CHEMICALS - MARKET

SALES WORLDWIDE
€3,534 Billion
Estimated market trend +2.2%

SALES IN EUROPE
€519 Billion

7th
2nd
CHEMICALS - MARKET

FRANCE

Sales in 2016:

€74.2 Billion
164,000 jobs
3,335 companies
incl. 38 new companies

AUVERGNE RHÔNE-ALPES

Sales in 2016:

Auvergne-Rhône-Alpes
€12 Billion
21,233 companies
incl. 3 new companies

Export
€7.8 Billion
5 jobs (13%)
CHEMICALS - ECOSYSTEM

COMPETITIVE CLUSTERS
- AXELERA (Chemicals & environment)
- Plastipolis (Plastics)
- trimatec (Industrial processes)
- techter (Technical Fabrics)

ACCELERATORS / INCUBATORS
- PULSALYS
- axelö
- processangle
- LA PAILLASSE SAÔNE
- LYON START UP
- BIG BOOSTER
- NOVACITE

R&D PLATFORMS, DEMONSTRATORS
- Axel’One
- IFP Energies Nouvelles
- Gaya
- Proia Demse

CHEMICAL INDUSTRIAL SITES
- Vallée de la Chimie

OTHER ASSOCIATIONS
- Composites Rhône-Alpes
LYON, 1st student city of France 2017

L’Étudiant

UNIVERSITIES & ENGINEERING SCHOOLS

TRAINING

RESEARCH LABORATORIES

POLYMERS | CATALYSIS | PROCESSES | ANALYTICS | BIOCHEMISTRY | CHEMICALS/MATERIALS

LYON, 1st student city of France 2017
L’Étudiant

Research Laboratories
5.8% of R&D spending

3,000 researchers

2,568 patents filed before 2016

R&D projects funded by Axelera in 10 years

Flagship project

PLACELMAT

Internally plasticized cellulose derivatives: innovative materials based on ecological, sustainable resources, chemistry and processes
IDENTITY OF LYON VALLEE DE LA CHIMIE
INDUSTRIAL IDENTITY

- 6000 direct jobs in chemistry, petrochemistry, refining
- 5 scientific R & D centers of national or global reach
- 2000 researchers
Activities in “Chemical Valley”

POOLED SERVICES & RESOURCES

- Steam
- Electricity
- Industrial gasses
- Wastewater treatment
- Safety and fire department
- Industrial Fluids (pipelines)
- Analytical laboratory
- Restaurants

OPERATIONS/PRODUCTS

- Oxygen
- Nitrogen
- Hydrogen
- Refrigerant fluids
- Fluorinated Technical Polymers
- Silicon Products
- PVC
- Chlorinated PVC
- Chlorhydric Acid
- Bleach
- Acetylsalicylic Acid
- Salicylic Esters
- Food flavorings
- Polyamides
- Nylon
- Technical plastics
- Waste processing (WEEE, polluted lands)
- Ranage Petrochemicals

Direct jobs: 6,000
Researchers: 2,000
Hectares: 370
Research centers: 7
Start-ups: 12

For further information: http://www.appeldes30.fr/en
THE TERRITORY PROJECT
FRAMEWORK DOCUMENTS

Strategy Interventions
Private and public partners, Industrials committed to consolidate the dynamics of innovation, of economic development and to contribute to an improved living and working environment in the Chemical Valley Area.
In order to contribute to the development of the Industrial Campus, the partners identify the real estate and real estate availability of their sites and regularly feed into a shared database showing:

- the land deposits that could be affected, depending on the orientations of the project, for the economic development, for the realization of new roads, for the valorization of the ecosystem - real estate availabilities - changing sectors

Study the feasibility of strengthening cooperation: in order to contribute to the competitiveness of existing sites (economies of scale), to generate a strong attractiveness of the Industrial Campus for new economic actors who would come and settle there ( ...) the partners are studying the feasibility of reinforcing cooperation approaches, for example in terms of sharing functions related to production (utilities, energy, transport / logistics, hygiene, safety, environment, guarding, inspection, maintenance ...)

Promote actions in industrial and territorial ecology
THE 6 AXES OF AN AMBITIOUS DEVELOPMENT SCHEME FOR THE VALLEY

The economic and industrial transformation of the Valley is achieved by the diversification of the chemical sector and the emergence of the associated sectors of energy and the environment.
THE METROPOLITAN ENERGY FACTORY

Renewable Energy in the Territory
THE CHEMICAL VALLEY AREA, concentrated energy productions and heat networks

Our objectives:

- Channeling Energy & Waste flows
- Encouraging local and sharing use of renewable energy and global services
- Stimulate circular economy
THE CHEMICAL VALLEY AREA, productive landscape opportunities

Many challenges:

- Treatment and regeneration of the soil on industrial tenements
- Clean-up of soil using techniques associated with the area of phytoremediation
- Manufacture of living soils, fertilization of inert soils
- Recovery, storage, transformation and utilization of fertile land
- Biomass cultivation
ACCESSIBILITY INTO THE VALLEY
L’APPEL DES 30!
ORIGINS & GOALS
One instrument to create partnerships and a dynamic territory: 
THE CALL FOR PROJECTS: APPEL DES 30!

APPEL DES 30!,
THE APPEL DES 30! ALLOWS INNOVATIVE INDUSTRIAL PROJECT DEVELOPERS IN THE CHEMICAL, ENERGY, ENVIRONMENT AND CLEANTECH SECTORS TO GAIN THE BENEFIT OF OPTIMUM LOCATION AND GROWTH SOLUTIONS BUILT JOINTLY BY PUBLIC AND PRIVATE PARTNERS OF THE MÉTROPOLE DE LYON.

A unique partnership and innovative call for projects Strong added value:
- Putting on the market a varied field of public and private land
- Technical, regulatory and financial support
- Partnership mobilization of the ecosystem
- Integration of new products for each edition
Infiltration strategy for the development of the territory
PRODUCTION D’ÉNERGIE

PAYSAGE PRODUCTIF

ACTIVITÉS INDUSTRIELLES COMPLÉMENTAIRES

GRANDLYON la métropole
3 TARGET SECTORS:

- INDUSTRIAL
- RENEWABLE ENERGY
- PRODUCTIVE LANDSCAPE

25 ha for use

Potential investments of 200 millions €

Creation of 170 employment

4 cities concerned:
- Irigny
- Pierre Bénite
- Saint-Fons
- Solaize
APPEL DES 30 !

Suivi administratif et réglementaire

Dépollution et prise en compte des risques technologiques

Communication

Conception urbaine et architecturale

Travaux d'aménagement et de viabilisation

INGENIERIE TECHNIQUE ET REGLEMENTAIRE

FEDER

ADEME

SOMUDIMEC

bpifrance

Total Développement Régional

Groupe Caisse des Dépôts

GreenChannel

Site : www.appeldes30.fr
The results of the initiative Appel des 30!

Edition 2014:
- 16 Named Laureates
- 20 ha mobilised
- 5 millions d’euros d’investissement
- 25 emplois directs
- 2 communes bénéficiaires: Feyzin, et Saint-Fons

The first success-stories:
- JONTRANS: creation of a logistical exploitation site for chemical products in Saint-Fons Belle Etoile (platform at the service of the industrialists of the Valley)
- SERPOL: creation of a phytocentre in Feyzin in partnership with VICAT (opening in 2018)
- 2 beneficiary communes: Feyzin and Saint-Fons

Edition 2016:
- 10 Named Laureates
- 25 ha mobilised
- 200 millions d’euros d’investissement
- 170 emplois directs
- 4 communes bénéficiaires: Irigny, Pierre-Bénite, Saint-Fons et Solaize

3 projets d’entreprises industrielles
- DELTALYS
- SUEZ
- TERBIS “PHP”

1 projet “d’opérateur photovoltaïque”
- TERRE ET LAC - LANGA

6 projets “d’opérateurs paysage productif”
- ABSRA / RACINE
- AIN ENVIRONNEMENT
- PEPINIÈRE SOUPE
- TERRES FERTILES 2.0 (Collectif de 6 entreprises d’espaces verts)
- VALTER BIOMASSE
- VALORHIZ
FOCUS APPEL DES 30!
EDITION 2016
THE OPPORTUNITIES

Une offre foncière et immobilière diversifiée:

- Opportunities within the industrial sites: 20 ha
  Niveau de sollicitation: 40%

- Real Estate Program: 50,000 m²
  Niveau de sollicitation: 0%

- Opportunities for solar energy: 87,000 m²
  Niveau de sollicitation: 100%

- Productive landscape: 33 ha
  Niveau de sollicitation: 50%
CALENDAR & METHOD

CALENDAR

- Lancement de l'appel à projets
- Visites des sites par les candidats
- Délai de candidatures
- Pré-sélection des candidats

METHOD

- 29 Novembre 2016 au 2 Décembre 2016
  Salon Pollutec Lyon
- Speed-Meeting entre les candidats, les propriétaires et les partenaires techniques et financiers (ingénierie des projets)
- Délai de dossiers-projets
- Sélection des lauréats

- À partir du 1er semestre 2017
  HUB Financé
  Montage des projets en lien avec les propriétaires
  Ingénierie technique et réglementaire

- À partir du 2ème semestre 2017
  Aboutissement des projets, montage juridique, actes notariés, baux.
10 Named Laureates in April 2017

- 25 ha mobilized
- € 200 million investment
- 170 direct jobs
- 4 beneficiary communes

<table>
<thead>
<tr>
<th>3 projets d'entreprises industrielles</th>
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<tbody>
<tr>
<td>DELTALYS</td>
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<tr>
<td>SUEZ</td>
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<td>TERBIS &quot;PHP&quot;</td>
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<td>VALTER BIOMASSE</td>
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<tr>
<td>VALORHIZ</td>
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</tbody>
</table>
THE 3 INDUSTRIAL PROJECTS IN SUMMARY...

<table>
<thead>
<tr>
<th>Company</th>
<th>Effectif</th>
<th>Investissement (en M€)</th>
<th>Échéance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deltalys</td>
<td>28</td>
<td>3,5</td>
<td>2017</td>
</tr>
<tr>
<td>Suez</td>
<td>35</td>
<td>Entre 43 et 65</td>
<td>2022</td>
</tr>
<tr>
<td>Terbis PHP</td>
<td>50</td>
<td>Entre 100 et 120</td>
<td>≈ 2021</td>
</tr>
</tbody>
</table>

Dans l’absolu, les 3 projets déposés représentent presque 200 millions d’euros d’investissement avec la création sur la Vallée de 110 emplois directs.

Key sectors of the projects

- GAZIFICATION GAS
- PURIFICATION TECHNOLOGY
- PRIVATE WASTE RECOVERY FOR ENERGY PRODUCTION
## THE 6 PRODUCTIVE LANDSCAPE PROJECTS IN SUMMARY

<table>
<thead>
<tr>
<th>Candidats</th>
<th>Nature du projet</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSRA &amp; RACINE</td>
<td>Biomass preparation platform</td>
</tr>
<tr>
<td>AIN ENVIRONNEMENT</td>
<td></td>
</tr>
<tr>
<td>SOCIETE FORESTIERE (CDC) / SUEZ / VALTERRA</td>
<td>Biomass production and soil remediation</td>
</tr>
<tr>
<td>PEPINIÈRE SOUPE</td>
<td>Production of fertile land and / or soil remediation + R &amp; D</td>
</tr>
<tr>
<td>TERRES FERTILES 2.0</td>
<td></td>
</tr>
<tr>
<td>VALORHIZ</td>
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</tbody>
</table>
ETAT PROJETÉ : LONE DE PIERRE-BÉNITE
ETAT PROJETÉ : SAINT-FONS SAMPAIX
SOLAR ENERGY OPPORTUNITIES

- 87,000 m² of cumulative space to develop photovoltaic solar power plants on the roof and in the parking shack

- The surfaces are divided among 6 industrial partners: ARKEMA - JTEKT - KEM ONE - VOS Logistics - TOTAL CRES - IFP EN

- The project is spread over 4 municipalities
SÉLECTION D’UN PROJET: CELUI DE TERRE ET LAC + LANGA

- A global investment of around € 8.5 million
- An installed power of 7.7 MWp (currently the cumulated power is 22 MWp on the whole of Greater Lyon)
- The mobilization of 20 FTEs during the construction phase and then approximately 2 FTEs during the operating life of the plants
- 4 files already retained by CRE + 6 filed in December 2017
TOWARDS A NEW 2018 EDITION...
TOWARDS A NEW 2018 EDITION

Capitalize on the results of the first editions and promote activities / service offerings to strengthen the Valley’s ecosystem!
TOWARDS A NEW 2018 EDITION

Capturing industrial projects in the chemistry-energy-environment, activity and employment generators sectors to (re) conquer land and mutable real estate

- Land available within industrial sites & industrial zones
- Real estate trails to welcome and support ecosystem players
- Synergies to develop on utilities and / or services in a logic of industrial ecology
Towards a New 2018 Edition

Encourage the emergence of innovative projects that respond to the opportunities and challenges of the Valley.

Implement service offerings to companies, employees and/or residents. Some examples of expected project typologies:

- **Mobility**: develop pools of shared private vehicles to connect dense sites with public transport hubs (bicycles, cars, cabs, etc.).
- **Innovative roads**: experimenting with innovative solutions in construction projects carried out by Metropolitan France (recycled materials, permeable pavement, energy production, etc.).
- **Energy systems**: valorize the energy production of the Valley, create micro-networks of heat/cold, imagine energy storage solutions...
- **Living environment**: offer new services to meet local demands and improve the attractiveness of the valley: catering, conciergerie, restaurants....