

#### TURNING INNOVATION INTO BUSINESS

#### **Luxembourg Materials Cluster**

**Cluster Presentation 2014** 





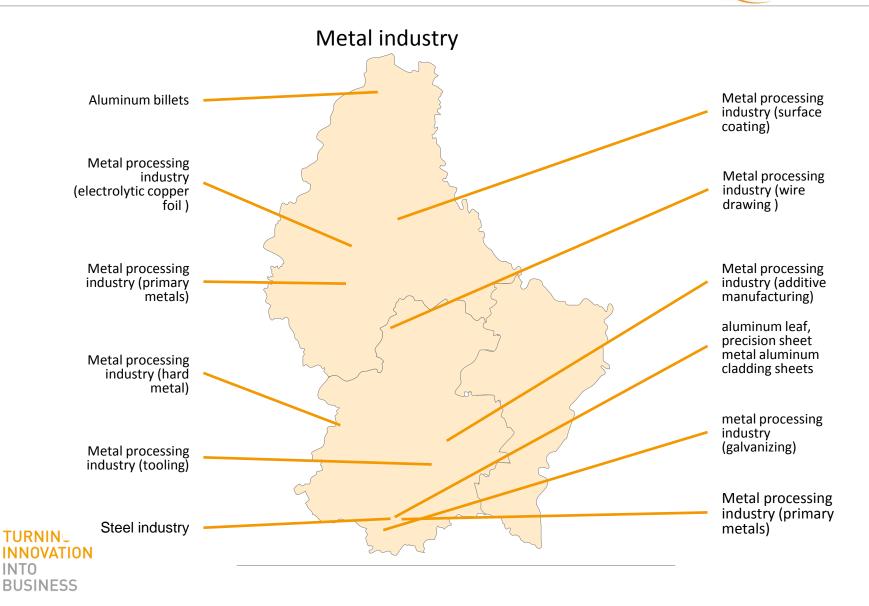




#### The industrial structure of Luxembourg



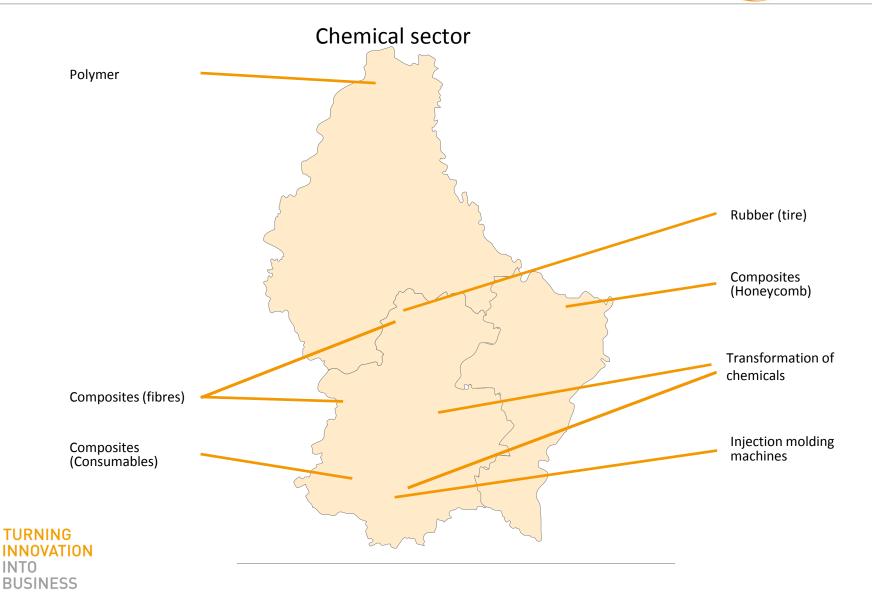
## Many sectors reflecting the diversity of the industrial structure of Luxembourg.



Luxembourg

Materials Cluster

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Luxembourg

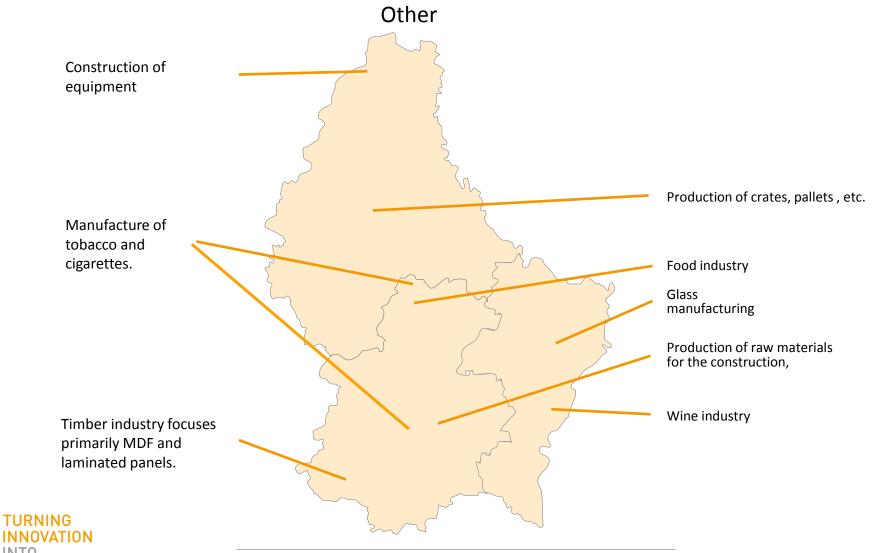
**Materials** 

Cluster

#### Many sectors reflecting the diversity of the industrial structure of Luxembourg.

INTO

**BUSINESS** 



Luxembourg

**Materials** Cluster



## Key figures

- Industry sector employs about 36.200 people (≈34.000 in 1995)
- PIB: 6.3%
- Exportation: 85% of produced goods
- Steel products represent less than 1/3 of total value
- Trading: (2012)
  - Export:
    - o 81% to EU
      - o 28% to Germany
      - o 15% to France
      - o 12% to Belgium.
    - 5,2% to US
    - o 5,6% to Asia

- o Imports
  - o 91% EU
    - o 28,5% Germany
    - o 11,8% France
    - o 35,0% Belgium.
  - 4,7% US
  - o 2,0% Asia

Luxembourg

**Materials** 

Cluster



# Luxembourg Materials Cluster

TURNING INNOVATION INTO BUSINESS

#### **Cluster Mission**



- The Cluster serves all its members as a neutral coordination, information and communication platform
- The Cluster drives its members to **innovate and develop new skills** in the area of material and production technologies
- Provide a portfolio of **value-added services** to support Cluster actors
- The cluster supports its members to gain a leading position in the field of Materials & Production Technologies with high **international visibility**
- Fosters the collaboration between private, public and institutional actors

#### **The Luxembourg Materials Cluster**

**BUSINESS** 





#### **Roadmap based on 5 pillars**







Aim: Identify technology needs, determine companies assets and visions explore market opportunities, create new business activities

Activities:

- Market studies: e.g. : "additive manufacturing"
- Cartography of cluster member
- Technology scouting, enabling competences
  - Advanced Robotics
  - Modélisation
  - Rapid Protoyping
  - Additive manufacturing
  - Open Innovation
- Get together company visits

#### **Product and service innovation**



Aim: "Flagship projects": develop new product and service ideas up to the

• Robotisation in PME

Bringing manufacturing back to Luxembourg

• Rapid prototyping:

Benchmark 3D printing technology

#### Branding



Aim: Position the Cluster as the key source of information about the sector, increase visibility of the Cluster and its members, providing a platform for members

#### Activities 2014:

- Revised Cluster Webpage
- Synchronize branding activities with LfB
- Cluster Member Catalogue
- Cluster Service Catalogue
- Cluster FORUM 2014



#### Aim: Identify gaps in the local value chain

• Establish links to international clusters, organizations and innovation agencies

#### Activities 2014:

- Develop strategic partnerships with complementary regions or countries
  - o Germany, Denmark, Netherlands
- IntermatGR
  - o Greater Region



Aim: Increase visibility of the industrial sector, initiating new partnerships and attract new companies

- Represent cluster members on national and international trade fairs and exhibitions
  - o Hannover Messe 2014
  - Robotics days Paris
  - Manufuture 2015 in Luxembourg
- Local contact point and access to the sector
- Sector-specific prospection missions



# Luxembourg Automotive Components

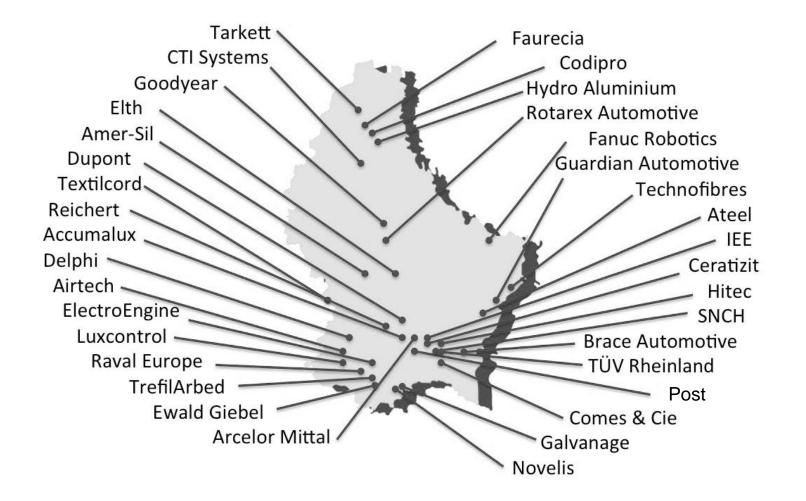
### **Cluster Mission**



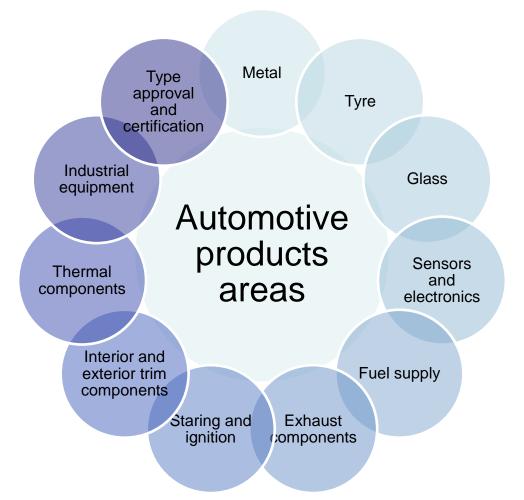
- Supporting and enhancing existing automotive supply base
- Attracting new suppliers
- Industry & regulatory affairs
- Government Relations
- Education and Communication
- Driving the direction & pace of innovation

#### **Automotive sector**





### **Automotive product areas**



Luxembourg

Automotive Components





- More than 1,5 billion € sales turnover
- Equal to 0,3 % of EU sales turnover in the automotive components industry
- Highest per capita automotive components turnover in EU
- More than 9000 employees, 1900 in R&D
- Exporting to 5 continents
- Major export countries are:

Germany, France, Italy, UK, Japan, Spain, USA, Chine, Sweden

#### **5 years work plan**

Luxembourg Automotive Components

Develop technology roadmap

Foster specific areas of local capabilities (mathematical modelling, simulation, testing)

Key areas:

Electro mobility

Autonomous driving

- R&D
  - PPPs
  - EU projects, international projects
- Education
  - set up training program for automotive industry
  - MBA in automotive, Engineering management, Project management, Product management, Business development, Quality management

#### **5 years work plan**



- Improved and adapted business environment
  - Automotive Campus
    - Resource sharing
    - Specialisation, Know-how
- Company acquisition and promotion
  - Identify potential candidates and follow-up upcoming opportunities select target regions
- Manufacturing
  - Competitive advantage: assessment of regional OEM decisionmaking process and criteria (proximity, flexibility...)
  - Logistics
  - Factories of the future, Manufuture,...