

# INVEST IN CHEMICAL PLATFORMS IN FRANCE



# CHOOSE FRANCE! OTHERS ARE ALREADY THERE

**Nick Stanage,  
Hexcel's Chairman,  
CEO and President, commented in 2014:**

“ I am delighted to announce Hexcel's investment in our first precursor plant in Europe and our first carbon fiber capacity in France. The state of the art manufacturing facilities that we will build demonstrate our commitment to technology expansion around the world to provide an efficient global supply chain in support of customer programs. The new plant will further strengthen our customer relationships, provide greater opportunities for aerospace industry growth and reinforce Hexcel's position as a global leader in carbon fiber composites. ”

**Ren Jianxin,  
CEO of the China National  
Chemical Corporation (ChemChina) said:**

“ 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. ”

## THEY CHOSE FRANCE IN 2013-2015

### HEXCEL

American firm Hexcel Fibers, specializing in carbon fiber and composites for the aerospace industry, sought the missing link in its high value-added field. It set up a new polyacrylonitrile plant in Roussillon (Rhône-Alpes region), hiring 120 people at the site.

### TORAY INDUSTRIES, INC.

Japanese company Toray, one of the world's leading carbon fiber manufacturers, invested €20 million in an R&D center in Lacq (Aquitaine region) to develop carbon fibers for new applications (wind power, automotive).

### CONTINENTAL STRUCTURAL PLASTICS

This American firm specializing in fiberglass design and manufacture for the automotive sector set up an R&D program in Pouancé (Pays de la Loire region) as part of its first investment in Europe.

### CHEVRON CORPORATION

This American manufacturer of lubricant additives invested more than €43 million in 2013 in a new production line at its plant in Gonfreville l'Orcher, just outside Le Havre (Haute-Normandie region). The aim of the project is to double the plant's capacity to produce overbased sulfur-free detergents as part of a major technological upgrade at the site.

### HET ELASTOMERTECHNIK GmbH

This German chemicals firm, one of the leading manufacturers of elastic products made from recycled materials, decided to create a new subsidiary on a remediated site formerly belonging to Total in Dieuze (Lorraine region). They will employ 30 people.

### TECHNOCHEM

The Belgian company EcoPhos, which makes dietary phosphate, is set to build a plant in Mardyck (Nord-Pas de Calais region) on the site of a former Total refinery. They will create 100 jobs over the next three years.



# FOREWORD



**Emmanuel Macron,  
Minister for the Economy, Industry and Digital Affairs says:**

“ Since its initial development in the 19<sup>th</sup> century, the French chemical industry has been able to adapt and to remain competitive. The industry now ranks second-largest in Europe and sixth worldwide.

The Government provides active support for the expansion of industry, first and foremost through an innovation policy whose scope is unrivalled in the world with the research tax credit. The strategy also includes an unprecedented commitment to reduce social security contributions by €40bn between 2015 and 2017. The most energy-intensive industries, chemical industries in particular, have also benefited from special recently-adopted measures to lower their energy price to the level of their foreign competitors.

The Government intends to give further momentum to this approach through the second phase of the «France's Industrial Renaissance» programme which I launched in May 2015. €3.5bn have been earmarked from the «Investments for the Future» programme to buttress the modernisation of industry and foster new innovative production lines. I know for a fact that the chemical sector will largely benefit from this programme.

Proof that chemical companies can rely on state-of-the-art-competitive industrial platforms has recently been provided by Hexcel and Toray opening facilities in Roussillon (South-East France) and Lacq (South-West France) respectively. These platforms offer highly attractive investment opportunities. They provide economic benefits thanks to the pooling of resources such as power generation and water treatment, or to integrated, or even symbiotic, operations with the platform's other industrial facilities.

French platforms also benefit from world-beating infrastructure providing them with direct access to European and global markets. Lastly, the ecosystem gleams its vibrancy from long-standing partnerships with academia and human skillsets that have been hailed by numerous international business leaders.

The success of your project will be underpinned by this extraordinary commitment from the Government and its agencies. In addition, the relevant Government departments, down to local level, are primed to swiftly process formalities. All the stakeholders are on the front foot to help businesses join these platforms. Business France provides companies with responsive support for the whole duration of their investment projects, in collaboration with the chemical platforms. ”

## THE FRENCH CHEMICAL INDUSTRY ASSOCIATION UIC

**Jean Pelin,  
the UIC's CEO 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.

France has many competitive advantages, including excellent infrastructure, substantial investment in R&D (both public and private), tax incentive programs, and highly qualified personnel with degrees from leading engineering schools.

It can also rely on several strong downstream sectors (aeronautics, cosmetics, plastic processing, etc.)

This 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. Among companies with more than 250 employees, 50% of operations in France are undertaken by foreign-owned companies from:

Belgium	Solvay, etc.
China	Chemchina (Bluestar, Adisseo, etc.)
Germany	BASF, Bayer, Lanxess, etc.
Japan	Ajinomoto, Sumitomo Chemical, TOYO INK, etc.
Netherlands	Lyondellbasell, etc.
Switzerland	Ineos Chemicals, etc.
United States	Dow Chemical, DuPont, ExxonMobil Chemicals, PPG, etc.

## 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 (6% of GDP) than many of its European neighbors, including Germany, Italy and Spain. France is ranked third in the EU for the number of students leading to an advanced research qualification. (Eurostat, 2014)

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 3,500 of these special contracts are signed in France's chemical industry every year.

## 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-rate infrastructure.

### FRANCE has:

- Europe's most extensive road network. More than one million kilometers (620,000 miles) of roads, of which nearly 11,500 kilometers (7,150 miles) are motorways.
- Europe's second 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).
- 330,900 kilometers of railway lines. Many specialist service providers offer wagon and tanker container hire services to transport chemical products, as well as rail transport.



## KEY FIGURES FOR CHEMICAL INDUSTRY



€75 BILLION OF TURNOVER  
€17 BILLION OF  
VALUE ADDED



WORLD'S 6<sup>TH</sup> LARGEST  
CHEMICAL PRODUCER;  
AND 2<sup>ND</sup> LARGEST IN EUROPE



3,335 COMPANIES  
94% ARE SMEs

## 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 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 2012, French businesses in the chemicals, rubber and plastic sectors received €271 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. (KPMG, Competitive Alternatives, 2014)
- **Was once again ranked first in 2015 by the Deloitte "Technology Fast 500 EMEA"** (for the fifth year running) with 87 of the top 500 fastest growth companies based on percentage revenue growth in Europe, the Middle East and Africa.
- Is also ranked **first in Europe** in an index of the 100 most innovative organizations in the world. (Thomson Reuters, 2014)
- Is ranked **fourth in the world for researchers**, with 9.2 for every 1,000 employees, ahead of Germany (8.2) and the United Kingdom (8.3). (OECD, Main Science and Technology Indicators, 2014)

## 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 specializing in the chemical industry:

Axelera

Chemicals and environmental protection  
[www.axelera.org](http://www.axelera.org)

Elastopôle

Rubbers and polymers  
[www.elastopole.com/english](http://www.elastopole.com/english)

IAR

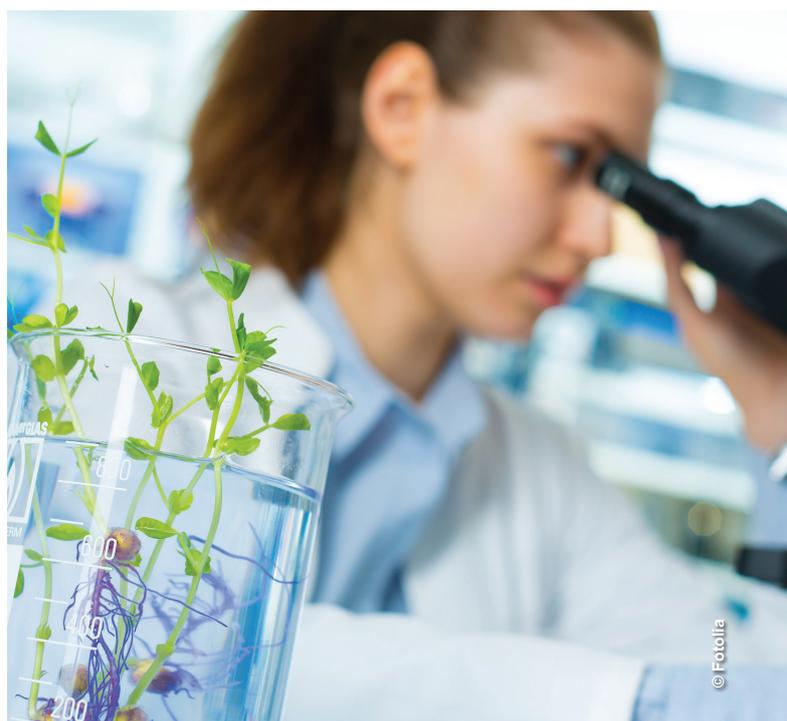
Industries and agro-resources  
[www.iar-pole.com/?lang=en](http://www.iar-pole.com/?lang=en)

Matikem

Materials, chemicals and green chemicals  
[en.matikem.com](http://en.matikem.com)

Trimatec

Clean and non-detrimental processes for the industrial sector  
[www.pole-trimatec.fr/article/missions](http://www.pole-trimatec.fr/article/missions)



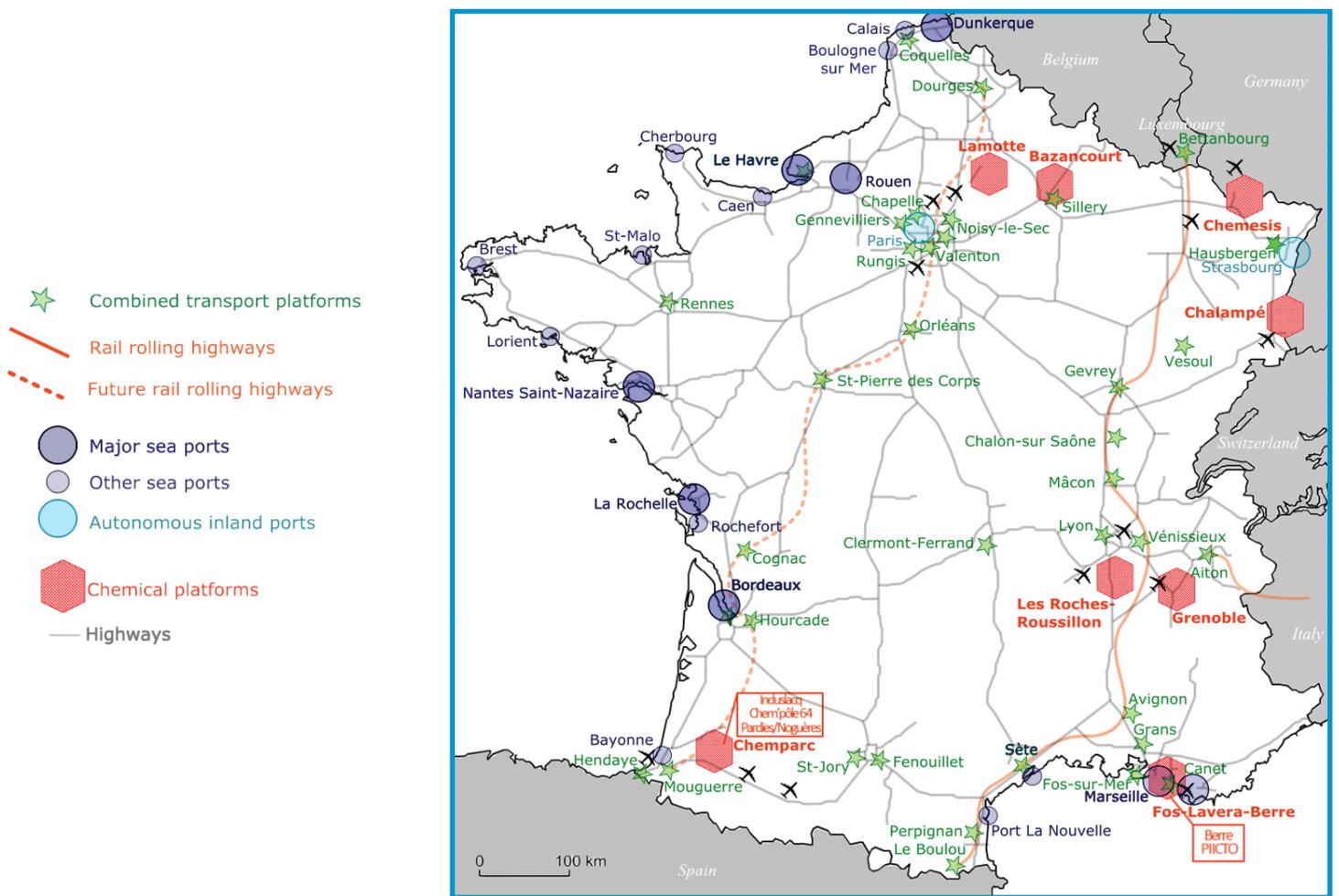
€3,4 BILLION OF  
CAPITAL EXPENDITURE  
12,5% SPENT ON REDUCING THE  
INDUSTRY'S CARBON FOOTPRINT



FRANCE'S CHEMICAL  
INDUSTRY EMPLOYS 157,000  
PEOPLE 50% IN SMEs  
(FEWER THAN 250 EMPLOYEES)



€1.77 BILLION IN R&D SPENDING  
12,558 PEOPLE IN R&D,  
INCLUDING 5,576 RESEARCHERS



# CHEMICAL PLATFORMS TO POOL RESOURCES

France boasts several major chemical industry platforms. Located in lightly urbanized areas and classified Seveso II, they bring together various chemical industry players, subcontractors and suppliers to effectively pool their needs. 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 provides an attractive environment for investors in sites like these. Investors can take advantage not only of shared services and expertise, enabling quicker permit issues and lower operating expenses, but also a number of investment and tax incentives for new projects.

Major platforms in France:

<b>Bazancourt</b>	In the north	The largest biorefinery in the world (3.5 million tonnes/year of biomass transformed)
<b>Chalampé</b>	In the north-east	Nitrogen-based chemicals and polyamide technologies
<b>Chemesis</b>	In the north-east	Petrochemicals and plastics
<b>Chemparc</b> (Chem'pôle 64, Induslacq, Pardies/Nogueres)	In the south-west	Fine chemicals and specialty chemicals
<b>Fos-Lavera-Berre</b> (PIICTO, Berre)	In the south	The largest petrochemical site in southern Europe
<b>Grenoble</b>	In the east	Chlorine, phosgene and hydrogen expertise
<b>Lamotte</b>	In the north	Specialty chemicals, silica based materials and specialty polymers
<b>Les Roches-Roussillon</b>	In the east	French leader in mineral and organic product



# 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](http://www.businessfrance.fr)



# THE FRENCH CHEMICAL INDUSTRY ASSOCIATION UIC

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](http://www.uic.fr)



POWERED BY CREATIVE FRANCE