



AXELERA

Conjuguons  
chimie et environnement



**Ici**, se construit une filière  
unique au monde unissant  
chimie et environnement

*Here, we are building up a network  
bringing chemistry and environment  
together*

# AXELERA

## Competitiveness Cluster Chemistry & Environment



***At PIXEL***

***European Clusters  
October the 14th***



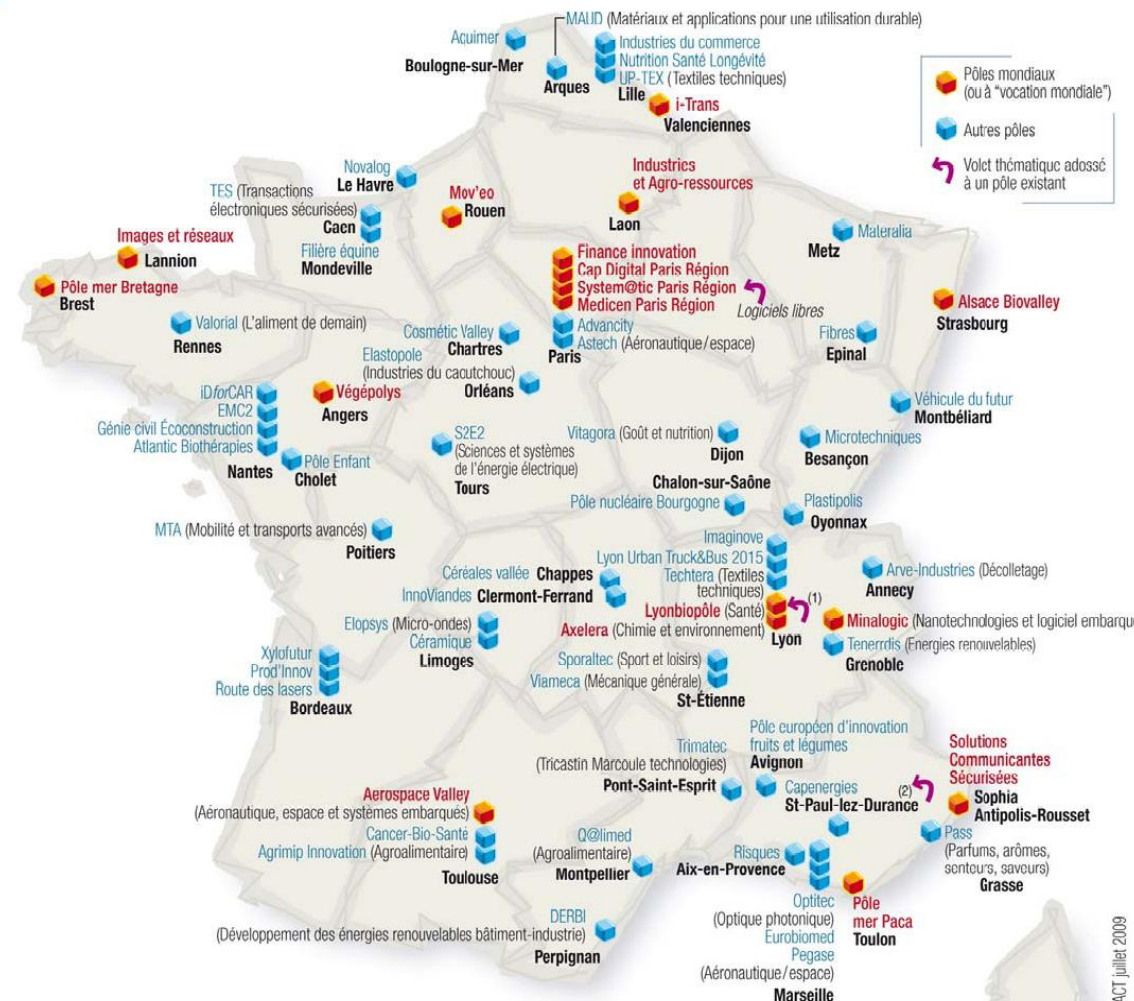
# FRECH COMPETITIVENESS CLUSTERS

COMPANIES

RESEARCH CENTRES

COMPETITIVENESS CLUSTER

EDUCATIONAL INSTITUTIONS



→ 71 competitiveness clusters in France





## AN INNOVATIVE AND UNIQUE VISION: TO CONNECT CHEMISTRY AND ENVIRONMENT

- **One Ambition**

To facilitate the construction of a global industrial and scientific network that combines chemistry and environment

- **Two strategic objectives**

1. Become an international showcase for innovation in the field of chemistry & environment
2. Be a major actor in sustainable development and be recognized for excellence in the main environmental issues

- **Founding members**



## 5 STRATEGIC THEMES 8 TARGET MARKETS



**1** Chemistry and environment for market applications

- Durable buildings
- Renewable energies
- Transportation
- Electronics



**2** Protection of natural resources

- Water, Air, Soil, Agri - Agro



**3** Recycling and material recyclability

- Materials, wastes, recycling



**4** Green chemistry

- Bioresources



**5** Future factory

- Clean processes



## FOCUS ON THE ECOSYSTEMS

### JOIN A DYNAMIC PROCESS FOR INNOVATION

- ECOSYTEM = working group made of 15 members
- OBJECTIVES:
  - To set up a technology watch
  - To propose a technological roadmap for the targeted market
  - To organize brainstorming sessions to facilitate exchange of ideas
  - To convert those emerging ideas into R&D projects
  - To identify national and international partnerships needs



## FOCUS ON THE ECOSYSTEMS

### YOUR CONTACTS TO KNOW MORE ABOUT THE ECOSYSTEMS

- RENEWABLE ENERGIES

- ELECTRONICS

Roya FARHOOSH

[roya.farhoosh@axelera.org](mailto:roya.farhoosh@axelera.org)

- MATERIALS, WASTES, RECYCLING

- TRANSPORTATION

Gilbert FUCHS

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- SUSTAINABLE BUILDINGS

- CLEAN PROCESSES

- AIR, WATER, SOIL, AGRI-AGRO

Isabelle HARTER

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- BIORESSOURCES

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## KEY FIGURES FROM 2005 - 2010

<b>122</b> R&D projects certified and financed	409 M€
<b>7</b> equipment and implantation projects	150 M€
<b>3</b> collaborative platforms for innovation	
<b>400</b> peoples involved in R&D collaborative projects	

## AXELERA'S MEMBERS

>**230** members

- 2/3 come from industry, half of which are SMEs
- 1/4 research establishments
- 10% of training and institutional organizations

## INTER-CLUSTERS NETWORK

Synergies through the ecosystems with other competitiveness clusters

- **Advancity** (water, air, soil, agri-agro),
- **IAR** (bioresources)
- **LUTB** (transportation)
- **Minalogic** (electronics)
- **Plastipolis** (materials, recycling, wastes)
- **Tenerrdis** (Sustainable buildings, renewable energies)

## EcoTech Rhone-Alpes Network

- Focused on energy efficiency from "material to use"
- Founding members: Axelera, LUTB, Mineallogic, Tenerrdis

## International network



Green Business Norway



ENVIRONNEMENT  
PARK



# AXELERA'S INTERCLUSTER NETWORK

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 Green Business Norway

Chemie Cluster Bayern 



- **Current partnerships**
- **Partners of Ecoclup project**

## R&D PROJECTS

122 R&D projects certified and financed

14 of which were launched and set-up by the cluster

- **DURAMAT, SHERPA**: chemistry and environment for market applications
- **RHODANOS, VALORSITES, ACACIA, PCB-AXELERA, NORMACAT**:  
protection of natural areas
- **TRIPLE, VALEEE** : recycling and material recyclability
- **PVclin** : Green Chemistry
- **PROCESS INTENSIFICATION, LEGIOSECURE, ALTERECO, INNOVAL**:  
Future Factory



## EQUIPMENT AND IMPLANTATION PROJECTS....among others

- Lyon Environmental Analysis Site (CLEA): NMR, electronic microscopy...
- Mixed Rhodia-CNRS Polymers laboratory
- Feyssine waste water treatment station
- Chemistry institute technological platform of Lyon
- Re-Source Project: recycling of end life products
- Living Chemistry Institute: microbiology, biology
- Centre for training and advice on chemical and processes job INTERFORA



## SERVICE OFFER

- **Network coordination**  
Axelera's Thursday, newsletters, web site with an extranet dedicated to members...
- **Support for innovation**  
Brainstorming workshops, calls for proposals, technology watch through the **ecosystems**, personalized advices, search for partners, certification of R&D projects, IP training, support for consortium agreement..
- **Contribution to facilitate connections between members and financing organizations**  
Public funding organization, private investors
- **Support to business development**  
Pollutec exhibition, international missions

# Axel'one : R&D Platforms, 3 sites in interaction

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## ➤ Campus de la Doua

Small scale experimentation on processes and materials

Starting 2015-2016



## ➤ Innovative Material Platform

Saint-Fons

Starting end of 2012



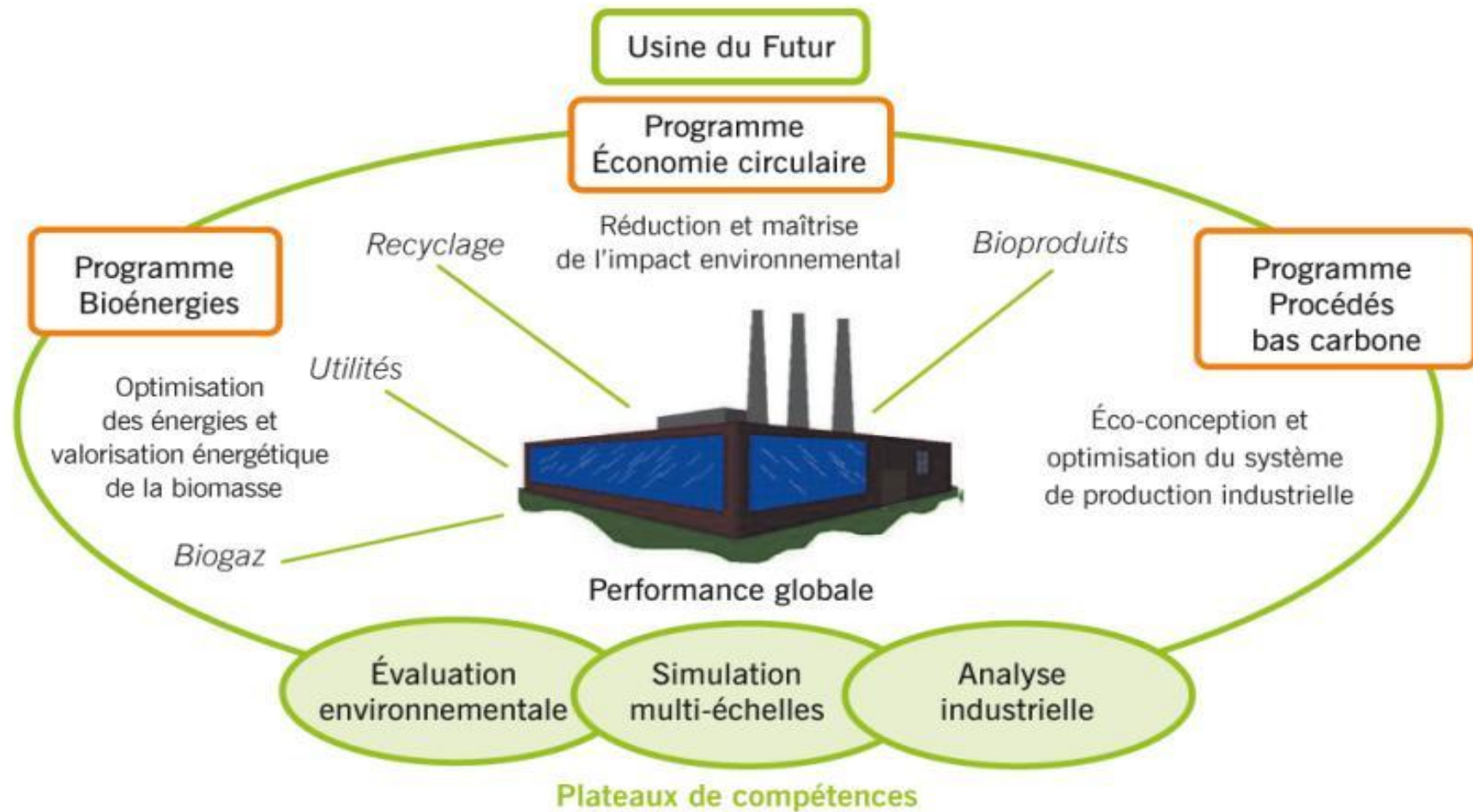
## ➤ Innovative Processes Platform

Solaize

Starting 2014

*Un environnement scientifique et technologique fertile  
favorable à la coopération entre les équipes académiques et industrielles*

# INDEED : from raw materials to final products within Decarbonated Energy Program



→ *An ambitious umbrella project initiated and covered by Axelera Backbone of the Pole's stratégie*



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THANK YOU FOR YOUR ATTENTION

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