healthcare products markets.



Decapulp

Decapulp manufactures moulded cellulose products made from 100% recycled paper and organic additives. The final product is Recycled, Recyclable and Biodegradable. The company offers a comprehensive design service and the subsequent manufacture of the developed packaging items and paper fibre moulds, offering a wide variety of products with different shapes and sizes.



Decopak Europ

Decopak Europ are specialists at efficiently producing both usual decorations as well as more complex challenges. Varnishing, UV lacquer, PU lacquer, water-based lacquer, metallisation, screen printing, pad printing... They decorate all kinds of plastic, metal or glass pieces.



Enplater

Enplater focuses its activity on the printing and manufacture of flexible film. 95% of its market is related to the food sector (prepared dishes, fourth range, fresh produce, bags of sliced bread, pet food, coffee...).



Gráficas Varias

Graficas Varias is a company that is almost 100 years old, specialising in the printing of labels and sleeves for mainly Cava, Wine and Liquor, along with Cosmetics and Food, among others.



Industrial Bolsera

Familial company since 1919, dedicated to printing and converting flexible packaging and bags. Involve with the markets: Europe and Maghreb.



Industrias Plásticas Triana

Manufacturers of plastic parts by injection with two main specialisations: cylindrical containers for granules (salt, talc...) and medical products such as measuring elements (cups, spoons, syringes...), medication containers or vaginal cream applicators.



IPE Industria Gráfica

IPE Industria Gráfica has specialised in printing labels, sleeves and packaging since 1962. They work for different markets: Wine, Health, Food, Cleaning, Cosmetics, Pharmacy, Industrial and Chemical, Automotive and other technology markets.



Klockner Pentaplast España

They are world leaders in the production of rigid sheets of plastic, which are essential for the packaging of pharmaceuticals, food, electronics and medical products; as well as consumer goods, printing and specialised applications.



Menshen Iber

Menshen is a leader in priority tasks for the development, production and processing of plastic closures and packaging systems for closures on bags, bottles, sponge applicators and tubes. They collaborate with strategic partners in the cosmetics, chemical, pharmaceutical, home, food and beverage sectors.



NG Plásticos

NG Plastics designs products, manufactures moulds, injects plastic pieces and decorates for sectors such as the pharmacy, food and consumer goods.



Packintube

They offer environmentally-friendly and sustainable cardboard cylindrical containers, with textures, fragrances and RFID tags. Innovative packaging that is ideal for wines, oils and gourmet food, packaging for cosmetics and perfumery, as well as packaging for beverages, jewellery and fashion.



Quadpack

Quadpack are specialises in the development of standard and customised packaging solutions for the beauty products sector. Their selection of products ranges from skincare, hair and nails to makeup, perfumery, sun protection and OTC products.



Rieusset

Rieusset is a company that is dedicated to the manufacture of labels and flexible packaging for the sectors of food, beverages, hygiene, tobacco and pharmacy. With the rotogravure technique, they print labels in reels, pre-cut, die-cut, as well as sleeves and flexible packaging.



Virospack

Virospack is a family owned company with more than 60 years of experience in the sector, a world leader in the manufacture of cosmetic droppers for skincare, hair, nails and liquid makeup.



Witte y Solá

Witte y Solá is a strategic packaging collaborator specialising in aluminium tubes. With a family business structure that has a modern concept, it has maintained a line of action since 1968 based on customer service and support.



Zobe Group

Multinacional líder global en el desarrollo y fabricación de productos, de hogar y cuidado personal. Ofrece soluciones y servicios globales que cubren toda la cadena de valor de la innovación y desarrollo de productos de fabricación y entrega. Con una amplia gama de productos.



Secondary Packaging Manufacturers

Capsa Packaging

Capsa Packaging designs, produces and commercializes packaging solutions for multiple professional's sectors. Capsa is structured in three divisions: Packaging, Moving & Home and Self-Storage. With the launch of new products, Capsa focus its commercial development to the potential application of this novelty in multiple sectors and for all national and international markets.



DS Smith

DS Smith is a company that manufactures packaging and specialises in the design of advanced packaging. Its catalogue includes packaging for all types of applications, which allows DS Smith to respond to market and customer needs. In 2015, it acquired the activities of the corrugated cardboard division of the Lantero Group, which strengthened the company's productivity and operations in Spain.



Flexoplast

Specialised in rigid and flexible profiles and tubes in all types of internal and external diameters up to a maximum of 60 mm. Multiple manufacturing materials: PVC, Polyurethane, Polyethylene, Polystyrene, Thermoplastic Rubbers, ABS, Polypropylene, PMMA. Extensive experience in sectors like the automotive sector, industrial machinery components, naval, electrical, electrical appliances, construction, architecture, medicine and furniture in general.



Font Packaging

The company that manufactures corrugated carton, cardboard boxes and packaging. They have established themselves as specialists in next generation packaging, thanks to their philosophy of implementing the latest developments and trends in packaging in the following six lines of business: Consumer Pack, Industrial Pack, Plastic Pack, Insu Pack, Protective Pack and Olivé Corrugated.



Hinojosa Packaging

Grupo Hinojosa, leader in the corrugated carton packaging sector, is made up of thirteen companies that are spread all throughout Spain, and that have a large presence in Europe thanks to the European Blue Box Partners alliance.



Inka Palet

Inka Palet was created with the goal of offering the full range of existing pallets in the market: plastic pallets, aluminium pallets, metal pallets, new and used wooden pallets, agglomerate and mdf pallets, cardboard pallets and expanded polystyrene (EPS) pallets. This is in addition to their entire range of containers and crates made of wood, plywood, plastic and aluminium, all of which come in both standard and special measures.



Inprou

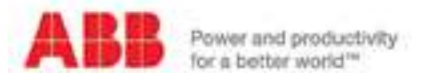
Inprou is a company dedicated to finding solutions which guarantee a correct distribution of refrigerated products. With the aim of offering personalized transport and logistics solutions, assuring the proper delivery of products that need low temperatures, without ever breaking the cold chain during the transport and storage, provides services to clients.



Peripherals and End of Line

Asea Brown Boveri, S.A.

ABB is a leading provider of industrial robots, modular production systems and services. The focus on packaging solutions helps manufacturers to improve productivity, product quality and worker safety. ABB has installed more than 250,000 robots worldwide.



Branson Ultrasonidos. Emerson

Branson is a supplier of products for the assembly of plastics, metal welding by ultrasound and precision process equipment, in addition to providing technical service and support services. Sectors such as the automotive, packaging, food, electronics and construction use ultrasonic cutting and welding systems.



Delta Energy Systems

Supplier of a full range of highly efficient power systems, electronic and thermal management components, industrial automation, Cloud information systems, household and medical devices.



E21 Design Technologies

For more than 20 years, E21 has been specialised in the creation and design of processes that are focused on dosing and industrial automation. It develops dosing machines for the manufacture of special colours for the graphics industry, turnkey projects for the automation of industrial processes, in addition to offering a management software for graphic arts and printers.



E2M

E2M is a company that specialises in the design, manufacture and installation of equipment for quality control in production lines. Its main objective is constant innovation in inspection systems through Artificial Vision, Orientors and Rejection Systems for all types of packaging in the packaged foods and beverages sector, as well as in the pharmaceutical, chemical and cosmetics industry.



Go Fruselva

GO Fruselva's current activity is based on the development, production and management of products such as fruit purees, vegetables, dairy products, functional products, smoothies, juices, nectars and fruit drinks in both glass and pouch formats.



Grup Cooperatiu TEB

TEB is a social company that specialises in packaging and handling, whose mission is to integrate people with disabilities both socially and in the labour market.



Lubritec

Company that specialises in industrial lubrication that knows everything about lubrication needs and trends, developing a set of high quality services in the field of lubrication, including everything from the audit of the lubrication plan, training, and the supply of well-known brands of lubricants with a high technical value.



Mettler Toledo

Mettler Toledo is a global manufacturer and supplier of precision equipment for use in laboratories and in industry.



RT Manipulados

RT Manipulados belongs to Grupo Constant, and specialises in handling and recuperating items for the corporate sector. Our company boasts ideal facilities, 700 m2 of which are aimed at production, and more than 2100m2 correspond to expandable, sectioned warehouse facilities to be used as required. Our team comprises specialised personnel with ample experience in the sector, and we employ the latest technology to achieve the very best results.



Yaskawa

World's leading manufacturer of drives, servomotors, motion controllers, PLCs and MOTOMAN industrial robots. Pioneer in motion control and drive technology, launching innovative products that optimize the productivity and efficiency of machines and systems. Divided into four areas: motion control, robotics, systems engineering and information Technology.



End User, Brands and Distributors

Milimétrica Producciones

Milimétrica Producciones has a proposal for its customers: to create packaging with the highest level of ecological efficiency. Under the brand "Encaja Bio" and "Huella de carbono CO₂" (Carbon Footprint CO₂), the design is replaced by an eco-design in order to develop the packaging of the future that is both efficient and environmentally friendly.



Multiembalajes

Integral supplier of products for packaging Its sales area is mainly the area of Catalonia, and the three sales divisions that they offer are: packaging for food, for the industry and for hygiene. Multiembalajes is characterized and differentiated from other commercial companies by its speed in the delivery of the merchandise, since it has its own transport service, which allows them to deliver the orders the day after their request.



Nestlé

Agrifood company that offers a range of products, including everything from mineral water to pet food, as well as chocolate and dairy products.



Pick d Pack

Pick d Pack is a point of sale for packaging and accessories for the food world.



Logistics

Climesa

Climesa are manufactures of flexible containers for logistics and distribution. Fast-moving products for industries and agricultural, mining or construction companies.



Comepack Ibérica

Logistics company whose services include the rental, pooling and washing of boxes and pallets. They offer a global logistics solution for reusable packaging, making their packaging pool available to the customer and their suppliers with a wide variety of boxes and plastic pallets.



TM2

TM2 is a company with more than 80,000 m2 of facilities dedicated to industrial packaging, lashing and logistics in Spain, Portugal and Mexico, with a team of more than 150 people at your service.



Transversal

3D Click

3D Click is an online collaborative platform for packaging professionals, allowing them to directly personalise packaging in 3D and validate it at the point of sale through Augmented Reality without having to know anything about 3D, accelerating the time-to-market of new products, unlike the traditional processes that rely on 3D experts, expensive prototypes, renders and meetings.



Amec Envasgraf

Amec Envasgraf is the Spanish Association of Machinery Manufacturers for Packing, Packaging, Bottling, Carton Articles and their Graphic Design. Their main objectives are: to promote the internationalisation of the sector, enhance sectoral representation and lobbying, generate networking, encourage innovation, offer training and manage the sector's communication and image.



ASIP

ASIP is a consulting company with more than 20 years of experience. The work they do in companies favours efficiency based on improving and innovating their processes. Their work covers: the business culture, strategy, organisational structure, processes and the people: their skills and attitudes.



Brafim

solutions that we design of Packings with different materials that the suitable materials look and combine for every product to sprinting. Since engineering we centre on the reduction of breaks simultaneously that in the costs associated with the packing, since they are the transport due to packings on measured in volume, costs of returns, up to costs of excess of packing, both in time of assembly and in materials.



Cimworks

CimWorks provides tools for improving the value chain of its customers. Based on the DASSAULT Systems SOLIDWORKS software for Mechanical/Electrical Design, Simulation, Product Documentation and Document Management, they contribute to improving the market position and reducing operating costs.



Eco Intelligent Growth

Eco Intelligent Growth is the integral design and industrial ecology consulting firm in Spain that is leading the transformation towards the Circular Economy, using its direct experience with Cradle to Cradle® design. They help design products, processes and business models that do not generate waste, that are healthy in all aspects, and that generate a positive impact; based off of transversal, contextualised and referenced scientific knowledge.



Enginyers Industrials de Catalunya

The Packaging Commission of the College of Industrial Engineers of Catalonia brings together professionals who are involved in the sectors of packaging engineering, packaging, packing, packaging processes and product packaging.



Gremi d'Indústries Gràfiques

The Graphic Industry and Communication Guild of Catalonia is the association that is born from the union between people in the graphics sector and those who manipulate paper and cardboard.



RSD Engineering Solutions

Company specialized in engineering services that proposes integral engineering solutions in various fields and sectors. In recent years they are focused on new 3D technologies to offer high quality innovative services in prototyping and packaging. They offer several services: design and 3D modeling, prototyping and tooling, analysis and study of projects of any type of product...



Schneider Electric

Schneider Electric, as a global specialist in energy management and with operations in more than 100 countries, offers comprehensive solutions for different market segments, with leadership positions in energy and infrastructure, industry, buildings and data centres, in addition to having a large presence in the residential sector.



Stimulo

We are a product design & innovation agency. We help companies grow by thinking, creating and developing compelling product experiences. We exploit the multidisciplinary team advantage to fusion strategy, design thinking and engineering to provide company's future prospects.



TAI Smart Factory

TAI Smart Factory is a company specialising in the development, sale, implementation and maintenance of software for collecting and managing industrial data, in addition to monitoring, analysing and exploiting said data.



Become a member



Would you like to be part of the Packaging Cluster? Contact us through the form «Become a member» on our website

*Annexed 2. Collaborators

Arboribus

A collaboration agreement has been signed between the company and Packaging Cluster arboribus. Arboribus offers the possibility for companies to obtain loans through a new nonbank channel alternative that can improve SME financing. At the same time, Arboribus allows people to invest through these SMEs obtaining loans in return profitability while supporting the local economy



Centre Metalúrgico

The Metallurgical Centre, among other things, focuses its activity on helping companies become global. Every year, the Metallurgical Centre and the Packaging Cluster organise trade missions to different emerging countries, which usually coincide with important trade fairs in the packaging sector.



Clúster de Innovación de Envase y Embalaje de Valencia

The Cluster of Packaging Innovation is an association of companies that belong to the packaging value chain in the autonomous community of Valencia. They are grouped together with the objective of exploring business opportunities through innovation, internationalisation and networking.



Ecoembes

ECOEMBES is a non-profit corporation that aims to design and manage a system that intends to selectively collect household packaging waste for its proper classification and recycling. In addition, it develops projects aimed at promoting innovation throughout the packaging value chain, in order to consolidate the system and protect the environment.



Enterprise + Europe Network

The EEN Network offers small and medium-sized enterprises (SME) information and advice on business policies and opportunities in EU countries, in addition to assisting them in technology transfer processes and with gaining access to European funding, research, development and innovation programmes (R&D).



Fira Barcelona

Fira Barcelona was established in 1932, and since then it hosts exhibitions and conferences every year that encompass the main sectors of the economy, in addition to many other corporate, social and cultural events.



Healthy Printing

EPEA launched a healthy printing initiative to expand the availability of healthier substances in printed publications and packaging, and invites everyone to join the alliance, which the Cluster already participates in, as a way of encouraging sustainable and healthy printing.



Korean Packaging Association

KOPA (Korea Packaging Association), founded in 1991, has 92 members representing the entire value chain and promotes the development of R&D activities within the context of the packaging industry, as well as the internationalisation of its members through strategic alliances with leading international partners.



News Packaging

The specialised packaging magazine is aimed at manufacturing companies in the sectors of perfumery, cosmetics, food, beverages... In the magazine you can find a double page entitled "Packaging Cluster Space" with news on the cluster and interviews with its associates.



Packnet

Packnet is a Spanish technological platform of packaging, aims to become a meeting point for the interests of the packaging industry, with the main idea of promoting and encouraging the collaboration of all members. This platform is committed to knowledge, innovation and technological development as fundamental tools to achieve competitiveness and excellence with a long-term projection.



Packbridge

Packbridge is the Swedish packaging cluster, founded in 2010, which integrates members of the packaging industry, both nationally and internationally. Based in Malmö (Sweden), it promotes different activities and projects. It is also certified with the Bronze Label by the European Secretariat for Cluster Analysis (ESCA).



Observatorio de Economía Circular de Cataluña

Node of reference at the green economics and circulate in Catalonia that it contribute ken and information, with the aim to give coherence and visibility at the efforts that will be realising since different levels and spheres of performance of the institutions and other organisms, contributing like this at positioning internationally Catalonia comma referent at this matter.



Universidad Fundació Politècnica de Catalunya - UPC School

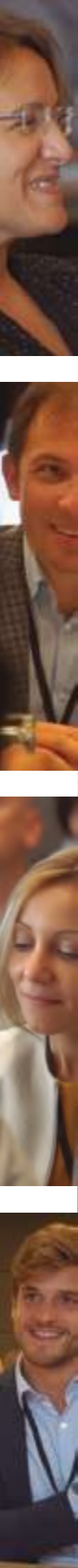
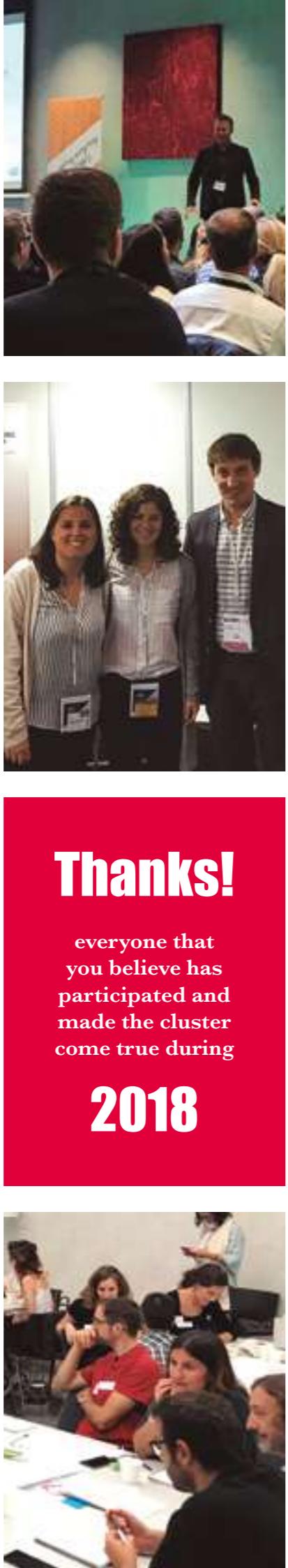
Since 2015, the Packaging Cluster has maintained a collaboration agreement with the Polytechnic Foundation of Catalonia, which offers the Postgraduate Course in "Packaging Engineering: Packaging Technology" in its portfolio of postgraduate degrees.



Vallés Circular

Iniciativa territorial compartida entre administraciones, agentes sociales, ambientales y económicos con el objetivo de impulsar la economía circular en el Vallès Occidental y aprovechar el desarrollo de nuevas formas de producir y consumir para ganar competitividad, calidad de vida y mejora del medio ambiente.





ENVIRONMENTAL INFORMATION

The role of this publication guarantees environmental, economic and social management responsible for forests that originate in the raw material. The environmentally responsible forest management guarantees the fair use of forest resources and contributes to maintaining the biodiversity of forests. Socially beneficial forest management contributes to the fact that local populations and society as a whole defile the benefits of forests while conserving forest resources.

ENVIRONMENTAL PACKAGING CLUSTER

The Packaging Cluster is committed to sustainable and healthy printing and certifies that the inks used to the impression of the “Annual Report 2018 “meet all regulations of absence of harmful chemicals as heavy materials, etc ... and that the paper used also meets with FSC® certification.

Thanks!
everyone that you believe has participated and made the cluster come true during **2018**



Paper provided by **Lecta.**

Printed by **Servinform, S.A.**





Find us at:

C/ de la Innovació, 2
08225 Terrassa (Barcelona)

Contact:

Tel. (+34) 93 788 23 00
info@packagingcluster.com

Follow us!



Certified by:



In collaboration with:

