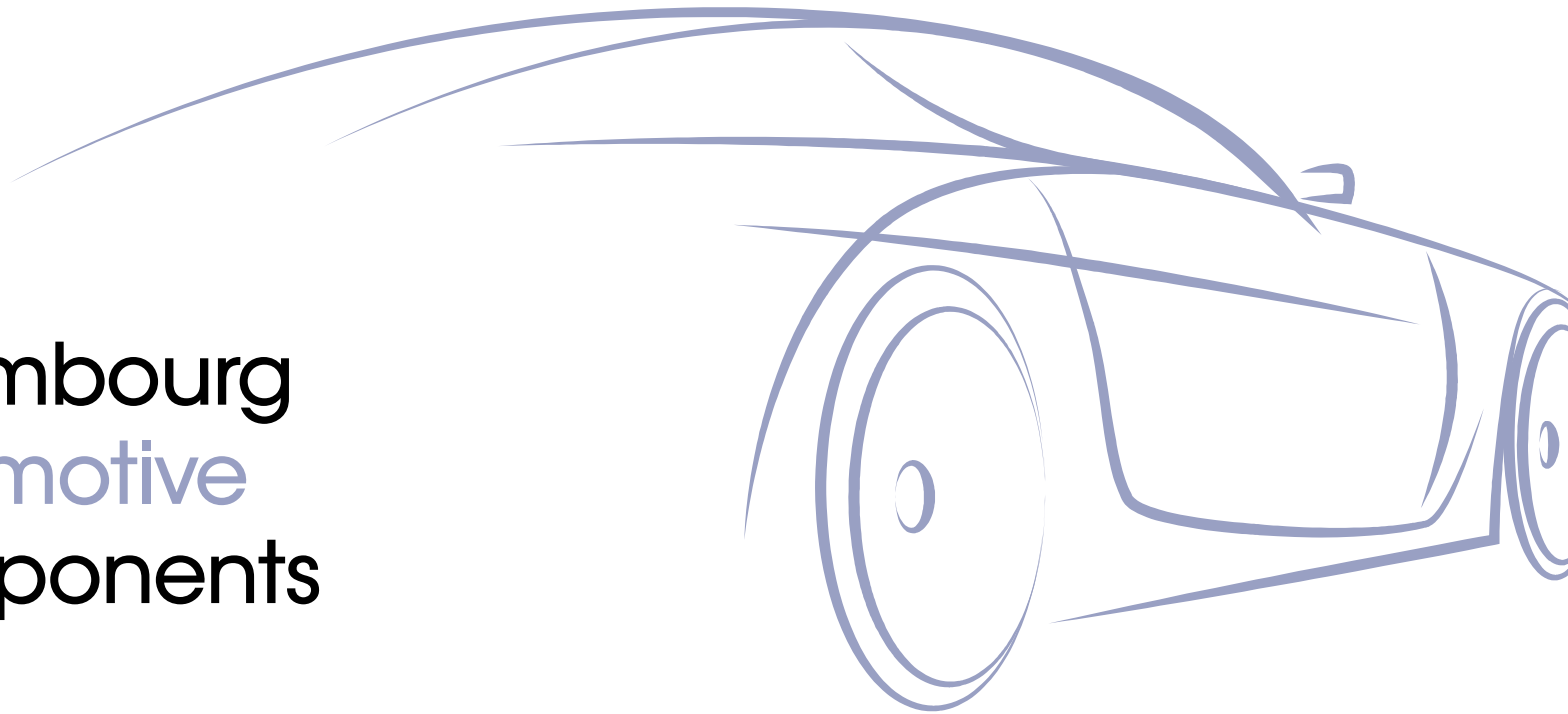


European Automotive Components Business

“Made in Luxembourg”



Automotive components

by Luxembourg



European automotive component business in Luxembourg?

Europe is considered as one of the **global leaders in light vehicle development**. European OEM's cover more than 1/3rd of the global light vehicle production...

European OEM's take **sourcing decisions at the European development locations**: Munich, Stuttgart, Frankfurt (Russelsheim), Cologne, Wolfsburg, Birmingham, Gothenburg, Paris....

Because of national economical interests, cultural perception and language differences, some non-European TIER1 component suppliers have deliberately moved their European sales and R&D centre in the **BENELUX: "neutral" ground on Europe's very competitive automotive battlefield**.....



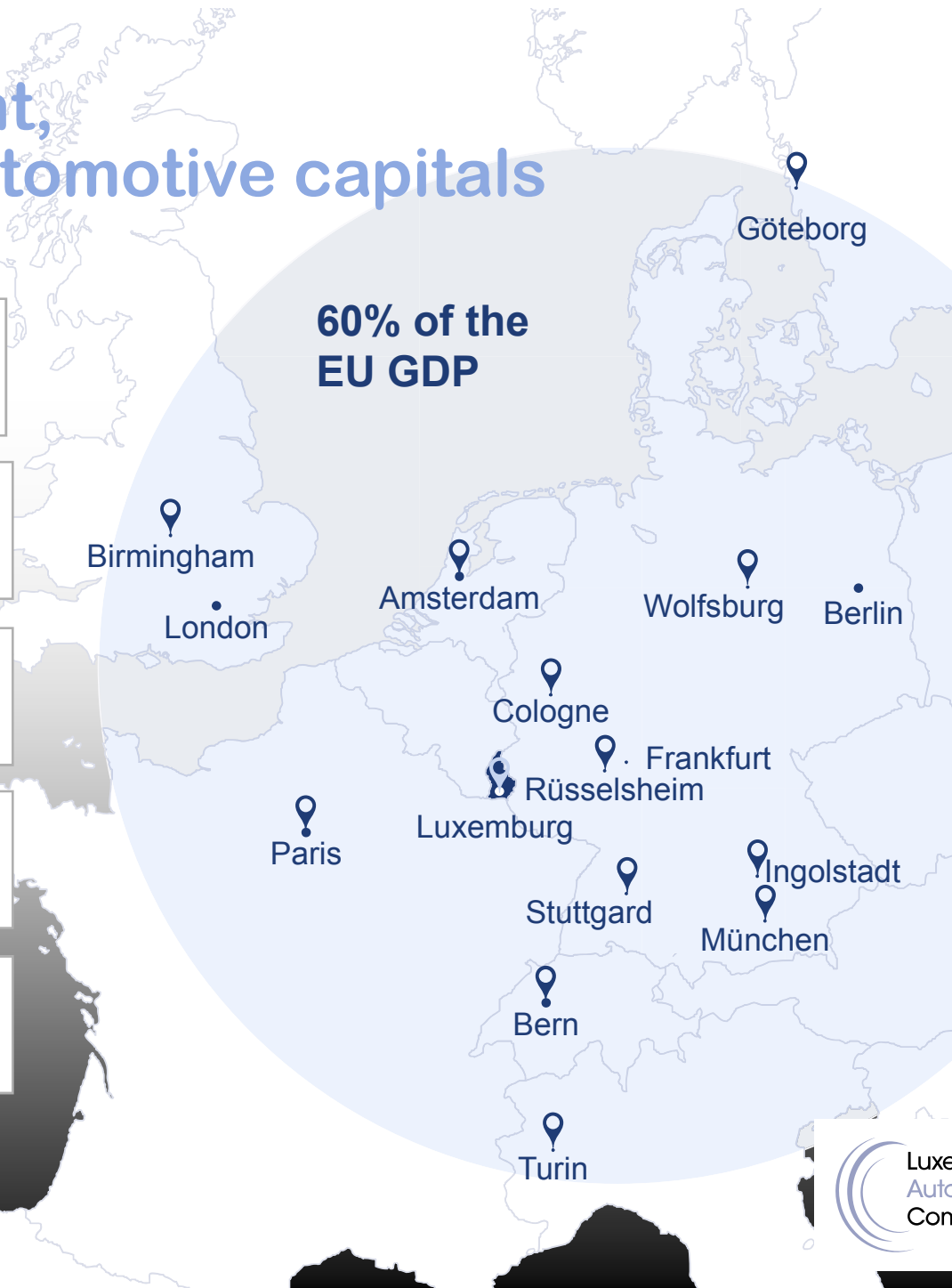
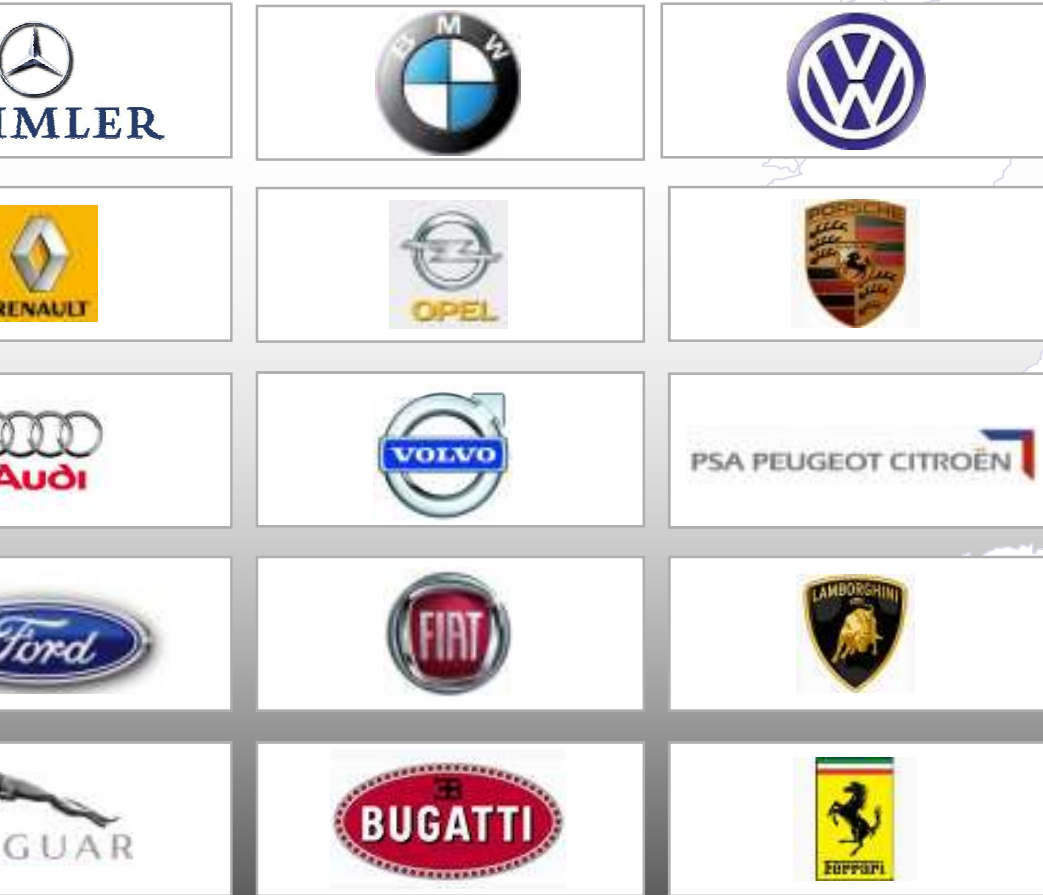
European automotive component business in Luxembourg?

an European **Sales and R&D centre in Luxembourg**, just in the middle of the European automotive car market, providing top quality, state of the art engineering, combined with the **language and cultural skills** needed for developing business “all over Europe”.

You'll never walk alone... members of the **Luxembourg Automotive Cluster (LAC)** like Delphi, Goodyear, Valeo, Magneti Marelli, Continental, Valeo Europe, Post Telecom, Luxcontrol, Elth (CEBI group) and many others, have developed an unique cooperation model supporting open innovation, business development, joint training & education programs and operational excellence!

Automotive business development, in the middle of European Automotive capitals

former visits feasible within one working day:





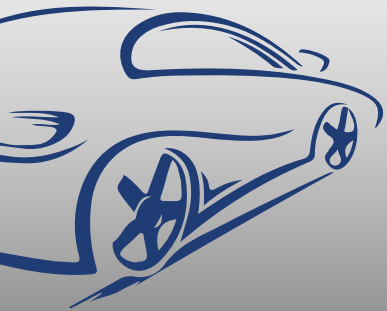
entering the European market...

fact-based decision

Europe's position in Global light vehicle PRODUCTION

(IHS)

- Global light vehicle production 2014 is expected to close at 88M units (vehicles)
- China is the global leader in vehicle production with 23M units (2014)
- Followed by **Europe (20M)** and North America (17M)
- In the period 2015 – 2020, global light vehicle production is expected to grow from 88M to 104M units, in total 16M units (19%)
- Strongest growth is expected to be generated by China (8M)
- Followed by South Asia (4M) and **Europe (3M)**
- Japan/Korea are expected to reduce their production output (-1.5M)



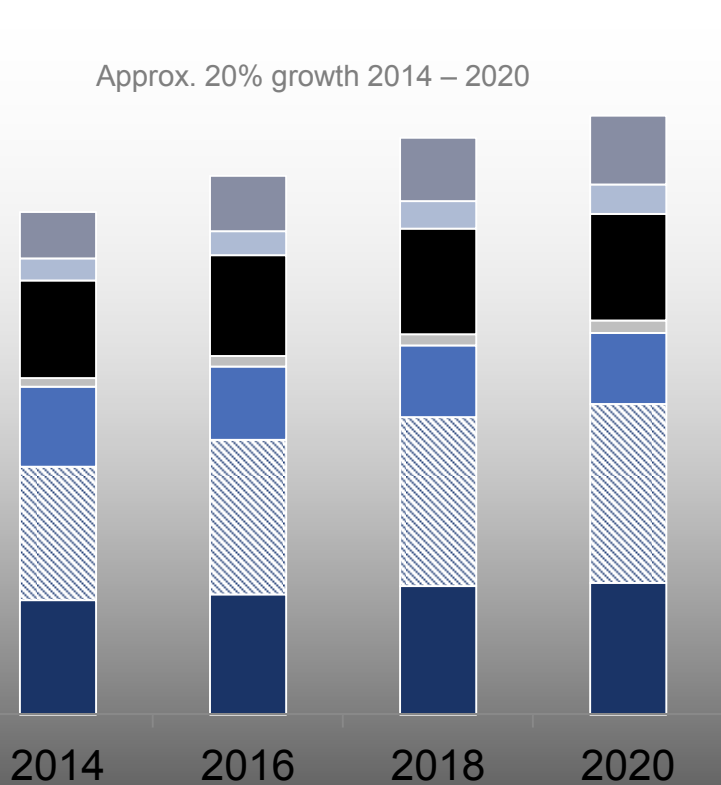
Europe is second in vehicle production (after China) and will remain this position in the near future (2015 – 2020)

Global light vehicle PRODUCTION in detail

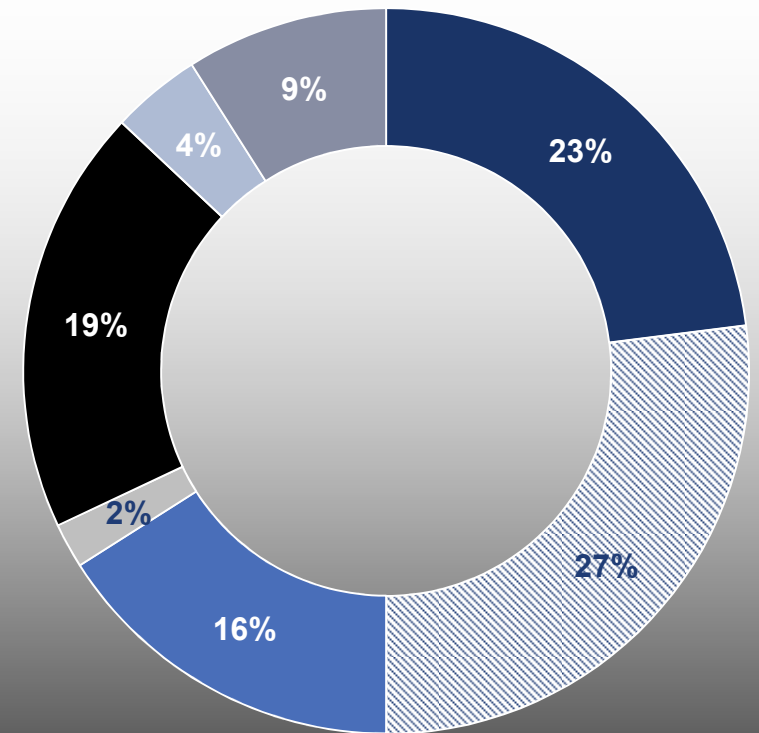
(IHS)

Growth 2014 – 2020

Approx. 20% growth 2014 – 2020



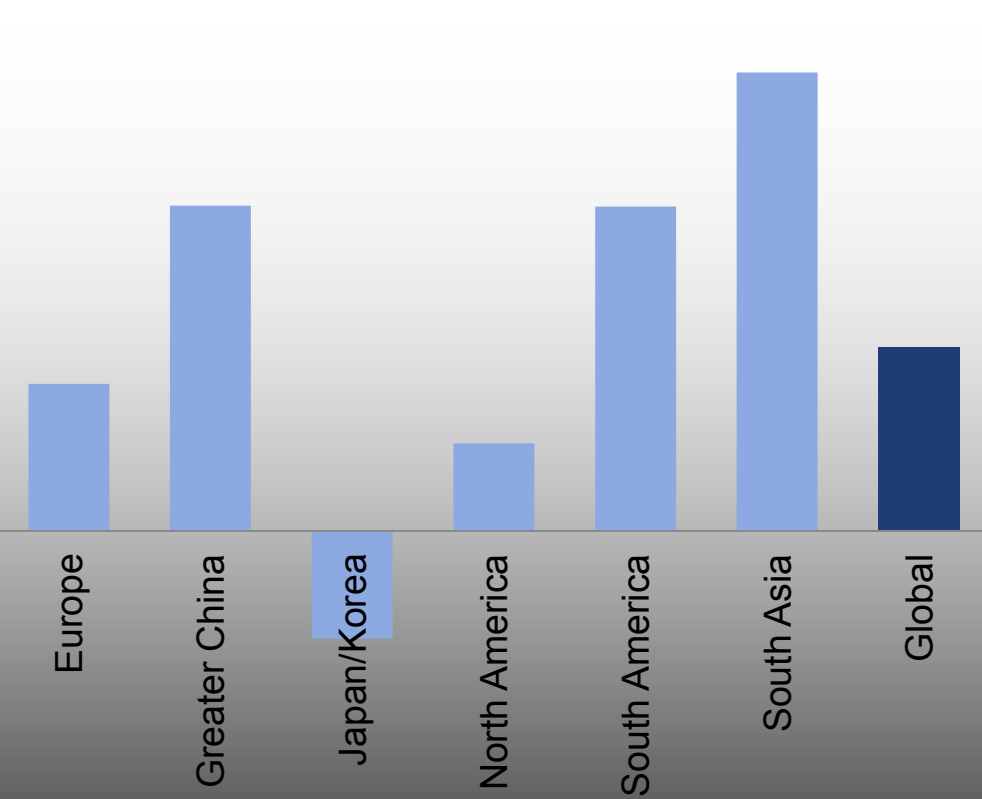
2014 global production by region



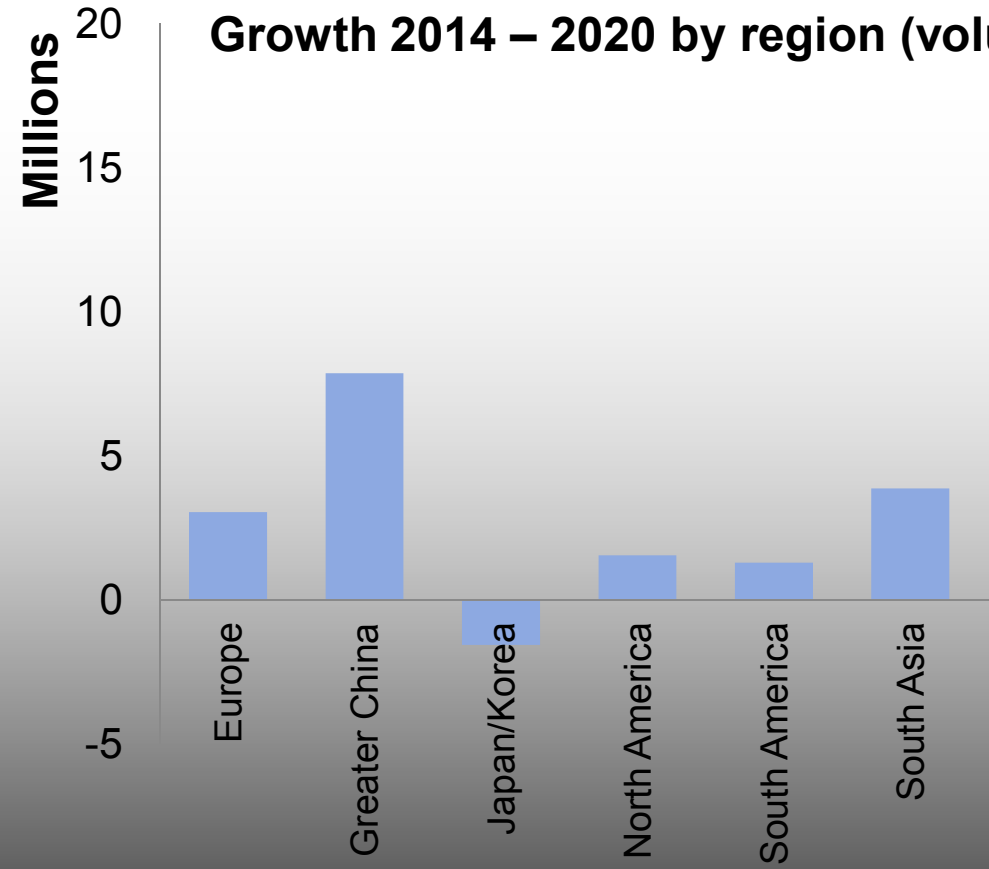
Growth 2014 – 2020 by PRODUCTION region

(IHS)

Growth 2014 – 2020 by region (%)



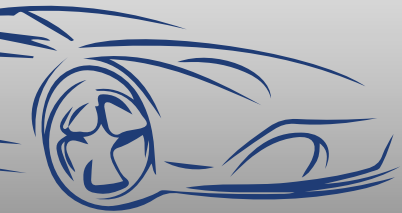
Growth 2014 – 2020 by region (volume)



Europe's position in light vehicle DEVELOPMENT

(IHS)

- Approx. 80% of the globally produced vehicles are developed in Japan, Korea and Europe
- 40M units are developed by Japanese and Korean OEM's (44%)
- 31M units are developed in Europe (34%)
- 6M of 16M global growth 2014 – 2020 is covered by Japanese/Korean OEM's
- 5M of the global growth is covered by European OEM's , 3M by Chinese OEM's
- North American OEM's are expected to develop 1M units less in 2020

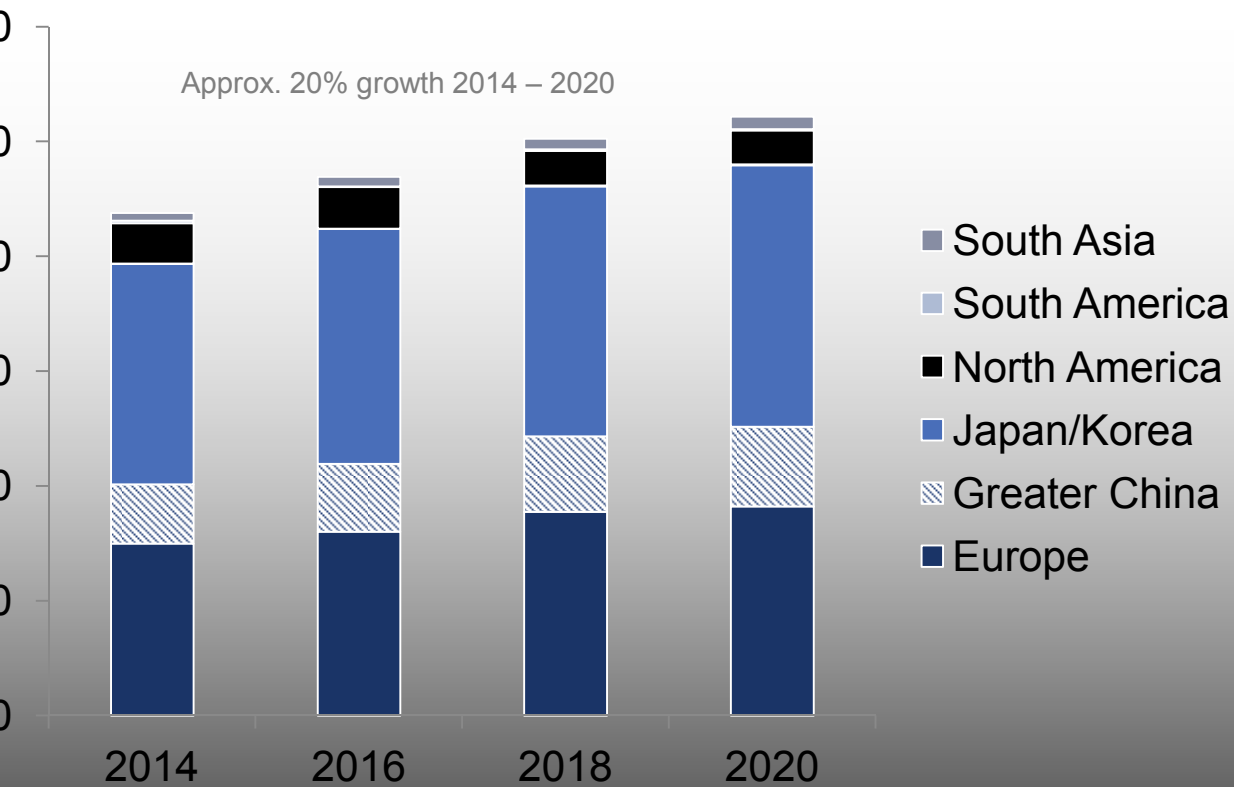


Europe is second in vehicle development (after Korea/Japan) and will remain this position in the near future (2015 – 2020)

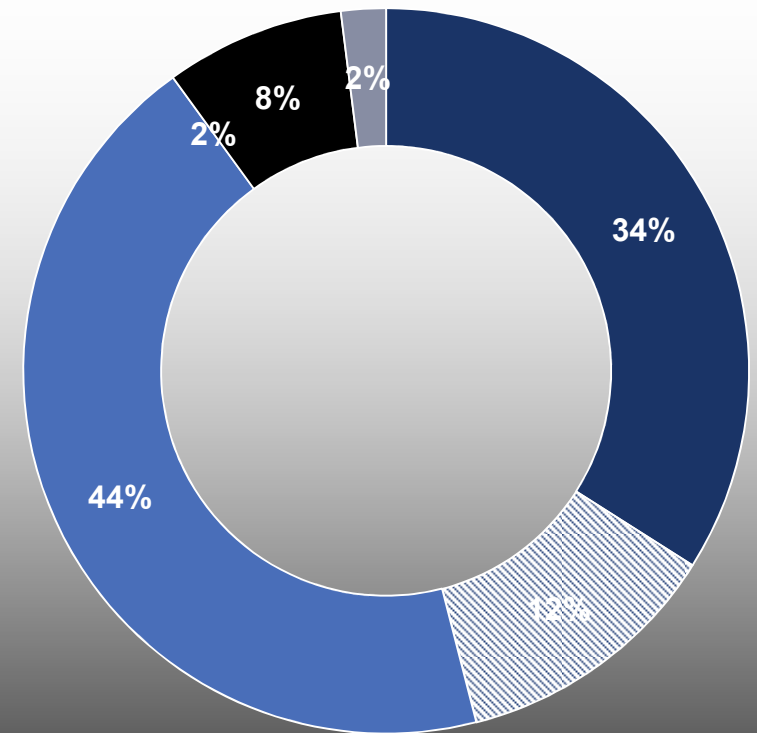
Light vehicle DEVELOPMENT in detail

(IHS)

Growth 2014 – 2020



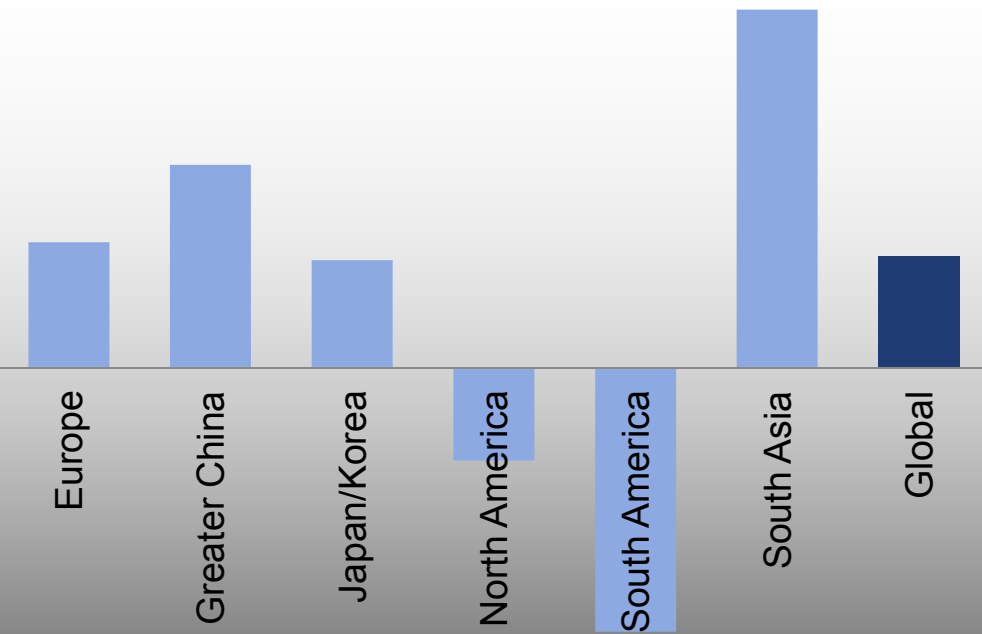
2014 global development by region



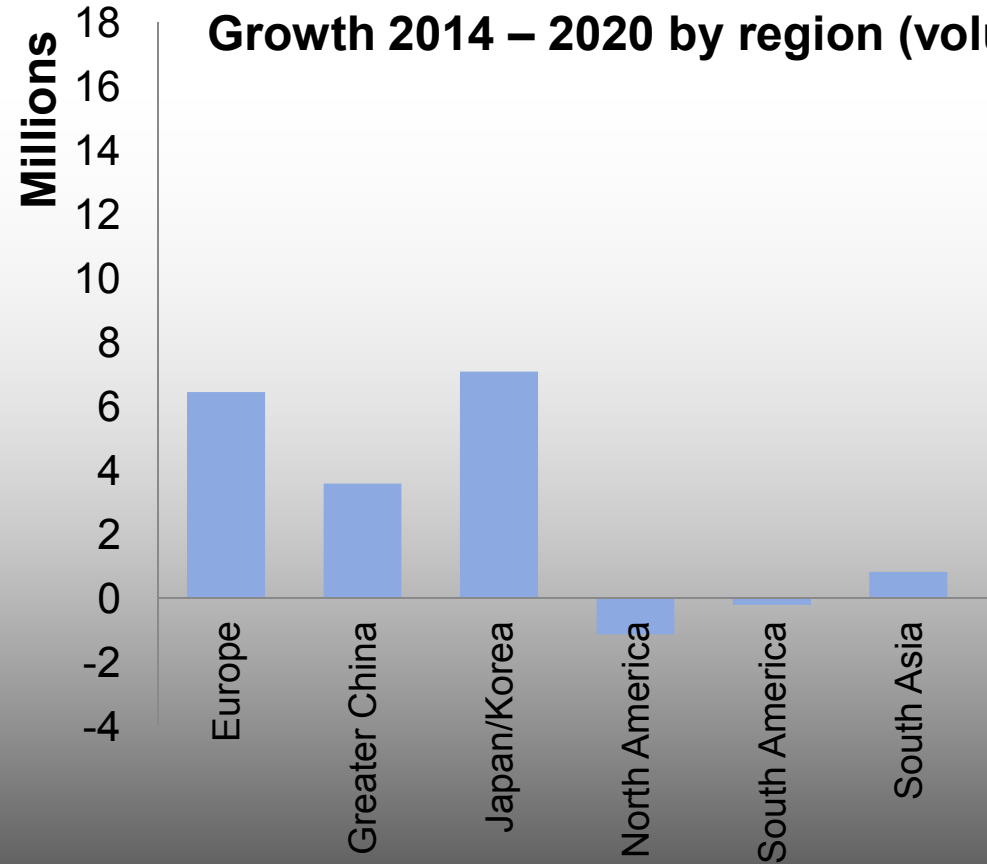
Growth 2014 – 2020 by DEVELOPMENT region

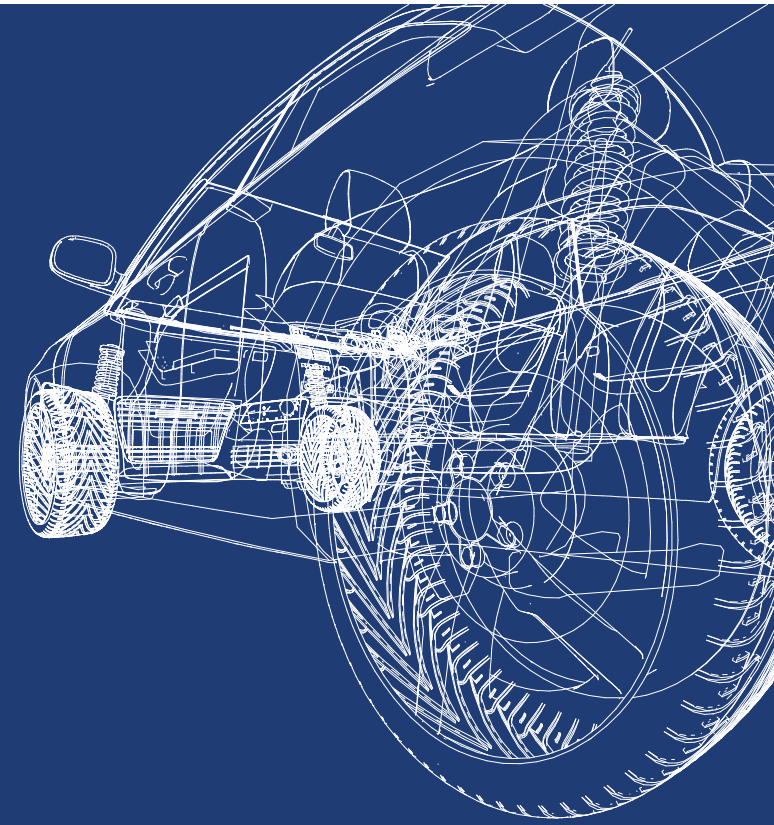
(IHS)

Growth 2014 – 2020 by region (%)



Growth 2014 – 2020 by region (volume)





some more good reasons for entering the
European component market...
Technology!



BMW i8 plugged-in hybrid



2014 Porsche 918 plugged-in hybrid



2014 Audi A3 e-tron



Mercedes-Benz GLA




2014 Mercedes-Benz C-class



2014 Porsche Macan

Technology leadership and opportunities

Technology/application trends	European Leadership	European Opportunity	Cooperation partners in Luxembourg
Infotainment, connectivity, HMI			
Passive & active safety, ADAS			
Weight reduction, lightweight materials			
Fuel efficiency, emission control, alternative fuels			
Green technologies, e-mobility, hybrid technology			

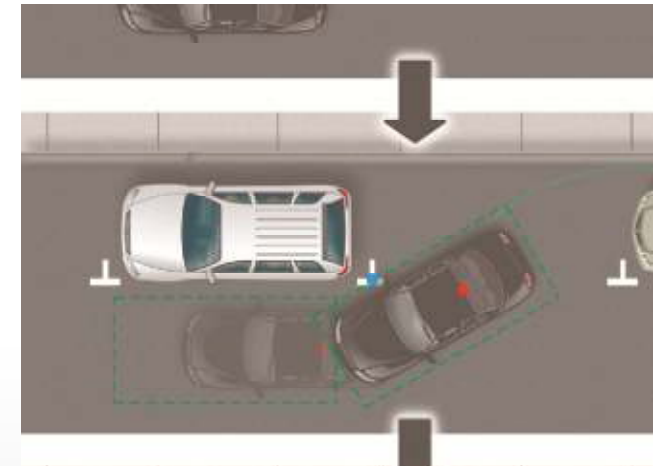
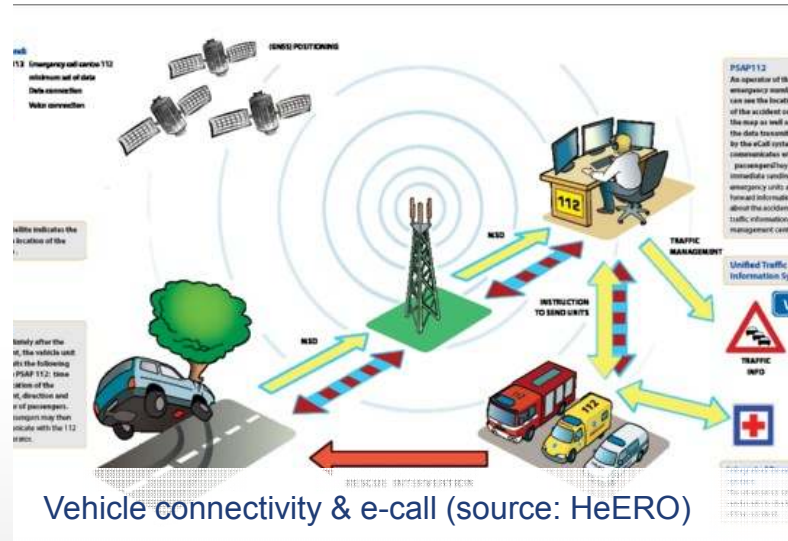


Innovation and R&D “made in Luxembourg”

Advanced material development, fuel management, emission control, active and passive safety, sensing systems, fuel venting systems, lightweight material development, vehicle connectivity... and much more



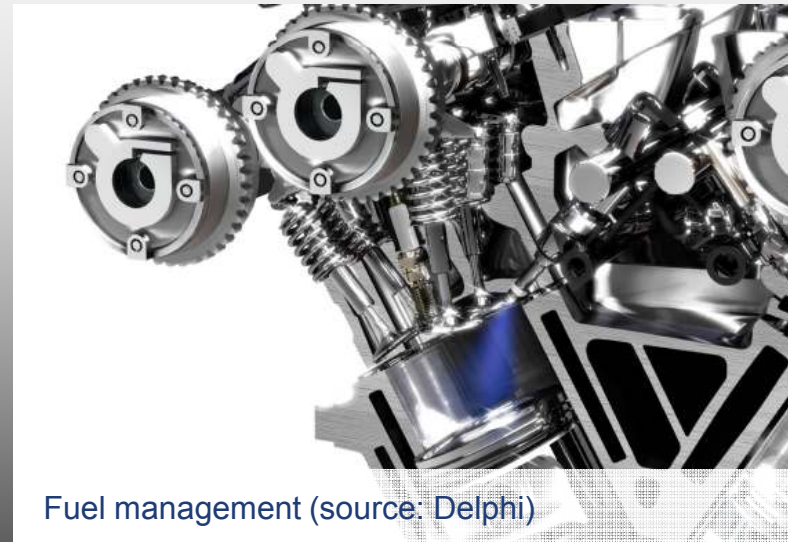
Testing (source: Goodyear)



Park assist / ADAS (source: Delphi)



Light materials (source ArcelorMittal)



Fuel management (source: Delphi)



Night vision / ADAS (source: BMW)

Public research driving innovation and R&D

100 researchers (full-time equivalent) – 52% in companies

100 R&D personnel (full-time equivalent) – 64% in companies

Factors:

University of Luxembourg

Public Research Centres

National Research Fund

Research fields

Material technologies

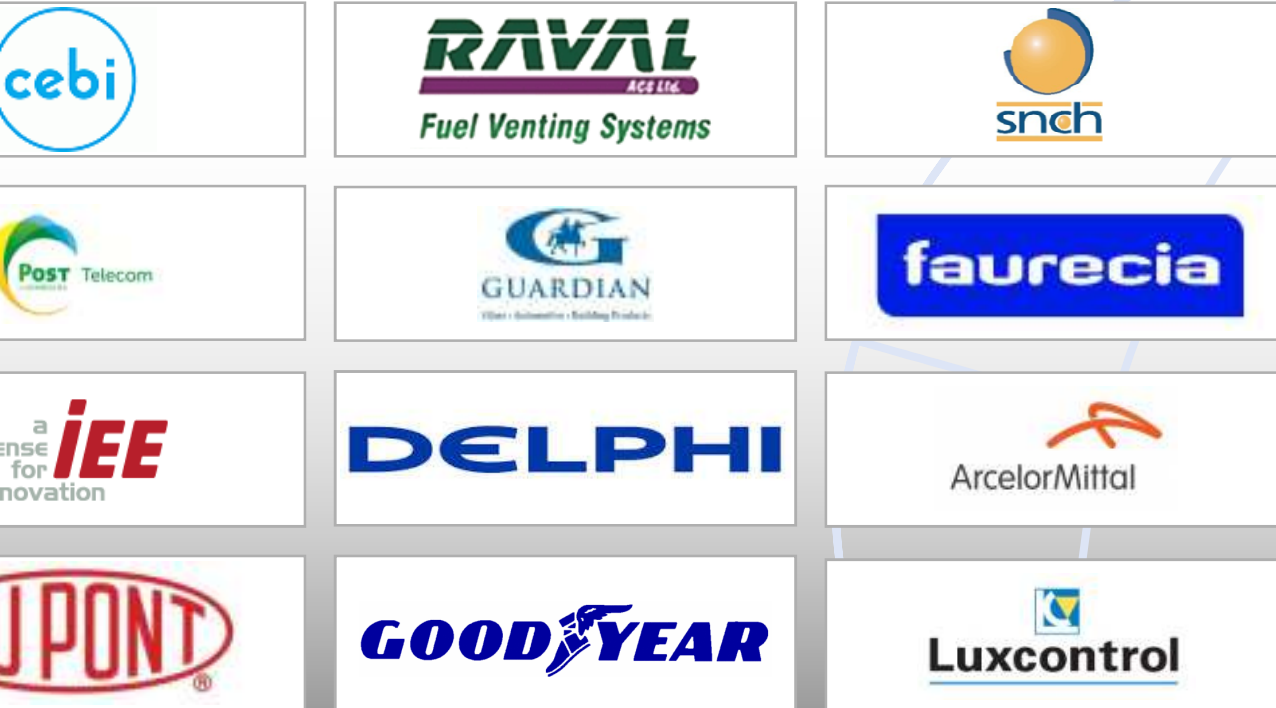
Environment

ICT

Biomedicine

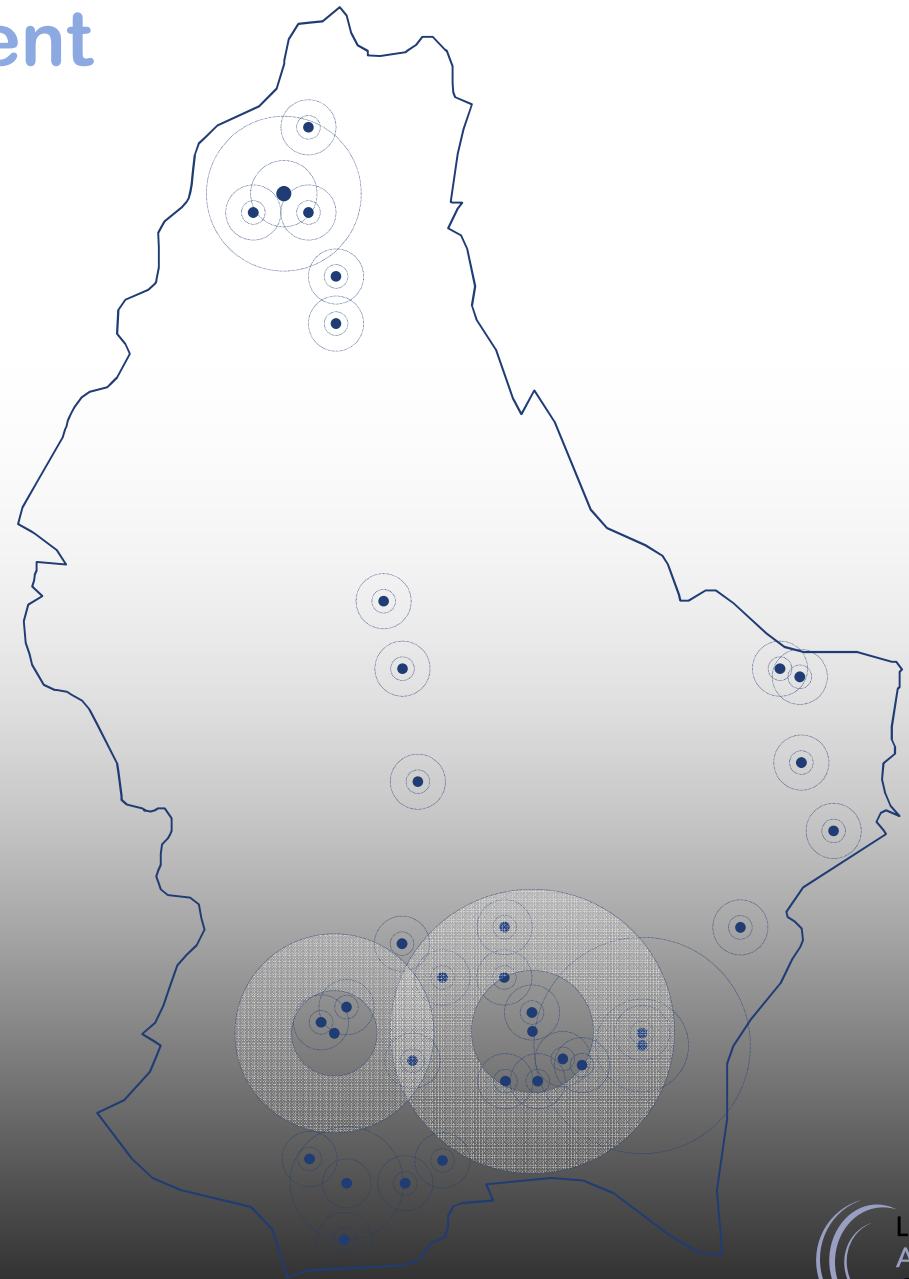


Global leaders in Tier1 and Tier2 position found their way to Luxembourg



More than 30 automotive component service suppliers in total

Lux	ElectroEngine	IEE
	ELTH (CEBI Group)	KYMCO
littal	Eurocomposites	Luxcontrol
	Eurofoil	POST Luxembourg
Automotive	FANUC	Raval Europe
	Faurecia	Rotarex Automotive
	Goodyear	SNCH
. Cie	Guardian Automotive	Tarkett
ems	Hitec	Technofibres
	HUSKY	Textilcord
	Hydro Aluminium	TÜV Rheinland
	Hyosung	



Luxembourg Automotive Components cluster

Luxembourg Automotive Component business:

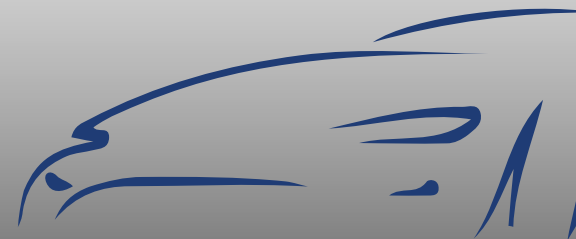
More than 1,5 billion € sales turnover

Highest per capita automotive components turnover in EU

More than 10.000 employees in total

More than 2.000 professionals in R&D, predominantly engineers and scientists from German universities, German OEM's and Tier1 suppliers

Export to 5 continents



Luxembourg Automotive Component cluster

Currently five “Flagship projects” under development

1. Automotive Campus
2. Competence mapping
3. Operational excellence
4. Training, education & recruitment services
5. Business development

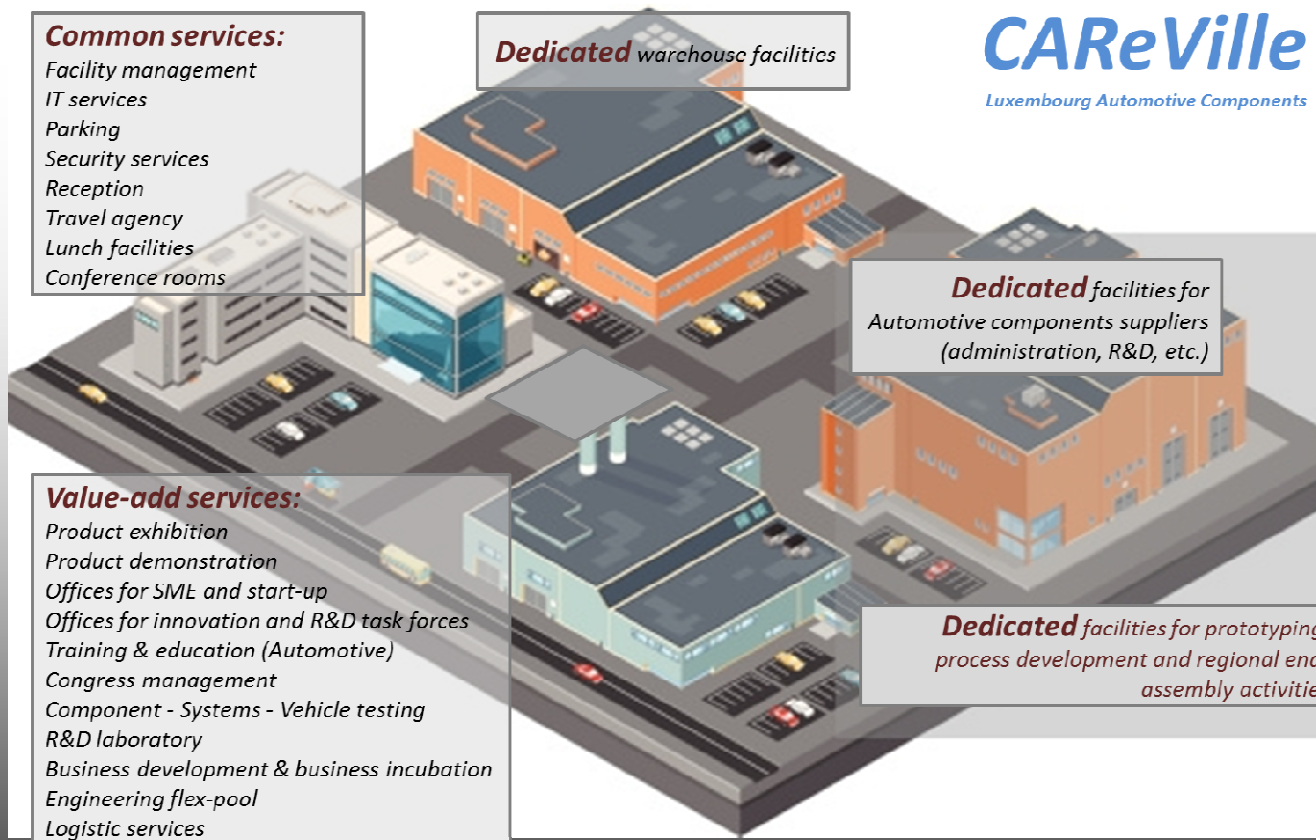


Automotive campus project under development

Platform for automotive experts and business incubation

Initiators, participants &

stakeholders:



CAReVille
Luxembourg Automotive Components

Note: Illustration for indicative purpose only; does not represent the targeted construction

Automotive component business “made in Luxembourg”

Take aways

Europe is expected to remain leading position in light vehicle development

Technology leadership in some area's like ADAS and fuel efficiency, but also offering technology opportunities in entertainment, e-drive and hybrid technology

Luxembourg is considered as key-location for an European headquarters

Located in the middle of the European Automotive capitals

Multi lingual and multicultural business environment

High top quality, state of the art automotive engineering

Strong focus on innovation and R&D, “guided” access to national and European funding

Automotive cluster and **CAReVille**: synergy potential and shared knowledge base

Roost Ortjens

Cluster Manager

LUXINNOVATION GIE
rue Alcide de Gasperi
1615 Luxembourg

+352) 43 62 63 - 653

(+352) 621 139 474

roost.ortjens@luxinnovation.lu

www.automotivecomponents.lu

Thank you!

Questions and answers

The Luxembourg Automotive Components cluster is powered by:

NATIONAL AGENCY
FOR INNOVATION AND RESEARCH
LUXINNOVATION



© 2014 Luxinnovation

