

INVEST IN

FRANCE'S

CHEMICAL PARKS



CHOOSE FRANCE ! OTHERS ARE ALREADY THERE

THEY CHOSE FRANCE :

ADISSEO a subsidiary of Chinese firm BlueStar (ChemChina Group), invested €25 million in a new multi-vitamins production line at its Commentry plant (central France), creating 50 jobs.

Based in Muttenz, Switzerland, **CLARIANT** is a multinational chemical group with more than 18,000 employees worldwide. Clariant France is headquartered in Choisy-le-Roi (outside Paris) and employs nearly 450 people at seven locations. In 2016, Clariant began to establish a new R&D center at Oncopole, the Toulouse cancer research hub. The new center will create around 30 jobs.

PLASTIGRAY, as a subsidiary of Belgian firm AccoForm, designs and manufactures plastic products for the automotive, healthcare, electronics, ... and environment industries. In 2016, it invested in its plastic injection facility in Gray (eastern France).

PLASTIPAK an American plastic packaging manufacturer has around thirty production facilities in the United States, South America and Europe. In March 2015, it acquired polyethylene terephthalate (PET) packaging specialist APPE, in a €360 million move that saved 134 jobs at the APPE site near Dijon (eastern France).

**THIERRY MERLOT,
CHAIRMAN OF HEXCEL GROUP OPERATIONS IN EUROPE, ASIA, PACIFIC, MIDDLE EAST AND AFRICA, SAID:**

“We are very proud to have created an innovation center dedicated to such advanced technologies as direct techniques (injection and vacuum infusion) and compression molding,”

In late 2016, Hexcel announced an expansion at its carbon fiber weaving plant, which is also part of the Avenières* site. This move forms part of an extensive €220 million investment and modernization program that will create more than 200 jobs by 2018 when the first PAN manufacturing facility in Europe and a carbon fiber production line are due to open in Roussillon (Provence-Alpes-Côte d'Azur region), along with new French headquarters and a large prepreg line in Dagneux*
*Auvergne-Rhône-Alpes region.

**REN JIANXIN,
CEO OF THE CHINA NATIONAL CHEMICAL CORPORATION (CHEM-CHINA) COMMENTED:**

The local government has created excellent conditions to promote innovation [...] The French public research platform is truly unique and effective at bringing together innovators in French society, leading to collective creativity and integrated results. Moreover, France has a large number of highly qualified researchers to provide further support to Sino-French technological cooperation.



FOREWORD

“ Ever since its origins in the nineteenth century, France's chemical industry has been changing and adapting to remain competitive. Today, it is the second-largest such industry in Europe and ranks sixth worldwide.

The French government actively supports the expansion of its chemical industry. Robust national goals focus on innovation and upmarket positioning, backed by solid, sustainable value chains.

These efforts involve a forward-looking policy in favour of innovation, embodied by the Research Tax Credit, as well as a €10 billion fund, launched in 2018, to support breakthrough innovation in industry. France has also permanently reduced employers' social security contributions and plans to cut the corporate tax rate to 25% starting in 2022. More specific measures for energy-intensive companies have also been introduced, and the chemical industry - as one of the most energy-intensive sectors - is one of the main beneficiaries.

Chemical companies can rely on highly competitive industrial parks. This can be seen in Hexcel's recent large-scale installations at Roussillon or, the renovation of the Kem One plant in Lavera - all of them resolutely looking to the future. These parks are excellent premises for new investments: pooled resources, such as energy production or water treatment, provide economic advantages. Another plus is the tight-knit integration with other industrial plants in the same park.

France's chemical parks also benefit from some of the world's top infrastructures, which put them in direct contact with both European and global markets. Lastly, the French chemical ecosystem is underpinned by a highly-qualified workforce and long-standing academic partnerships that have been praised by many foreign leaders.

Stakeholders at all levels stand ready to help companies set up shop. Business France's teams work closely with the chemical parks to provide proactive, customised support throughout the entire investment cycle, while local government departments help speed the process at every stage.

The French government and its agencies are committed to making your project a success.”

**BRUNO LE MAIRE,
MINISTER FOR THE ECONOMY AND FINANCE**

THE FRENCH CHEMICAL INDUSTRY ASSOCIATION

**MAGALI SMETS,
GENERAL MANAGER OF THE FRENCH CHEMICAL INDUSTRY ASSOCIATION SAYS:**

“France has always been a welcoming country for foreign companies, especially for foreign chemical firms, which account for approximately 40% of chemical output in France.

Among the many strengths which attract investors are: excellent infrastructure, outstanding R&D (both public and private) supported by efficient tax incentive programs, and highly qualified and productive personnel. Strong downstream sectors (aeronautics, cosmetics, pharmaceuticals, plastic processing, etc.) offer attractive market opportunities for chemical firms in France. Finally, our government ambitious agenda of reforms clearly demonstrates its ambition to make France even more attractive to inward investment.

More than ever, France is a perfect environment in which to expand a chemical firm in Europe.”



FRANCE'S INVESTMENT ATTRACTIVENESS

A MUCH-APPRECIATED HOST

France attracts many foreign investors: companies from other countries account for approximately 40% of chemical output in France. Several operations in France are undertaken by foreign-owned companies from:

BELGIUM :	Solvay
CHINA :	Chemchina (Elkem, Adisseo)
GERMANY :	BASF, Bayer, Lanxess
JAPAN :	Ajinomoto, Sumitomo Chemical, Toyo Ink, Toray
NETHERLANDS :	Lyondellbasell
NORWAY :	Yara
SWITZERLAND :	Ineos Chemicals
UNITED STATES :	Chevron Oronite, Dow Chemical, DuPont ExxonMobil Chemicals, Hexcel, Lubrizol, PPG

A STRONG DOWNSTREAM BASE

The chemical industry in France has a large range of downstream customers from the cosmetics, pharmaceuticals, aerospace, automotive, energy, health, and agriculture sectors. It plays a key role in the development of these dynamic sectors, while its innovations lead to continuous performance improvements.

EDUCATIONAL EXCELLENCE AND MAJOR INVESTMENTS IN R&D

France invests more in its education system than many of its European neighbors, including Germany, Italy and Spain. The proportion of human resources employed in science and technology (HRST) throughout the country is substantial: in France, HRST accounted for 50.5% of the active population in 2016. France is ranked lower than the United Kingdom (56.9%), but ahead of Germany (48.4%).

Throughout France, forty engineering schools prepare students for a degree in chemistry and chemical engineering. Young people have many opportunities to work in companies through apprenticeship and sandwich courses: more than 5,000 of these special contracts are signed in France's chemical industry in 2016.

TRANSPORT AND LOGISTICS

At the heart of continental Europe, strategically located between Northern Europe and the Mediterranean Sea, France boasts comparative geographic advantages that assure its major role in European logistics. These geographic advantages are complemented by first-class infrastructure.

FRANCE HAS:

- Europe's most extensive road network. More than one million kilometers (620,000 miles) of roads, of which nearly 11,600 kilometers (7,207 miles) are motorways.
- Europe's first leading airport for cargo (Paris Charles de Gaulle).
- Europe's leading business airport (Paris Le Bourget).
- The longest network of natural and artificial navigable waterways in Europe (nearly 8,500 kilometers or 5,280 miles).
- The largest port in the Mediterranean by tonnage (Marseille port).
- The 1st French Port for foreign trade (HAROPA = Le Havre-Rouen-Paris ports)
- 30,000 kilometers of railway lines. Many specialist service providers offer wagon and tanker container hire services to transport chemical products, as well as rail transport.

MAJOR INNOVATION INCENTIVES

France's competitive environment promotes innovation. The French chemical industry makes substantial growth investments in forward-looking sectors such as sustainable chemistry and nanomaterials. The French authorities also encourage innovation in industry through tax-incentive programs.

FRANCE:

- Has the most attractive tax incentive program of R&D of its kind in Europe: the research tax credit. This is a tax break amounting to 30% of annual R&D expenses, up to €100 million, and 5% above this threshold. In 2014, French businesses in the chemicals, rubber and plastic sectors received €318 million through France's research tax credit.
- Has the lowest effective corporate tax rate (among the 10 countries surveyed) for R&D operations, taking into account differences in tax bases, depreciation allowances, tax exemptions and tax credits.
- Was again ranked first in 2017 by the Deloitte "Technology Fast 500 EMEA" (for the seventh year running) with 97 of the top 500 fastest growth companies based on percentage revenue growth in Europe, the Middle East and Africa.
- Is also still ranked first in Europe in an index of the 100 most innovative organizations in the world.

FOCUS ON BIOBASED CHEMICALS AND CIRCULAR ECONOMY

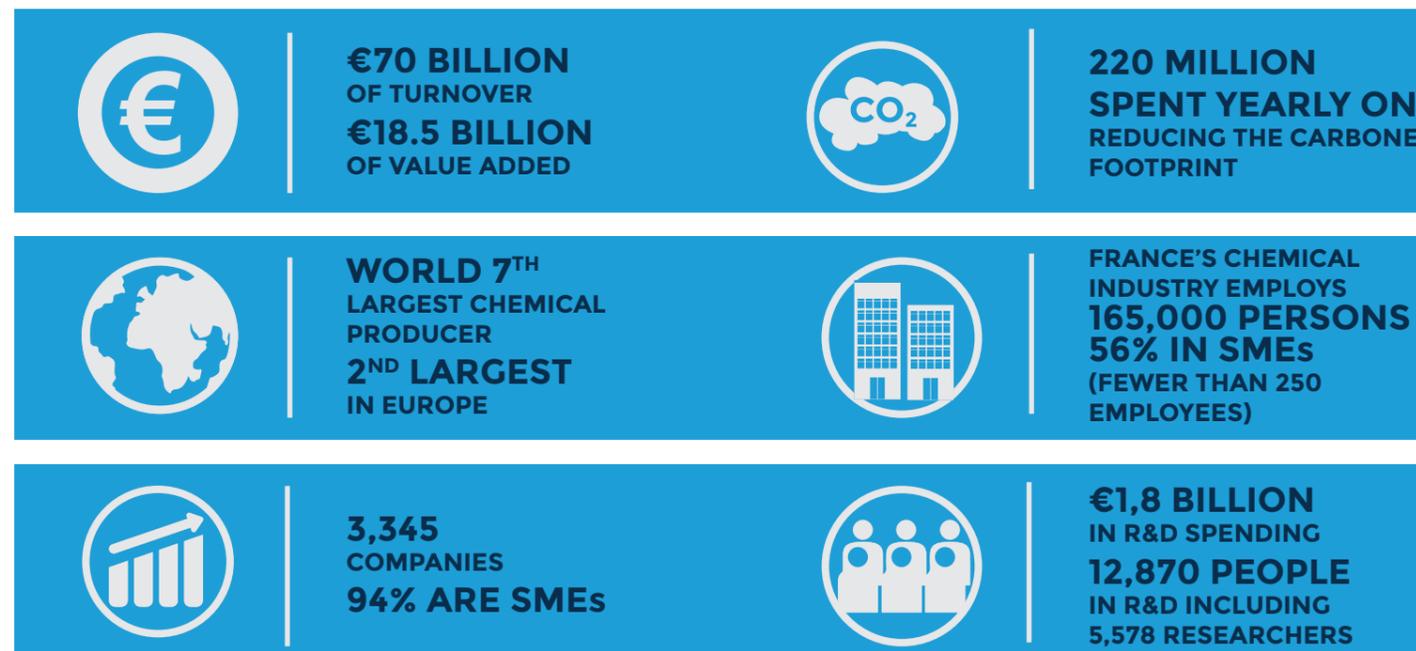
Green chemicals are changing the fundamentals of the chemical industry. Agribusiness is France's leading industrial sector and is therefore a strategic market for sustainable development. Commodities and processes are now being designed to reduce their impact on health and the environment, while an increasing number of products are being made using renewable raw materials and energy sources. Manufacturing processes are optimizing yield and energy efficiency.

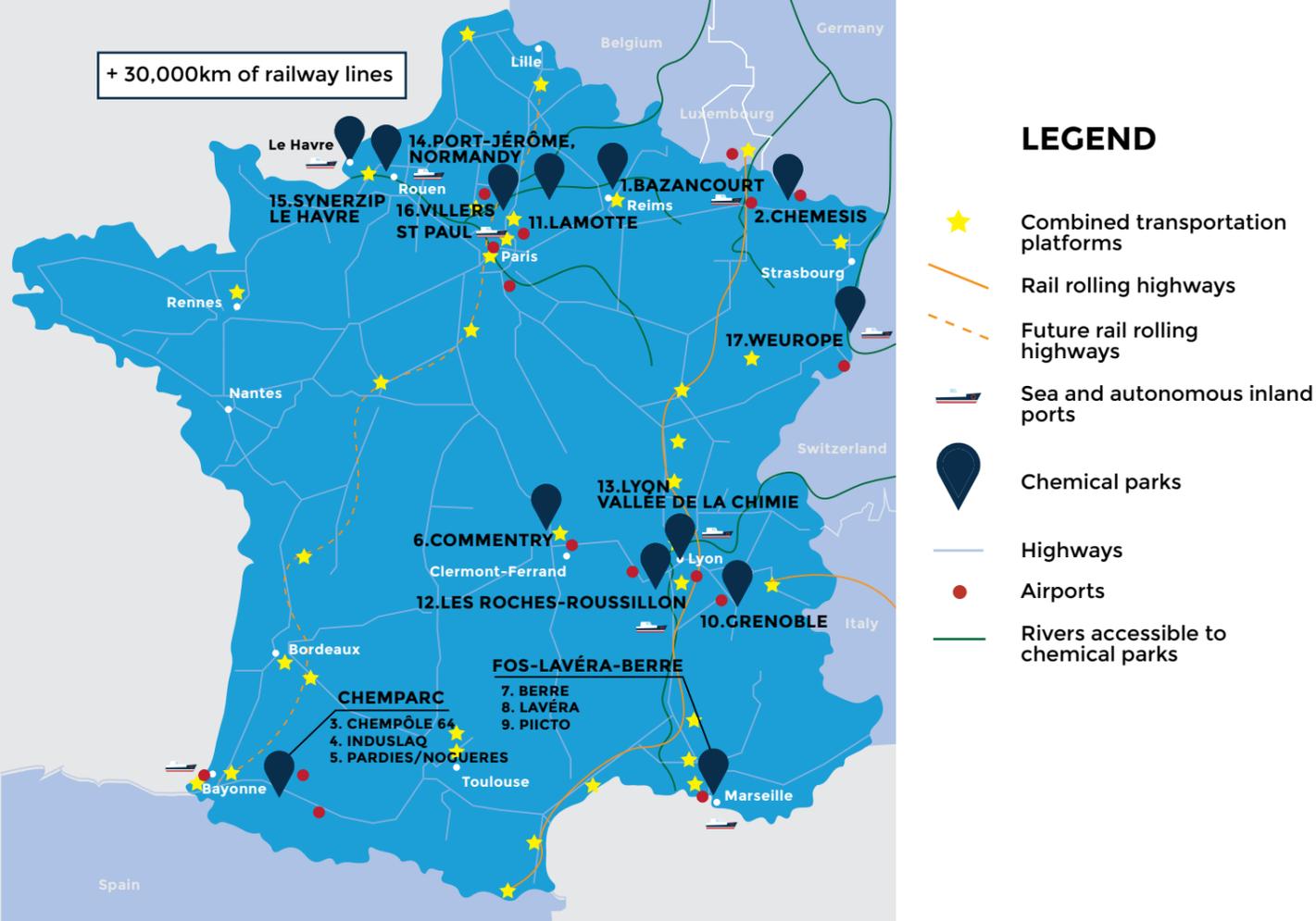
INNOVATION CLUSTERS

France has a number of innovation clusters specialized in the chemical industry:

AXELERA :	Chemicals and environmental protection
ELASTOPÔLE :	Rubbers and polymers
COSMETIC VALLEY :	Cosmetics and perfumes
IAR :	Industries and agro-resources
MATIKEM :	Materials, chemicals and green chemicals

KEY FIGURES FOR CHEMICAL INDUSTRY :





CHEMICAL PARKS TO POOL RESOURCES

France boasts several major chemical industry parks. Located in lightly urbanized areas and classified Seveso II, they bring together various chemical industry players, subcontractors and suppliers to pool their needs effectively.

For example : sharing distribution networks for industrial fluids, waste processing and disposal significantly reduces investment and running costs. The services provided such as maintenance, assistance in opening a new facility, stock and logistics management etc. are also available at lower cost.

A particular attention has been developed for platforms in conjunction with the French government, which forested an attractive environment for this type of sites. Investors can take advantage not only of shared services and expertise, enabling a faster permit delivery and lower operating expenses, but also of a number of investment and tax incentives for new projects.

MAJOR CHEMICAL PARKS IN FRANCE

1. BAZANCOURT	THE LARGEST BIOREFINERY IN THE WORLD
2. CHEMESIS	POLYMERS AND RESINS
CHEMPARC 3. CHEM-PÔLE 64 4. INDUSLACQ 5. PARDIES / NOGUERES	FINE CHEMICALS AND SPECIALTY CHEMICALS
6. COMMENTRY	FINE CHEMICAL SYNTHESIS AND FORMULATION
FOS-LAVÉRA-BERRE 7. BERRE 8. LAVÉRA 9. PICTO	THE LARGEST PETROCHEMICAL SITE IN SOUTHERN EUROPE
10. GRENOBLE	CHLORINE, PHOSGENE AND HYDROGEN EXPERTISE
11. LAMOTTE	C2 SPECIALITY CHEMICALS AND MULTI-PURPOSE PLANTS, SULPHUR CHEMISTRY, SILICA BASED MATERIALS AND SPECIALITY POLYMERS
12. LES ROCHES ROUSSILLON	FRENCH LEADER IN ORGANIC AND SPECIALTY PRODUCTS
13. LYON VALLÉE DE LA CHIMIE	SPECIALTY CHEMICALS, POLYMERS, SILICA BASED MATERIALS, INTEGRATED REFINERY-PETROCHEMICAL COMPLEXE AND 7 WORLD-CLASS R&D CENTERS IN CHEMISTRY & RENEWABLE ENERGY
14. PORT-JÉRÔME, NORMANDY	CRUDE OIL & PETROLEUM PRODUCTS, CARBON BLACK, INDUSTRIAL GASES, PLASTICS
15. SYNERZIP LE HAVRE	ONE OF THE EUROPE'S LEADING INTEGRATED REFINERY PETROCHEMICALS COMPLEXES
16. VILLERS ST PAUL	PRODUCTION OF PHOTOCURE RESINS, OLIGOMERS AND MONOMERS, COPOLYMERS, FLUORO DERIVATIVES, WATER-SOLUBLE ACRYLIC POLYMERS
17. WEUROPE	NITROGEN-BASED CHEMICALS AND POLYAMIDE TECHNOLOGIES

BUSINESS FRANCE

Business France is the national agency supporting the international development of the French economy, responsible for fostering export growth by French businesses, as well as promoting and facilitating international investment in France.

It promotes France's companies, business image and nationwide attractiveness as an investment location, and also runs the VIE international internship program.

Founded on January 1, 2015 through a merger between UBIFRANCE and the Invest in France Agency, Business France has 1,500 personnel, both in France and in 70 countries throughout the world, who work with a network of public- and private-sector partners.

For further information, please visit: www.businessfrance.fr

THE FRENCH CHEMICAL INDUSTRY ASSOCIATION

UIC is the professional body that helps to develop and enhance the competitiveness of the chemical industry and its applications in France. It takes action at regional, national and European levels, bringing stakeholders together and actively driving chemical industry's sustainable development in France.

The actions of UIC are based on three main areas:

- Competitiveness based on the development of innovation, favorable economic, fiscal and regulatory conditions (REACH,...), long-term access to energy and raw materials at competitive prices, convenient business environment for investments in the chemical industry, strong regional clusters ;
- Sustainability: developing a sustainable economy focusing on renewable energy and resources, as well as on recycling.
- Attractiveness: offering more innovative products and technologies to downstream customers, maintaining and developing jobs and skills according to the prospective technical and economic needs of the chemical industry

For further information, please visit: www.uic.fr

THE DIRECTORATE-GENERAL FOR ENTREPRISE (DGE)

Under the authority of the Minister for the Economy and Finance, the DGE is tasked with developing and implementing government policy for industry, the digital economy, tourism, commerce, craft industries and trades and services.

The DGE's 1,300 members of staff work nationally and regionally in our network of Regional Directorates for Enterprises, Competition Policy, Consumer Affairs, Labour and Employment to promote business start-ups, growth, innovation and competitiveness for companies of all sizes in France and abroad.

The DGE works in close partnership with businesses and business representatives including trade organisations and federations, chambers of commerce, industry and trade and support networks. Combined with the DGE's knowledge, these partnerships make it possible to perform joint assessments before introducing the appropriate government policy.

For further information, please visit : www.entreprises.gouv.fr/dge