Chemical industry in Catalonia: Sector Snapshot

ACCIÓ
Government of Catalonia

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Barcelona, June 2018
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1. The chemical industry
The chemical industry description

The chemical industry is focused on the extraction and processing of primary materials, both natural and synthetic, as well as transform them into substances with new characteristics.

Chemical value chain

Source: EIC (ACCIÓ).
The global chemical industry

The chemical industry in the world (2016)

- World chemicals turnover valued at €3,360 bn.
- China is the main producer with €1,331 bn.
- Twelve of the top 30 biggest producers are Asian, generating chemical sales of €1,916 bn – 57% of the world market.
- BRICS countries (Brazil, Russia, India, China and South Africa) together accounted for 45.2% of global chemical sales in 2016, valued at €1,519 bn.

The chemical industry in the European Union (2016)

- At the EU level, the chemical industry is the 5th largest industry, with a turnover of €507 bn.
- Germany and France are the two largest chemicals producers in Europe, followed by Italy and the Netherlands.
- Spain is the 5th chemical producer in the EU.

Note: Chemical industry excludes pharmaceuticals

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2. The chemical industry in Catalonia
The chemical industry in Catalonia

In Catalonia there is a strong, developed and international chemical industry, which is the largest chemical hub in Southern Europe.

- **758** COMPANIES (2017)
- **33,462** EMPLOYEES (2017)
- **€16,872 M** TURNOVER (2016)

3.4% of all Catalan industrial companies.

27% of all chemical companies in Spain.

Basic chemicals (31.4%) and Cleaning and polishing preparations, cosmetics and perfumes (30.5%) lead the sector by number of companies.

7.1% of total industrial employees in Catalonia.

36.8% of all chemical industry employees in Spain.

Cleaning and polishing preparations, cosmetics and perfumes lead the sector by number of employees (36%).

13% of total industrial turnover, being the second leading sector in Catalonia.

45.7% of whole sector turnover in Spain.

Basic chemicals is the most important subsector, contributing 58% to the total turnover.*

Source: INE.


Note: Chemical industry excludes pharmaceuticals.

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Catalan chemical industry competitiveness (I)

Attractive for foreign investors

From 2013 to 2017…

**The Catalan chemical industry registered…**

- 31 FDI projects
- €692.4 M of capital investment
- 1,164 jobs created

** Catalonia has been the top chemical FDI destination in Spain, representing…**

- 59.1% of the capital investment
- 56.3% of the jobs created
- 54.4% of the FDI projects received

…within the chemical industry in Spain.

**Catalonia has also been the…**

- 3rd region in terms of job creation
- 3rd region in number of FDI projects attracted
- 5th region in capital invested received

…within the chemical industry in Western Europe.

Source: EIC (ACCIÓ) based on fDi Markets.
Catalan chemical industry competitiveness (II)

International and open trade

Over the last decade…

49.3% of Spanish chemical exports
16.8% over total Catalan exports

Basic chemicals has been the most exported group for the last decade (56.5%).

REGULAR EXPORTERS

2,393 chemical regular exporter companies in Catalonia, which accounts for 43.2% of the total in Spain and 48.5% of the total chemical exporter companies in Catalonia. (2017)

Exports from regular exporters accounted for €10,806 M, which is the 92.6% of total chemical exports from Catalonia. (2017)

Note: Regular exporters are those companies which have exported for the last four consecutive years.

Source: EIC (ACCIÓ) based on ICEX.
Catalan chemical industry competitiveness (III)

Innovative and entrepreneurial

Catalonia is at the forefront of innovation…

1.46% of its GDP dedicated to R&D.

9,282 innovative companies, representing 22.2% of the Spanish total.


Presence of important technological and research centres

CTQ - Centre for chemical Technology

EURECAT - Technology Centre of Catalonia

LEITAT - Technological Centre

ICIQ - Institute of chemical Research of Catalonia

CATALONIA...


4th Region for scientific production in Europe (Knowledge Cities Ranking, 2014).

BARCELONA...

5th City in Europe in terms of innovation. (Innovation Cities Index, 2016/2017)

5th City in Europe in terms of scientific academic production. (Knowledge Cities Ranking, CPVS, UPC, 2017)

Source: INE.
Catalonia, the ideal place for the chemical industry

STRATEGIC LOCATION AND MARKET ACCESS

A logistics network that serves 400 million consumers in Europe and the Mediterranean/Africa in less than 48 hours.

The Port of Tarragona is the logistics platform responsible for importing the raw materials required for the production processes in the chemical sector and exporting the products derived from them.

The Port of Barcelona has specialized facilities and multimodal distribution for the chemical sector.

CHEMICAL INDUSTRY BUSINESS STRUCTURE

Three differentiated chemical poles in Catalonia (in Barcelona, Tarragona and Vallès) with companies of the chemical industry at different levels of the value chain, besides companies offering services for chemical companies.

ChemMed is an industrial, logistical, academic and scientific chemical cluster located in Tarragona integrated by more than a hundred chemical companies of all sizes. Presence of associations related to the chemical industry.

TRADE FAIRS & CONGRESSES

Barcelona ranks 3rd in the world city International Congresses ranking, only behind Berlin and Paris (ICCA, 2016).

Barcelona holds important global trade fairs and congresses of the chemical and related sectors, such as the World chemical Summit and CPhI Worldwide.

LEADING SCIENTIFIC FACILITIES

Renown applied and basic research groups supporting technological transfer and a complete network of scientific and tech centers representing the Catalonia’s research and innovation program.

COMPETITIVE TALENT

Catalonia boasts qualified and talented workers at a cost well below other comparable countries.

Catalan universities offer chemical degrees and masters in addition to first-rate business schools.

BUSINESS MINDSET

Catalonia is always open for business, with the government’s business focused policies perfectly complementing a strong private sector.

Source: EIC (ACCIÓ).
The chemical industry ecosystem in Catalonia

BASIC CHEMICAL COMPANIES
- Covestro
- BASF
- Messer
- Linde
- Abello Linde, S.A.
- Kao Chemicals
- Dow
- Inovyn
- Clariant
- Caburros Metálicos

SPECIALTY CHEMICAL COMPANIES
- Soaps, perfumes, detergents and cosmetics
  - PUIG
  - Henkel
  - Unilever
- Paints, varnishes and similar coatings
  - PPG
  - Titanax
  - AkzoNobel
- Other chemical products and man-made fibers
  - Iyonnelbasell
  - BASF SONATRACH PropanChem S.A.
  - ERCROS
  - Elix Polymers
- Pesticides and other agrochemical products
  - SIV
  - Laboratorio Jaer, S.A.
  - Lainco, S.A.

SPECIALISED LOGISTICS
- Brenntag
- Vopak Terquima
- TransLink
- Cañada Parés, S.A.

CHANNELS
- Agricultural
- Automotive
- Construction
- Food
- Pharmaceutical
- Other chemical manufactures
  - Big and medium distribution channels
  - Supermarkets
  - Perfumeries
  - DIY Stores (e.g. Bauhaus and Leroy Merlin)

Note: The use of these trademarks is for informative purposes only. Trademarks mentioned in this document are the registered trademarks of the companies to which they belong and are not owned by ACCIÓ. This is a partial and illustrative representation of companies that form part of the chemical ecosystem in Catalonia; however, there may exist other companies that have not been included in the study.

Source: EIC (ACCIÓ) based on Orbis.

Strategies and Competitive Intelligence Unit
Tarragona: a chemical hub

There is a leading chemical ecosystem, thanks to the presence of competitive companies together with ChemMed and top infrastructures as the Port of Tarragona.

Industrial ecosystem

ChemMed, a leading cluster

ChemMed Tarragona is an industrial, logistical, academic and scientific chemical cluster located in the greater Tarragona area in Catalonia.

Its aim is to consolidate existing production facilities and the network of ancillary industries, and make the area better known among domestic and foreign investors as a potential location for chemical production.

Port of Tarragona, a petrochemical hub

The Port of Tarragona is one of the top ports in Spain and a leading port in Europe.

It is the logistics platform that is responsible for importing the raw materials required for the production processes in the chemical sector and exporting the products derived from them.

60% of port business comes from the Petrochemical sector.

Direct line with 46 countries, connecting the entire world via 40 regular lines.

Excellent road and rail connections and an intermodal station.

Note 1: Companies have been selected by turnover and by being members of AEQT.

Note 2: The use of these trademarks is for informative purposes only. Trademarks mentioned in this document are the registered trademarks of the companies to which they belong and are not owned by ACCIÓ. This is a partial and illustrative representation of companies that form part of the chemical ecosystem in Catalonia; however, there may exist other companies that have not been included in the study.

Source: EIC (ACCIÓ) based on Orbis and AEQT (Chemical Business Association of Tarragona), Port of Tarragona and ChemMed Tarragona.
3. Opportunities in the chemical industry
Investment opportunities

MANUFACTURING

**Fertilizers & agrochemicals**
Catalonia has a persistent legacy and progressive talent in the fertilizer and agrochemical industry. Thanks to a notorious Agricultural sector there is a growing demand.

**Paints & coatings**
Catalonia is one of the strongest leading hubs in Europe for paints & coatings. There is a large base of potential clients in sectors such as Automotive, Food & Beverages and Construction.

**Food packaging**
In Catalonia there is a dynamic ecosystem for the food packaging industry thanks to presence of technological centers researching on new materials. There is a large base of potential clients in Meat, Oils, Dairy and Bakery products.

**Cosmetics**
Catalonia has a sophisticated atmosphere for cosmetics made of chemical companies, suppliers of raw materials, and technological centres.

**New materials**
Catalonia is the launching pad and forefront for the chemistry of tomorrow. Hewlett Packard has its worldwide 3D printing business in its development center in Catalonia, where it has designed its 3D printer, the Multijet Fusion.

**Plastics for the automotive industry**
Catalonia is an excellent international powerhouse in the plastics for the automotive industry. GAP analysis of the Catalan automotive value chain has shown a lack of players in the molds and dies and the need of new materials for the Automotive industry.

LOGISTICS

Catalonia with efficiency and seamless infrastructures is the key Logistics Location in the EMEA market.

R&D CENTRES

Catalonia blends its strengths in the chemical industry and a robust partnering institutions to develop cutting edge R&D.

Source: ACCIÓ.
**International market opportunities**

**COLOMBIA**

Colombia has significant oil production and a hydrocarbon industry. Industry nonetheless requires chemical products with other specifications that optimise production processes and are environmentally friendly. There is also a demand for end products that incorporate added value in order to lengthen the useful life of products, as is the case of furniture and wood.

**UNITED STATES**

The United States accounts for 19% of world chemical production. The most significant subsectors of the chemical sector in the United States of America include pigments, resins, adhesives, agricultural products, pharmaceutical products and consumer chemicals. The plastics industry alone generates a turnover of US $419,000 million.

**GUATEMALA**

Guatemalan industry seeks providers of raw materials, equipment and supplies for the chemical-industrial sector. The chemical sector supplies the entire range of the industrial sectors most active in the Guatemalan economy such as construction, and the pharmaceutical, cosmetics, agricultural and food sectors. Italy is currently competing efficiently in Guatemala, which shows that there are also opportunities for Catalan companies in the supply of chemical products to the different Guatemalan industrial sectors.

**MEXICO**

In Mexico there is high demand for chemical specialities that is met through imports. This indicates a need for supplies of chemical products from other countries. It is envisaged that 2018 will be a year of great challenges for Mexican chemical companies, which will require considerable reappraisal to determine actions with which to increase revenue, to encourage market share and to participate on new markets.

**AMERICA**

**GHANA**

By far most chemical products in West Africa are imported because of scarce local production, which is limited to basic detergents, cosmetic products, paint and fertilisers. Specifically, opportunities have been detected in the following products: fertilisers, pesticides, chemical products for treatment water, industrial chemicals, chemicals for construction. Bear in mind that entering the public sector requires a local partner, preferably recommended by the technical teams of public companies.

**AFRICA**

**FRANCE**

In 2017, the French chemical industry increased its production volumes by 4.6%. The year was particularly dynamic for organic chemicals (+ 7.5%) and for soaps, perfumes and cleaning products (+ 8.2%). The president of the Union of Chemical Industries forecasts a growth in production of 3% for 2018.

The green chemical sector in France is cross-cutting and established in many industrial sectors such as agroindustry and the automobile industry. It is a market opportunity, particularly in the Bioplastics subsector. The French Union of Chemical Industries has established that 20% of the chemical products manufactured should be biodegradable by 2020. The activity of the subsector is expected to grow 6% a year between 2017 and 2020. There is a strong trend towards reducing the environmental impact of packaging. The new French law on energy transition prohibits large department stores from distributing single-use bags, a move that excludes biodegradable and compostable bags. Companies that use plastic have a keen interest in finding innovative solutions: biodegradable plastic, new methods of packaging, new materials, etc.

**EUROPE**

**AZERBAIJAN**

Azerbaijan has huge oil and natural gas resources, a fact that has made it more significant on the world’s petrochemical market. In 2018, different factories will open on the new Sumgait Chemical Industrial Park. These will generate investments to a value of nearly 2,000 million dollars. Azerbaijan, and Sumgait in particular, offer a series of benefits for chemical companies because of their favourable location, the proximity of raw materials, direct transport connections, available low-cost power and connection to modern electricity, gas, water and wastewater networks.

**ASIA**

**TURKEY**

Tukey is a very dynamic economy in the chemical and plastics sector and most raw materials are imported. There is a high local consumption of chemical products, as well as a large number of factories and suppliers. This consumption is mainly for fragrances and aromatic essences in the hygiene sector (cosmetics and pharmacy supplies). There are also opportunities in innovative products and components for factories of plastic and paint, textiles, petrochemicals and construction.

Source: ACCIÓ.
Take a look at the full report:
http://catalonia.com/content/documents/chemical-industry-in-catalonia.pdf

More information about the sector and related news:
http://catalonia.com/trade-with-catalonia/chemical.jsp