



European Association of Automotive Suppliers

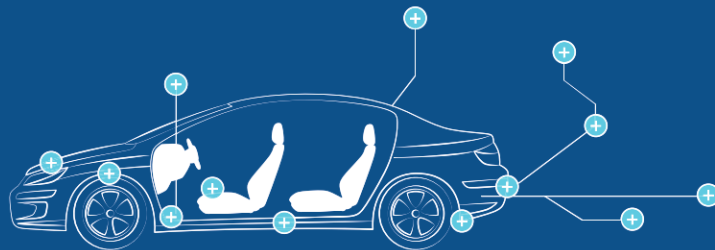
The background of the slide is a futuristic digital environment. A wireframe model of a car is shown in profile, facing right. The car is rendered in a light blue color. The background features a cityscape at night with tall buildings, overlaid with a complex network of glowing blue and red lines and curves, suggesting a digital or data-driven environment. The overall color palette is dominated by blues and reds.

CoRAI – Automotive Intergroup Meeting “Future of the Automotive Industry”

Brussels, 27th June 2019

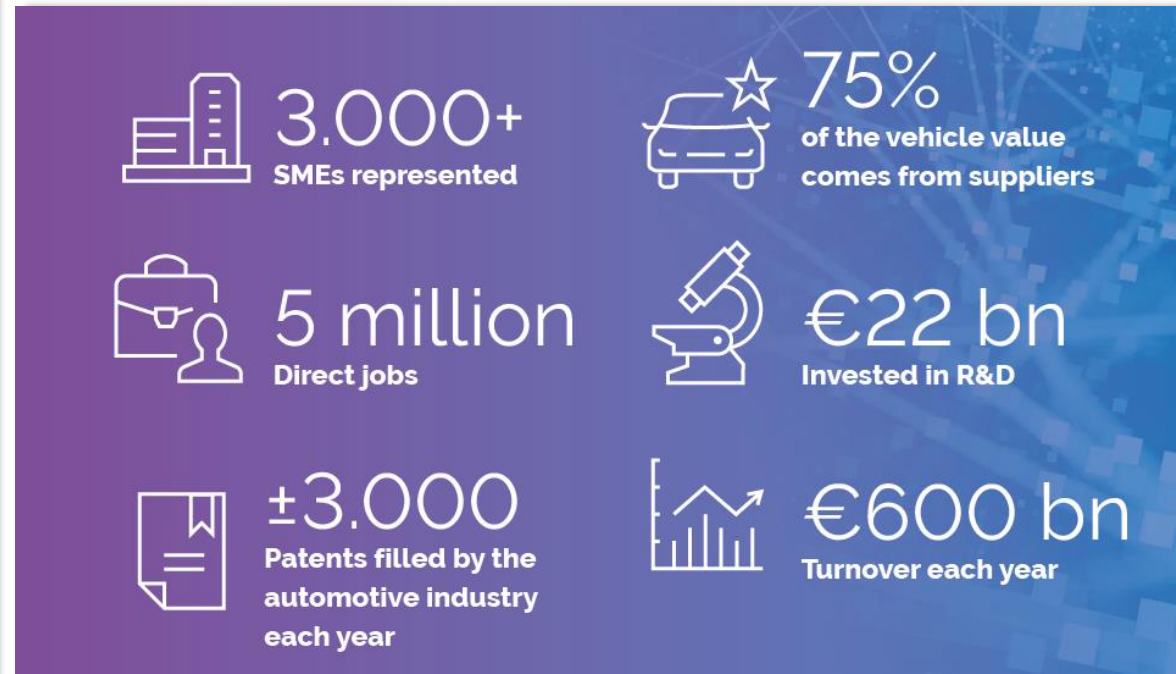
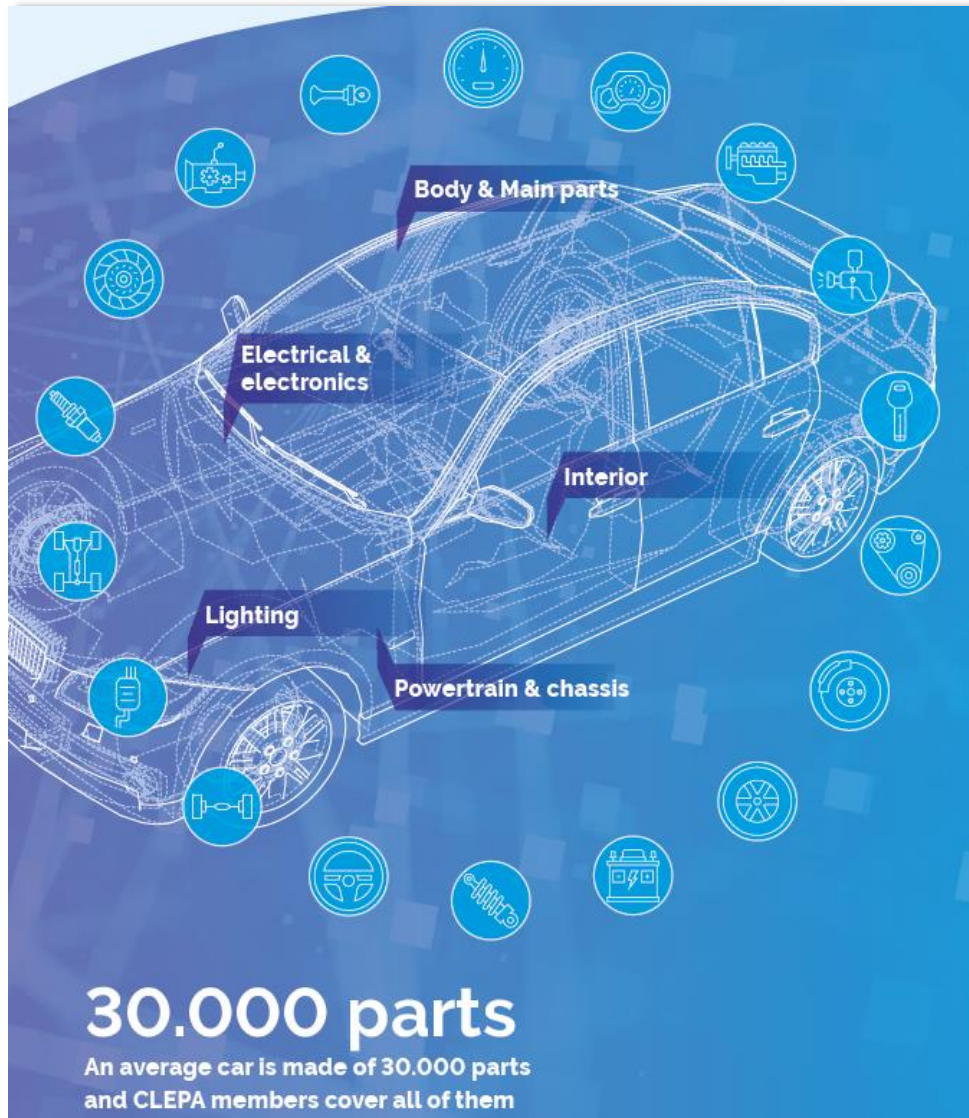
WHAT IS CLEPA?

CLEPA- the European Association of Automotive Suppliers -**brings together over 120 global suppliers** of car parts, systems and modules and **more than 20 national trade associations and European sector associations.**



CLEPA IS THE **VOICE OF THE EU AUTOMOTIVE SUPPLIER INDUSTRY** LINKING THE INDUSTRY TO POLICY MAKERS

WHAT IS CLEPA ABOUT?



HEADLINE PRIORITIES

The 4 CLEPA Focus Areas - 2019

- **Environment:** co-define the framework conditions for transitioning to sustainable mobility
- **Safety:** co-shape the longer-term (soft-)policy objectives for zero-accident mobility
- **Mobility Evolution**
 - identify and promote the framework conditions for **connected & automated driving** incl. policy on access to data, e-privacy, liability, cybersecurity
- **Competitiveness**
 - promote and defend efficient international value chains and rules-based **market access**
 - co-define the EU **research & innovation** priorities, roadmaps and funding opportunities



Energy & Environment



Safety



Mobility Evolution

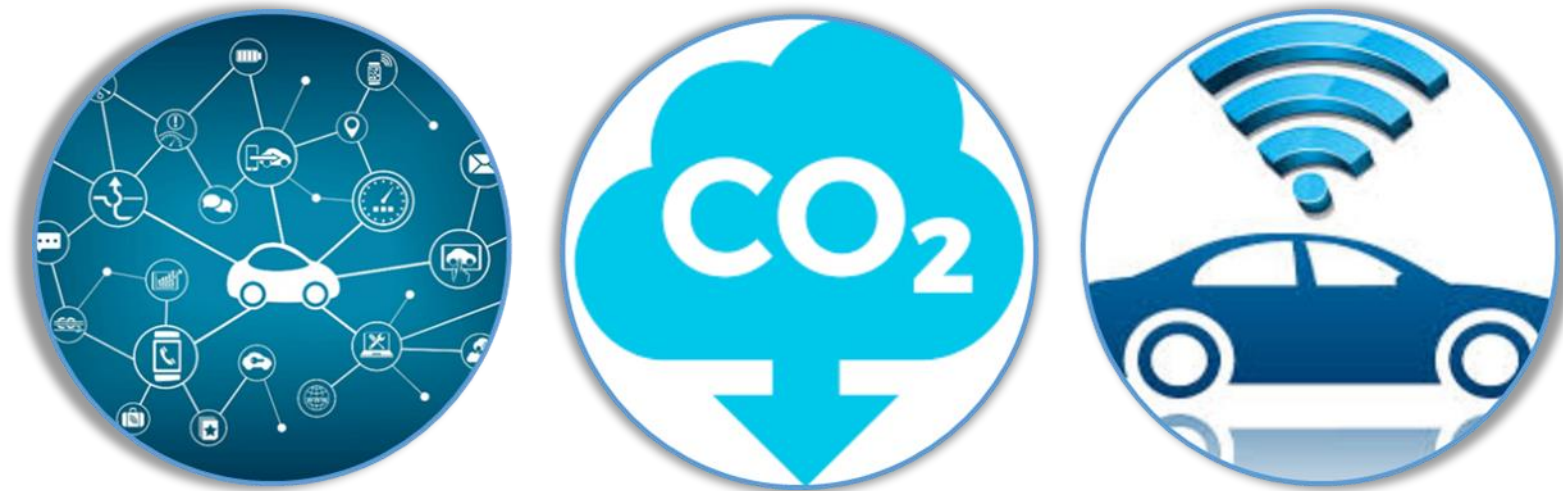


Growth & Competitiveness

DRIVERS OF CHANGE



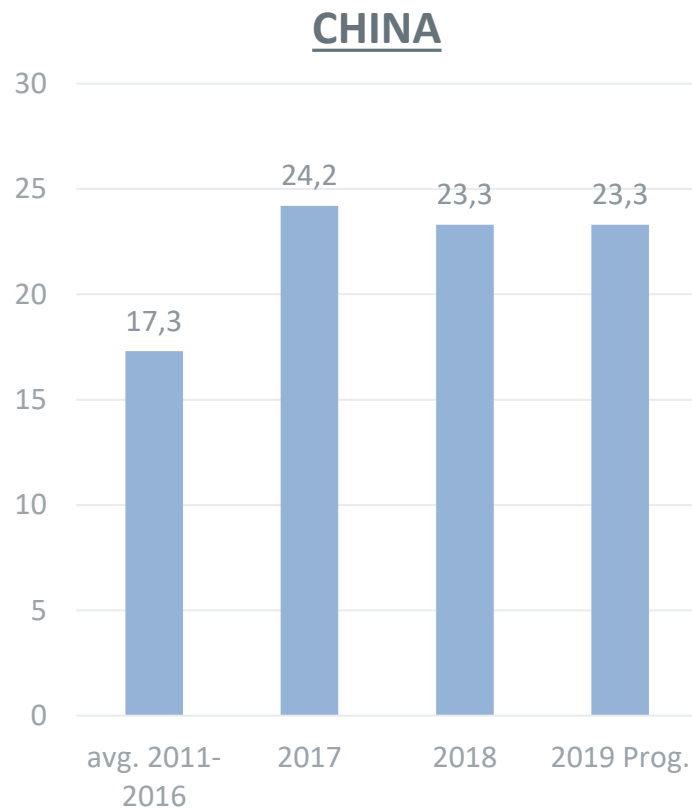
Major transformative trends are shaping the future of mobility and the automotive industry: **decarbonisation** and **digitalisation**



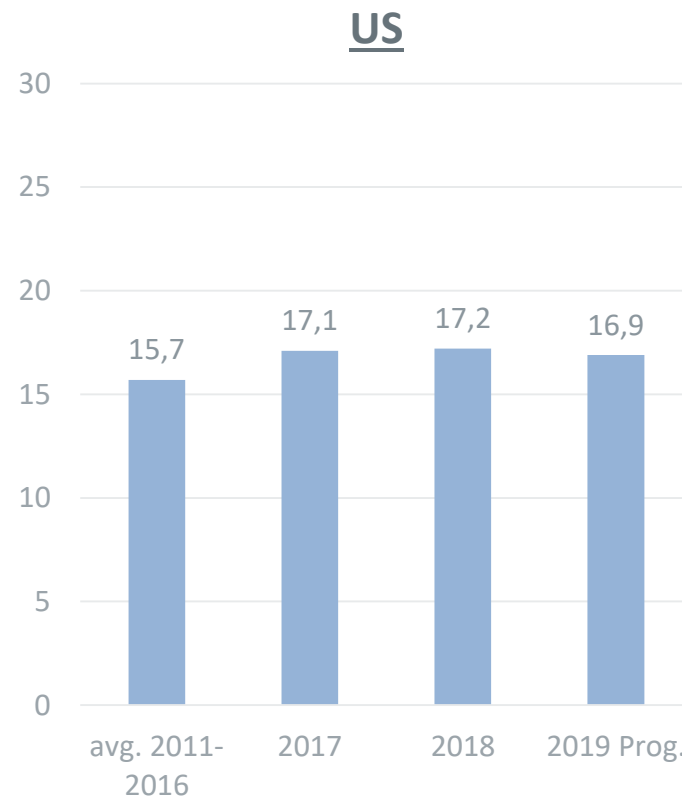
NEW VEHICLE REGISTRATIONS



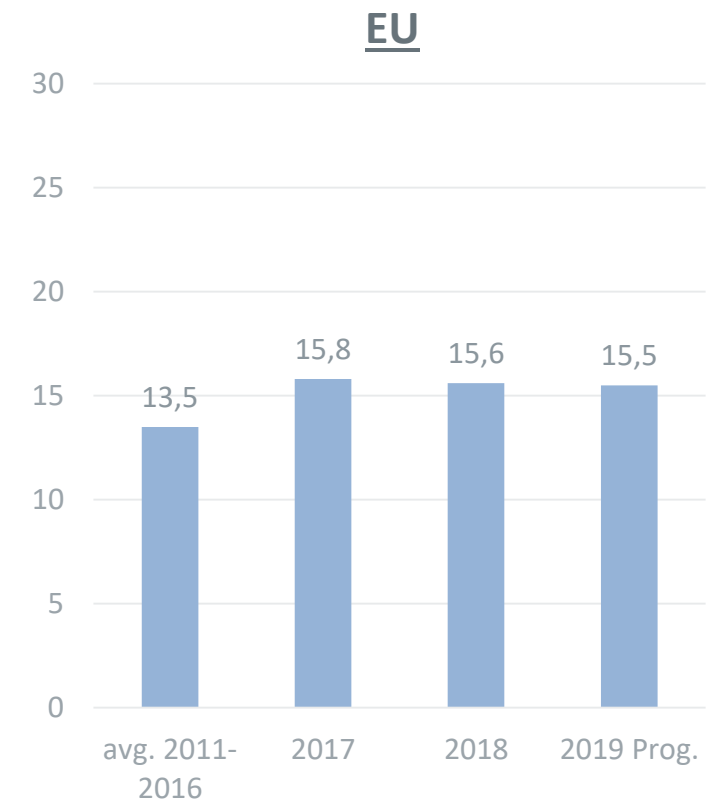
China, US and EU – in million units



Stagnation or change of trend?



Consolidation on high level



Insecurity due to EVAP¹⁾

1) EVAP: Evaporation Tests required from September 2019 in EU

Source: National registrations

PASSENGER CAR SALES/PRODUCTION



Previous years and outlook in 1.000 units

SALES	2017	% to p.y.	2018	% to p.y.	2019 prog.	% to p.y.
EU - West	14.321	3	14.211	-1	14.009	-1
EU - New countries	1.309	13	1.414	8	1.452	3
Global	84.732	2	84.202	-1	83.980	0
Global w/o CN	60.561	2	60.945	1	60.722	0

Shift of production and demand to the Eastern part of Europe

PRODUCTION	2017	% to p.y.	2018	% to p.y.	2019 prog.	% to p.y.
EU - West	13.069	0	12.530	-4	12.337	-2
EU - New countries	3.877	1	4.094	6	4.130	1
Global	84.686	2	83.683	-1	84.184	1
Global w/o CN	60.409	2	60.528	0	61.075	1

China remains in 2019 at previous year level

Source: VDA, IHS Automotive

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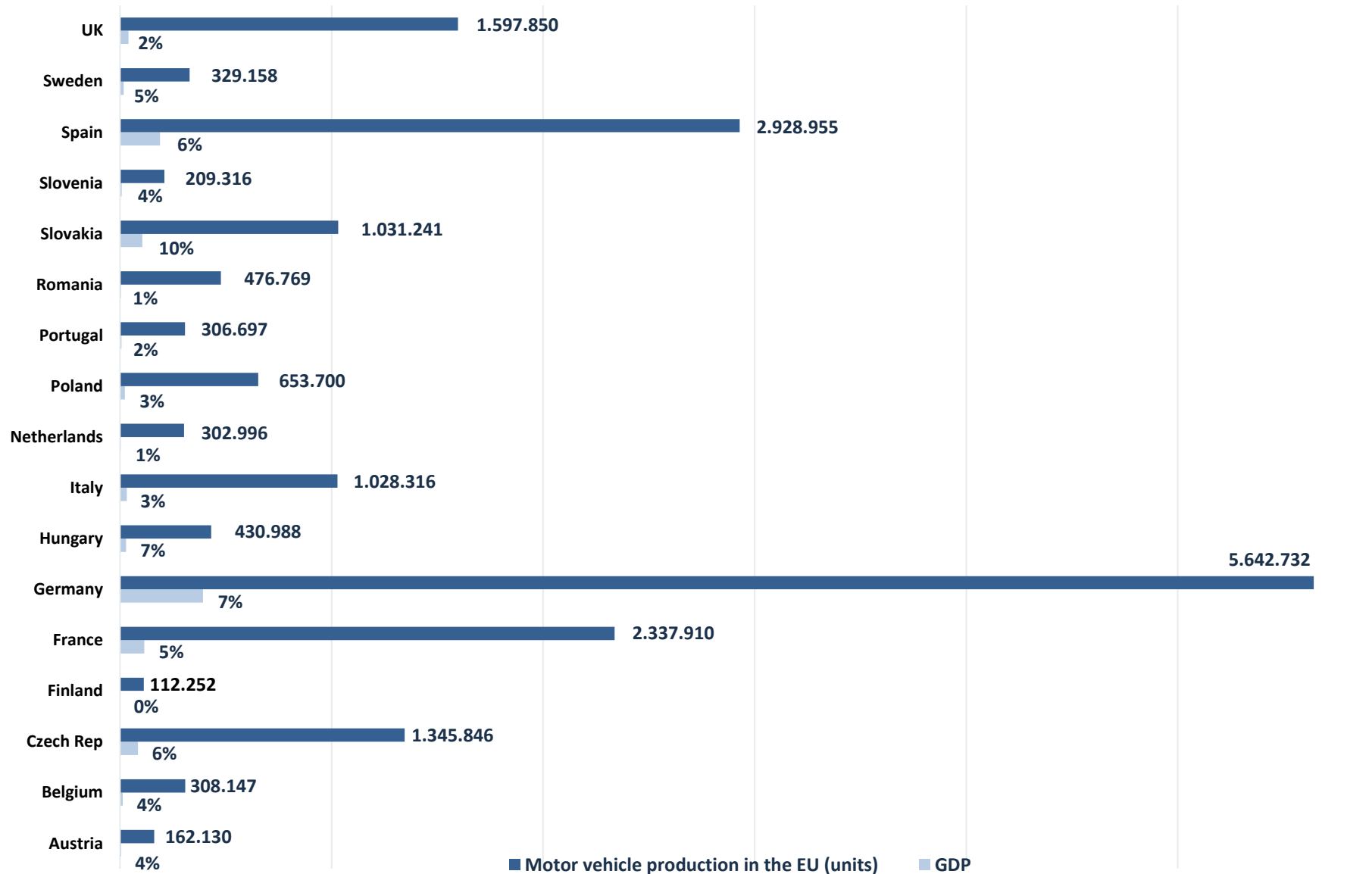
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MOTOR VEHICLE PRODUCTION AS SHARE OF GDP

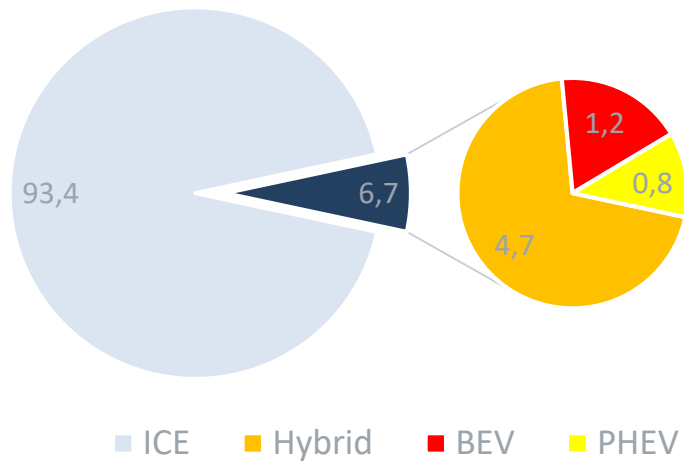


ELECTRIC VEHICLES

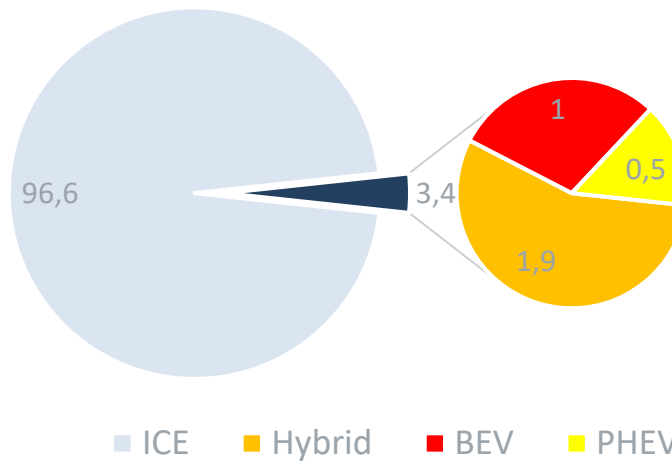


Vehicle registrations by powertrain and region - Q1.2019

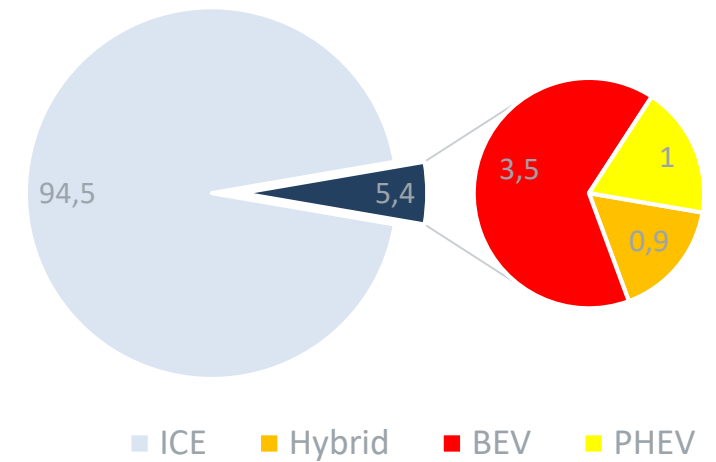
EU-Top 5



US



China

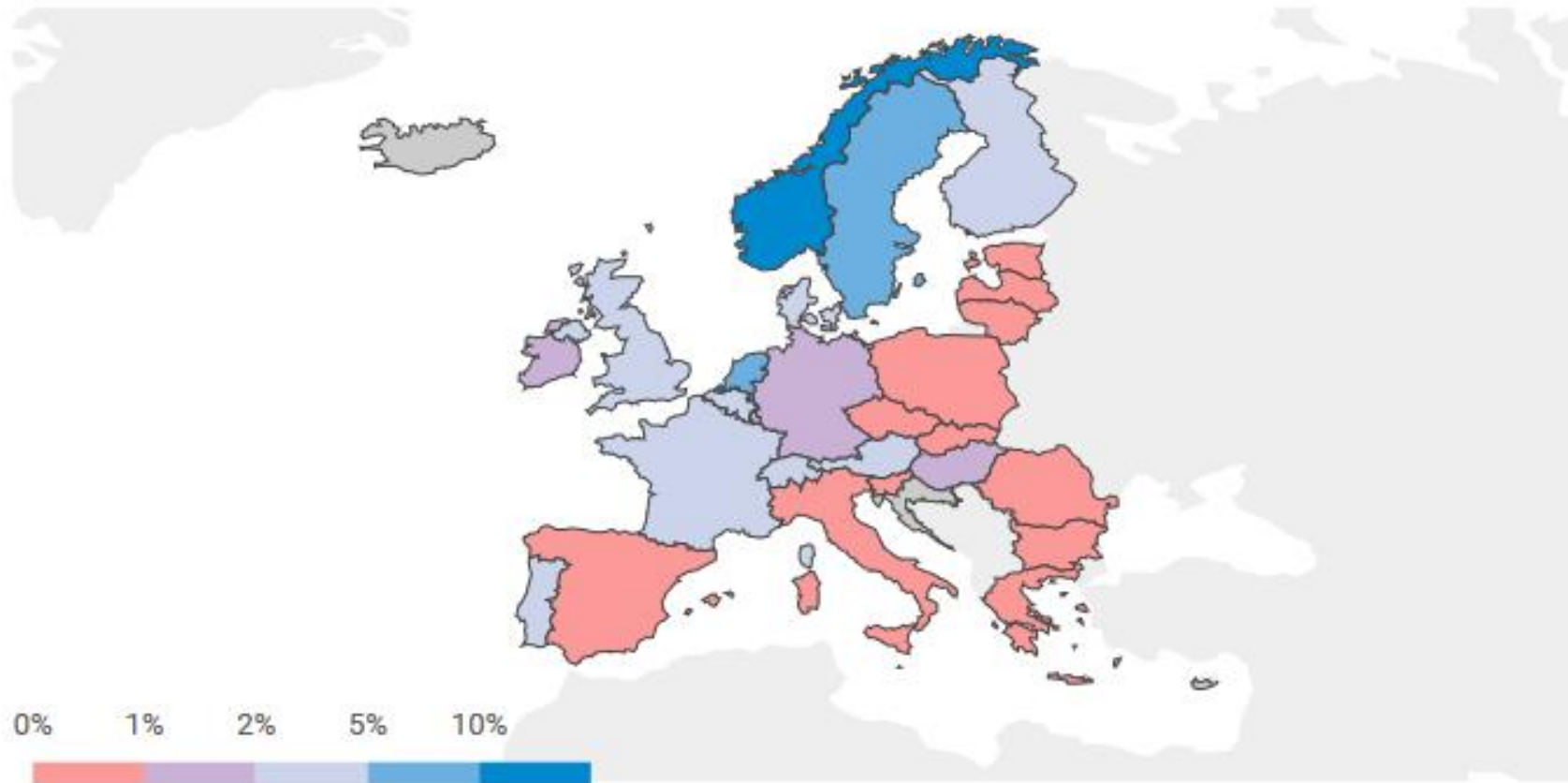


Source: PwC Autofacts

ELECTRIC VEHICLES



Market share of electrically chargeable vehicles | 2018



Top 5 countries with lowest share of electric cars in the EU sold in 2018

- Poland – 1,324 ECVs
- Slovakia – 293 ECVs
- Greece – 315 ECVs
- Czech Republic – 981 ECVs
- Lithuania – 143 ECVs

ECV market share of the 5 biggest EU car markets (cars sold in 2018)

- Germany – 67,658 ECVs
- United Kingdom – 59,947 ECVs
- France – 45,623 ECVs
- Italy – 9,731 ECVs
- Spain – 11,810 ECVs

EU+EFTA member states

Source: ACEA

DRIVERS OF CHANGE – MANUFACTURING & WORKFORCE

Industrial & market changes impact the competencies needed in the future

- Advanced manufacturing
- Advanced materials
- Complex and global supply chains
- Life cycle design, pollution prevention and product recyclability
- Active safety, automated driving and connectivity
- Decarbonisation, hybridisation and electrification
- Evolution of customer requirements



Source: Skills council report, GEAR2030

PROJECT BACKGROUND – AUTOMOTIVE SECTOR



DRIVES

- 7 % of the EU's Gross Domestic Product (GDP) and provides employment to 12.2 million workers (5.6 % of total EU employment).
- The sector is facing many structural changes,
 - electrification, new mobility concepts; growing use of connectivity and digital technologies in manufacturing & in vehicles;
 - relocation to low-cost countries and the development of global manufacturing systems.
- The automotive industry faces increased shortages of suitable workers (qualitative and quantitative).
 - an estimated 900 000 automotive jobs will need to be filled between 2016 and 2025.
- Half of the total job openings to 2025 are forecast to require high-level qualifications.

PROJECT BACKGROUND – AUTOMOTIVE SECTOR



Development and Research on Innovative Vocational Education Skills

Key facts:

- Erasmus+ funded project for 4 year
- From January 2018 to December 2021
- Successor of European Automotive Skills Council and WG1PT4 of GEAR 2030
- 24 partners representing industry from 11 countries, local authorities, training providers
- Steering Board is composed of ACEA, CLEPA and ETRMA
- Partnership between industry and academia to ensure that needs of industry are reflected by education institutions
- DRIVES is a key provider for EU-wide recommendation for the EU Commission



DRIVES PROJECT – OVERVIEW



- The Blueprint for Sectoral Cooperation on Skills in Automotive Sector
- Strategic cooperation in a given economic sector between key stakeholders



DRIVES OBJECTIVES



Key deliverables of the project

- Analyse key trends in the automotive, covering whole value chain
- Identify skills gaps for foreseen changes
- Define the skills and job roles needed in the future
- Provide clear guidance for the education providers what will be required from the side of the industry
- Ensure mutual recognition of the skills and jobs across the EU
- Create a market place for specialised job roles in the automotive sector
- Provide around 1100 trainings across the EU and across the education institutions





PROJECT PARTNERS

- Project Coordinator



- Steering Board Leaders



European
Automobile
Manufacturers
Association



EUROPEAN
TYRE & RUBBER
manufacturers'
association

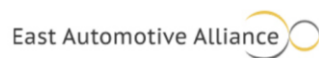


PROJECT PARTNERS

- Work Package Leaders



- Partners





PROJECT PARTNERS

- Associated Partners (Members of Steering Board)



Verband der Automobilindustrie



- Associated Partners:



- research partner

INNOVATION AWARDS 2019

4th editions

4 categories:

Environment

Safety

Connectivity & Automation

Cooperation



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PUBLICATIONS STAY INFORMED!



Positions papers

Press releases

Newsletter,
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Solutions providers for ever better Active and Passive Safety

Where do we come from and what is still in the pipeline?

60 YEARS OF ASSOCIATION

What is CLEPA? CLEPA - the European Association of Automotive Suppliers - brings together over 120 global suppliers of car parts, systems and modules, and more than 20 national trade associations and European sector associations.

What does CLEPA do? CLEPA is the voice of the EU automotive supplier industry, linking the sector to policy makers.

Join us now!

WHAT WE STAND FOR

- CLEPA supports the EU and UN in their common mission to speed the legislation impacting the automotive business.
- CLEPA is a credible partner to the EU and UN authorities.
- CLEPA actively endorses the development of competitive framework conditions.
- CLEPA ensures the consistent development of international trade and technical harmonisation.
- CLEPA promotes innovation and ensures EU funding for Research and Innovation.
- CLEPA fully complies with EU competition law and antitrust rules.

60 YEARS OF ASSOCIATION

CLEPA stands for Comité de Liaison des Fabricants d'Équipements de Véhicules Automobiles, or the Association of Automotive Suppliers.

The initial mission behind the foundation of CLEPA was the establishment of the United Nations Economic Commission for Europe (UNECE) 1958 Agreement which focuses on technical harmonisation in the automotive sector. CLEPA has ever since acted as the supplier's global representative in UNECE.

The automotive industry is one of the most regulated sectors in Europe and, today, the association is based in Brussels to facilitate contacts with the European Union and to act as an international non-profit organisation (INGO).

CLEPA was founded in Geneva in 1959 by the National Associations of Automotive Suppliers. Direct corporate membership was added in 1995. CLEPA also has European sector associations in its ranks.

Visit our website: www.clepa.eu and follow us

Connected and Automated Driving

The way forward towards ever safer, cleaner and more innovative mobility

48 VOLT: A PROVEN TECHNOLOGY TO REDUCE CO₂ AND NO_x EMISSIONS

WHAT IS IT ABOUT?

- Unlike a traditional 12V setup, a 48V system can cope with higher energy demand from the vehicle and equipment. 48 Volt electrical systems typically power stop-start motors, hybrid motors and turbochargers, allowing for smaller engines with better fuel economy and performance. 48 Volt systems handle hydraulic and mechanical accessories such as power steering, power brakes, water pump, radiator cooling and air conditioning.
- The system offers 4x the voltage and power at the same current compared to a conventional 12V architecture. It turns the vehicle, in combination with a petrol or diesel engine, into a "mild hybrid". For light urban vehicles, a 48V battery can also, function as one of the power units, propelling the vehicle and allowing emission-free driving at short range.

FULL VERSUS MILD HYBRID VEHICLES

- A full hybrid is equipped with a strong electric motor alongside a petrol or diesel internal combustion engine, that delivers additional energy as needed.
- The petrol or diesel engine in a mild hybrid does most of the work and the electric motor is there to assist. Unlike a plug-in hybrid, a mild hybrid does not require a cable to be recharged, but uses regenerative braking while driving instead.

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What does CLEPA do? CLEPA is the voice of the EU automotive supplier industry, linking the sector to policy makers.

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WHAT DOES CLEPA DO? CLEPA is the voice of the EU automotive supplier industry linking the sector to policymakers.

• CLEPA is a strong promoter of "technology neutrality" to reduce CO₂ emissions.

• EBV is one of the many technologies available today, achieving the above target.

• This matter is one of a series of publications, describing the various solutions.

What you should know about parts and components

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WHAT IS THE IMPORTANCE OF THE EUROPEAN SUPPLIER INDUSTRY?

- EU suppliers are world leaders in automotive technology for safe, sustainable and smart mobility.
- 10,000,000 jobs per year
- €75 billion trade of parts, systems and technology across Europe and the world
- Annual investment of €20 billion in R&D each year
- 75% of vehicle value is produced by suppliers
- €600 billion turnover each year
- around 3,000 suppliers are there for the automotive industry every year

DID YOU KNOW?

- +3000 CLEPA members from over 100 countries
- 56% of the total turnover of the Global Top 100 Automotive Suppliers is generated by CLEPA members
- 13 national associations combine forces with CLEPA
- 30,000 PARTS An average car is made of 30,000 parts and CLEPA members cover all of them

Visit our website: www.clepa.eu and follow us

More information on our [Brochures](#) and on our [website](#)