



European Automotive Components Business

%Made in Luxembourg+





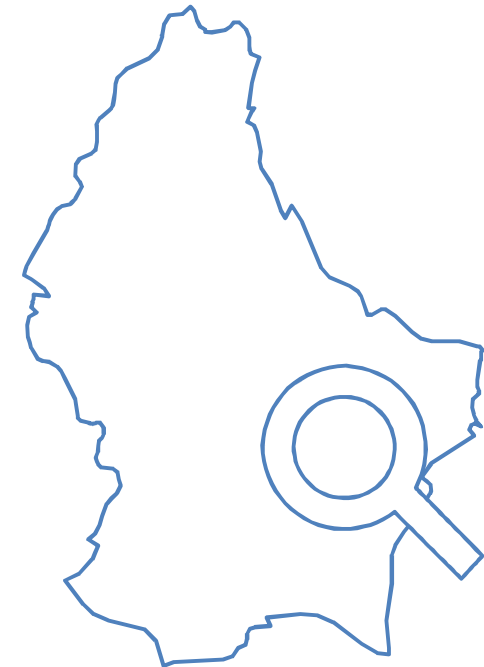
Automotive components Why Luxembourg

European automotive component business



Why Luxembourg?

- “ Europe is considered as one of the **global leaders in light vehicle development**. European OEMs cover more than 1/3rd of the global light vehicle production”
- “ European OEMs take **sourcing decisions at the European development** locations: Munich, Stuttgart, Frankfurt (Russelsheim), Cologne, Wolfsburg, Turin, Birmingham, Gothenburg, Paris” .
- “ Because of national economical interests, cultural perception and language issues, some non-European TIER1 component suppliers have deliberately located their European sales and R&D centre in the **BENELUX: neutral ground on Europe’s very competitive automotive battlefield**”



European automotive component business



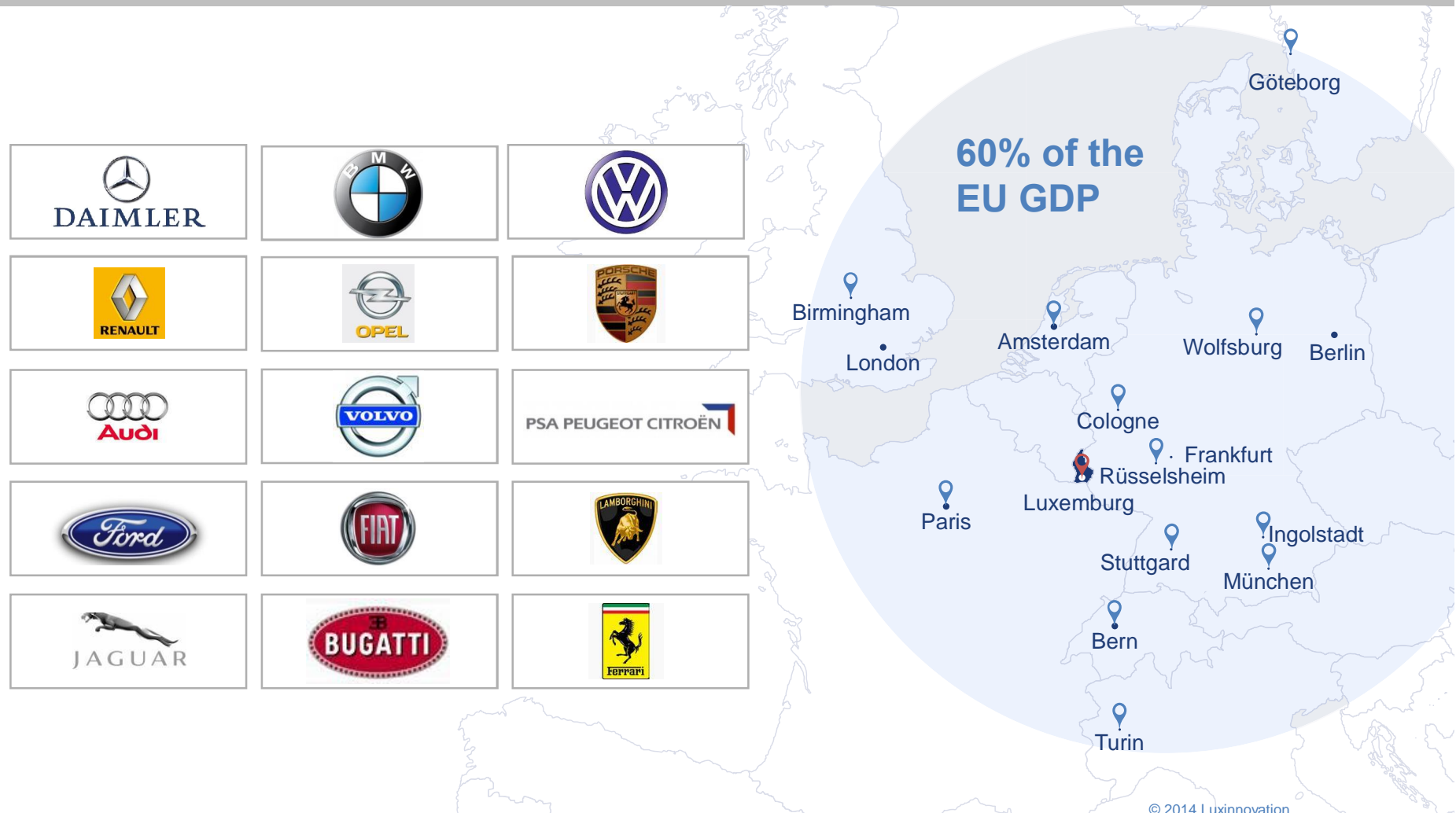
Why Luxembourg?

- “ An European [Sales and R&D center in Luxembourg](#), just in the middle of the European automotive capitals, is providing top quality, [state of the art engineering](#), [combined with the language and cultural skills](#) necessary for developing business %all over Europe+”
- “ Youd| never walk aloneõ members of the [Luxembourg Automotive Cluster \(LAC\)](#) like Delphi, Goodyear, IEE, Raval 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, just in the middle of European Automotive capitals



Customer visits feasible within one working day:





Entering the European market
a fact-based decision

Europe's position in Global light vehicle PRODUCTION

(source 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)



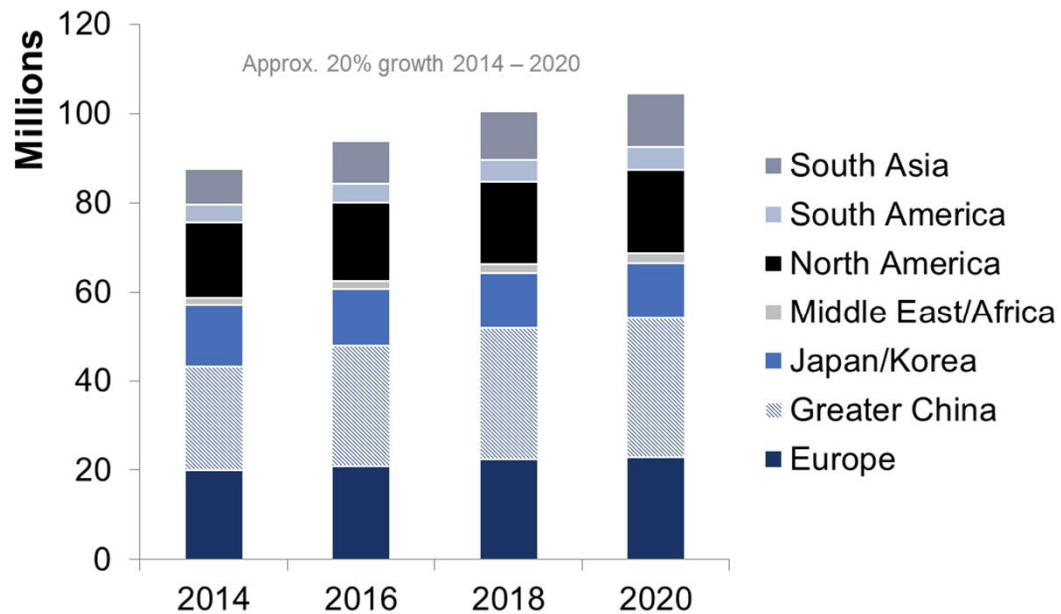
Europe is second in vehicle production (after China) and will remain this position in the near future (2015 – 2020)

Global light vehicle PRODUCTION in detail

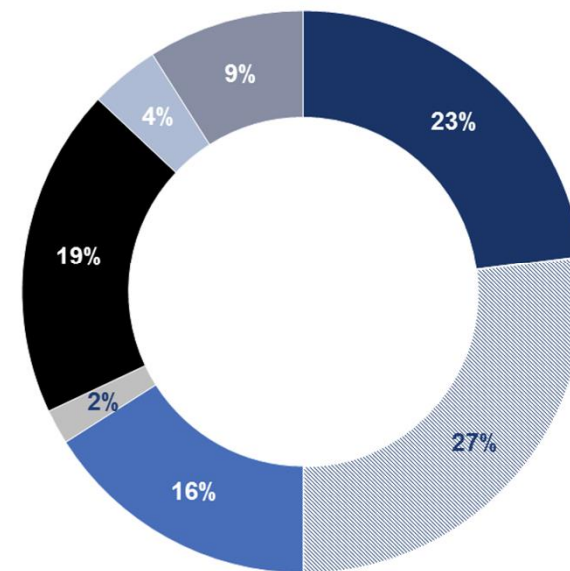
(source IHS)



Growth 2014 – 2020

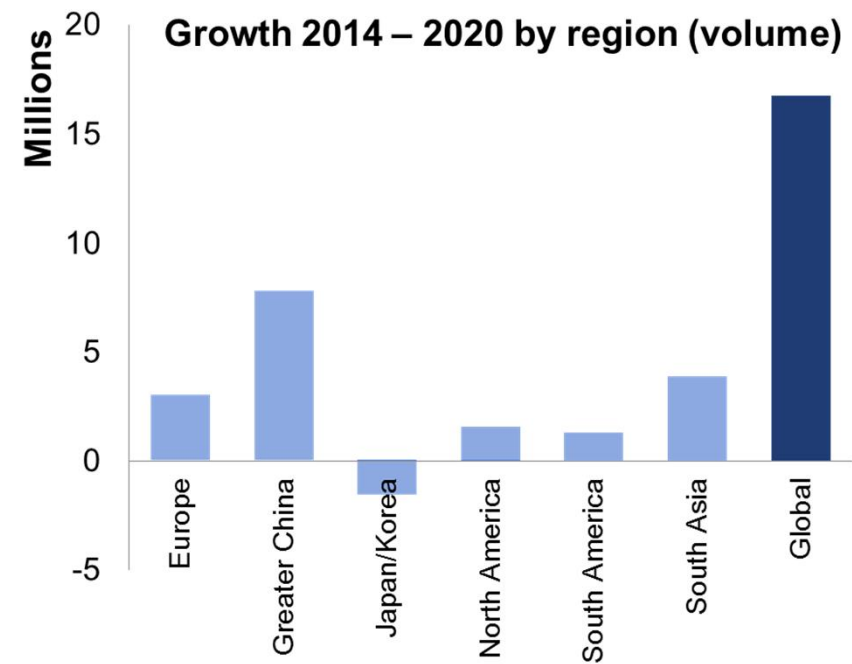
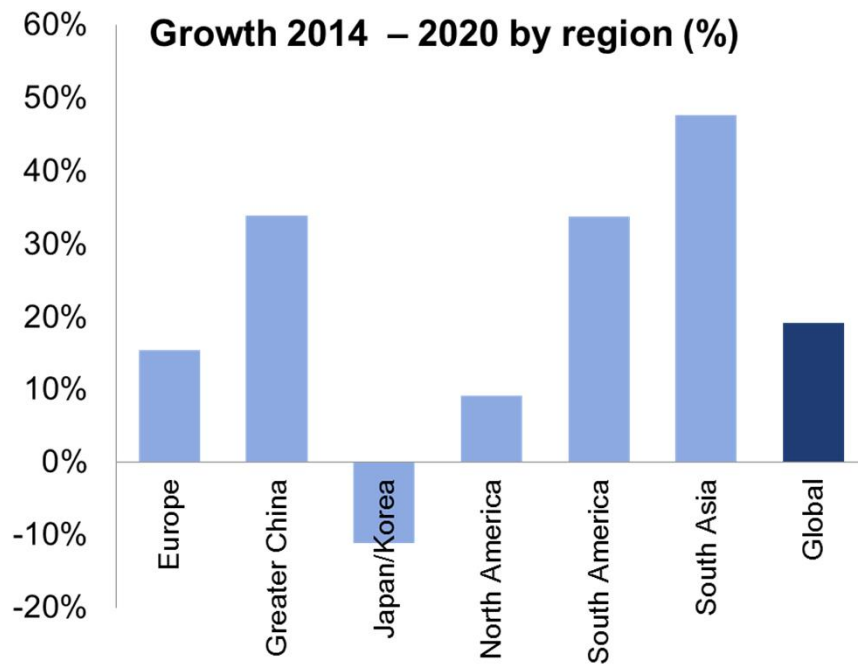


2014 global production by region



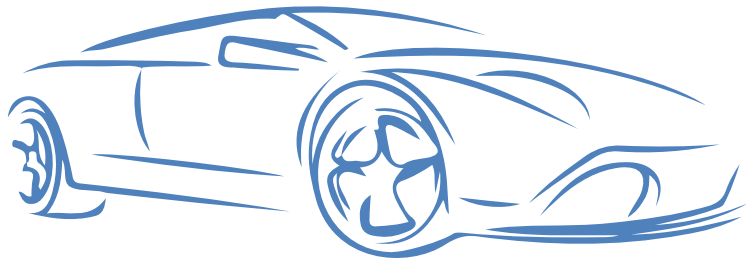
Growth 2014 . 2020 by PRODUCTION region

(source IHS)



Europe's position in light vehicle DEVELOPMENT

(source IHS)



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



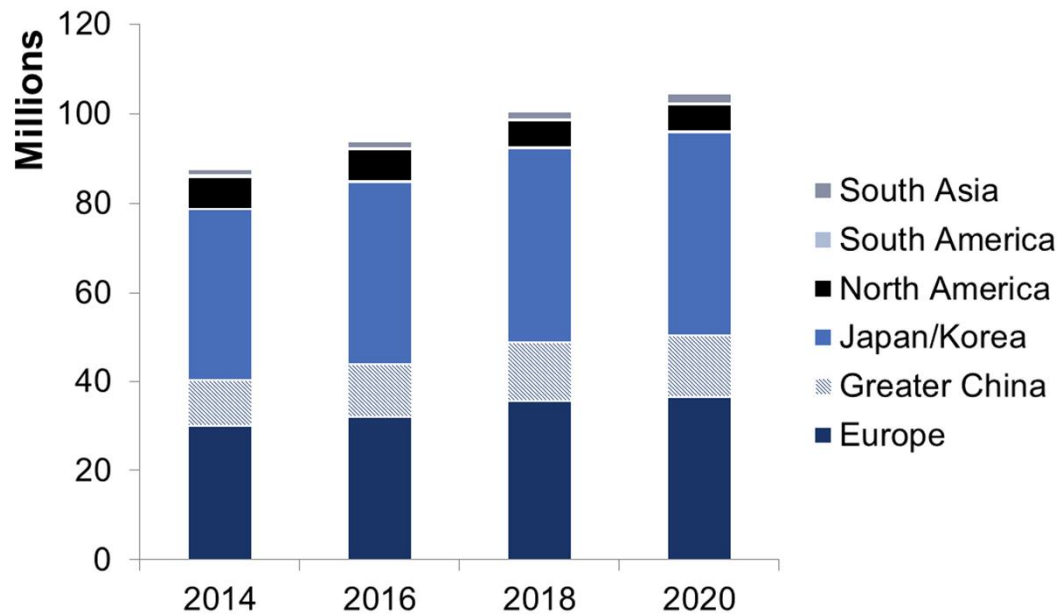
Europe is second in vehicle development (after Korea/Japan) and will remain this position in the near future (2015 – 2020)

Global light vehicle DEVELOPMENT in detail

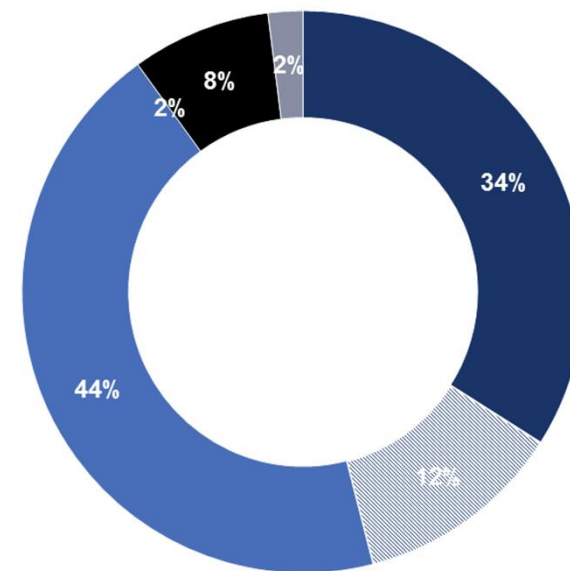
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Growth 2014 – 2020

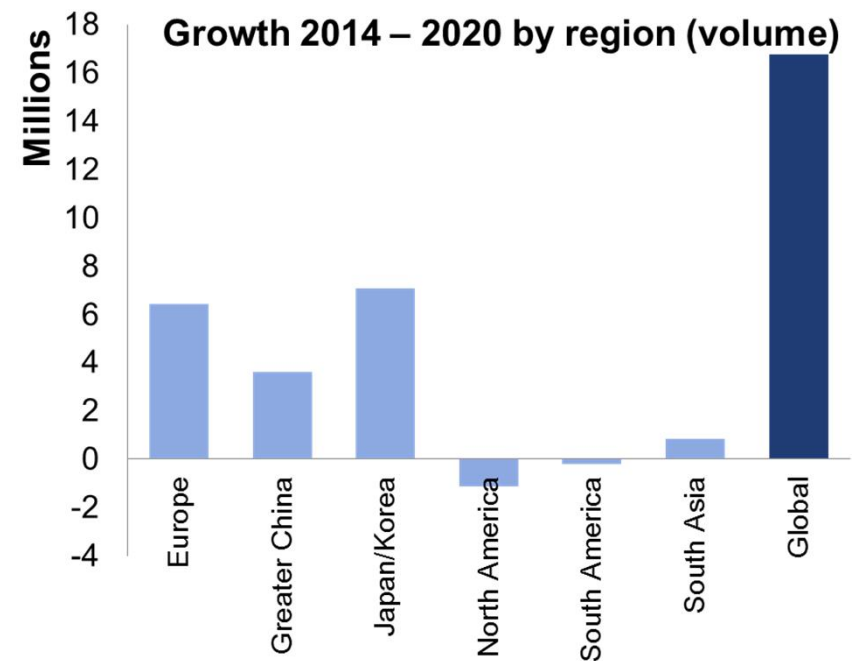
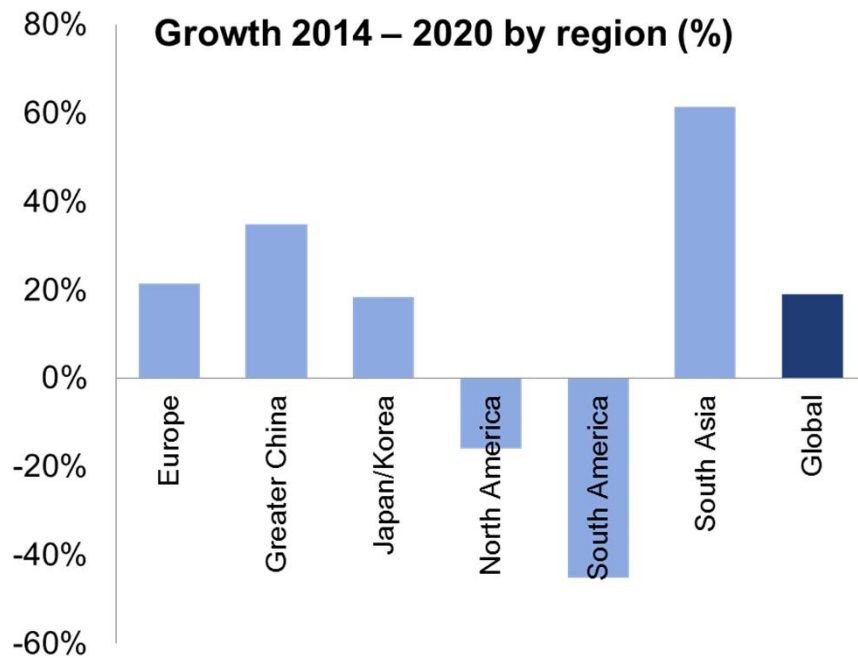


2014 global production by region



Growth 2014 . 2020 by DEVELOPMENT region

(source IHS)





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

Technology!



2014 BMW i8 plugged-in hybrid



2014 Porsche 918 plugged-in hybrid



2014 Audi A3 e-tron



2014 Mercedes-Benz GLA



2014 Mercedes-Benz C-class



2014 Porsche Macan

Technology leadership and opportunities



Automotive Technology/application trends	European Leadership	European Opportunity	Cooperation partners Local players (Luxembourg)
Infotainment, connectivity, HMI			IEE (HMI), Post-telecom, HiTech (both connectivity), Delphi (infotainment)
Passive & active safety, ADAS			IEE, Delphi, Goodyear
Weight reduction, lightweight materials			ArcelorMital, Eurocomposites
Fuel efficiency, emission control, alternative fuels			Delphi, Rotarex, Goodyear, Elth (CEBI)
Green technologies, e-mobility, hybrid technology			TUDOR, UniLUX, Eco innovation cluster

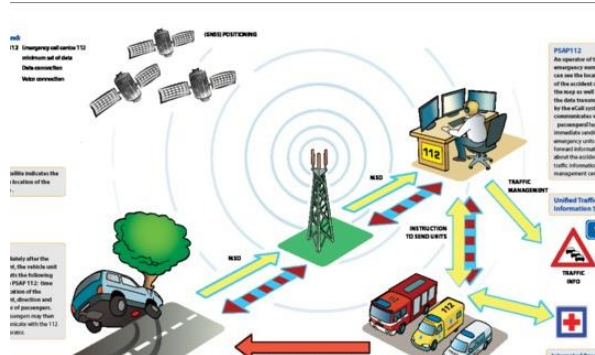


Innovation and R&D %made in Luxembourg+

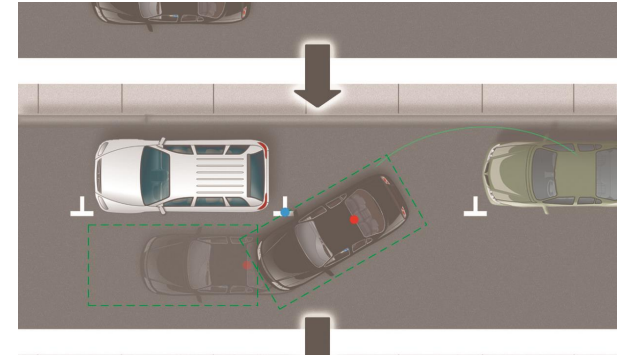
Advanced material development, fuel management, emission control, active and passive safety, sensing systems, fuel venting systems, lightweight material development, vehicle connectivity... and much more



Outdoor testing (source: Goodyear)



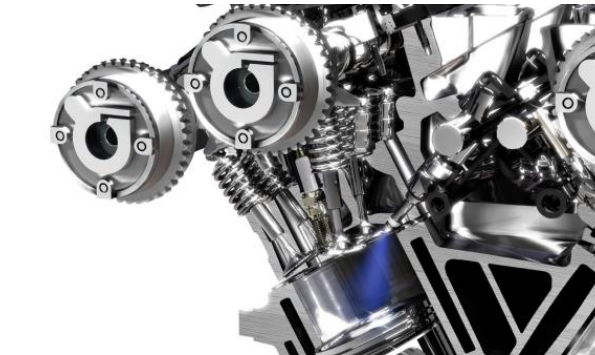
Vehicle connectivity & e-call (source: HeERO)



Park assist / ADAS (source: Delphi)



Light weight materials (source ArcelorMittal)



Fuel management (source: Delphi)



Night vision / ADAS (source: BMW)

Public research driving Automotive innovation and R&D



- “ 3,300 researchers (full-time equivalent) . 52% in companies
- “ 5,700 R&D personnel (full-time equivalent) . 64% in companies
- “ Key actors:
 - “ University of Luxembourg
 - “ Public Research Centres
 - “ National Research Fund
- “ Key research fields
 - “ Material technologies
 - “ Environment
 - “ ICT
 - “ Biomedicine



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



• more than 30 automotive
component
and service suppliers in total



Accumalux

Airtech

ArcelorMittal

Ateel

Brace Automotive

Ceratizit

Codipro

Comes & Cie

CTI Systems

DELPHI

Dometic

DuPont

ElectroEngine

ELTH (CEBI Group)

Eurocomposites

Eurofoil

FANUC

Faurecia

Goodyear

Guardian Automotive

Hitec

HUSKY

Hydro Aluminium

Hyosung

IEE

KYMCO

Luxcontrol

POST Luxembourg

Raval Europe

Rotarex Automotive

SNCH

Tarkett

Technofibres

Textilcord

TÜV Rheinland



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 OEMs and Tier1 suppliers
- “ Export to 5 continents



Luxembourg Automotive Component cluster



Currently five %Flagship projects+under development

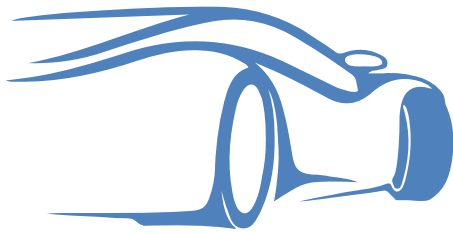
1. Automotive Campus

2. Competence mapping

3. Operational excellence

4. Training, education &
recruitment services

5. Business development



Automotive component business %made in Luxembourg+



Key take aways

- “ Europe is expected to remain leading position in light vehicle development
- “ Technology leadership in some areas like ADAS and fuel efficiency, but also offering technology opportunities in infotainment, e-drive and hybrid technology
- “ Luxembourg is considered as key-location for an European headquarters
 - “ Just in the middle of the European Automotive capitals
 - “ Multi lingual and multicultural business environment
 - “ Top quality, state of the art automotive engineering
 - “ Strong focus on innovation and R&D, %guided+access to national and European funding
 - “ Automotive cluster: synergy potential and shared knowledge base

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Thank you!

Questions and answers

The Luxembourg Automotive Components cluster is powered by:

NATIONAL AGENCY
FOR INNOVATION AND RESEARCH

LUXINNOVATION

