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automotive.
saarland

Regional automotive structural change

New technologies in the
Saarland automotive location

Dr. Pascal Strobel
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Staatskanzlei
SAARLAND



Europäische Union

EUROPÄISCHER FONDS FÜR
REGIONALE ENTWICKLUNG



wichtige Unternehmen
sociétés importantes | important enterprises

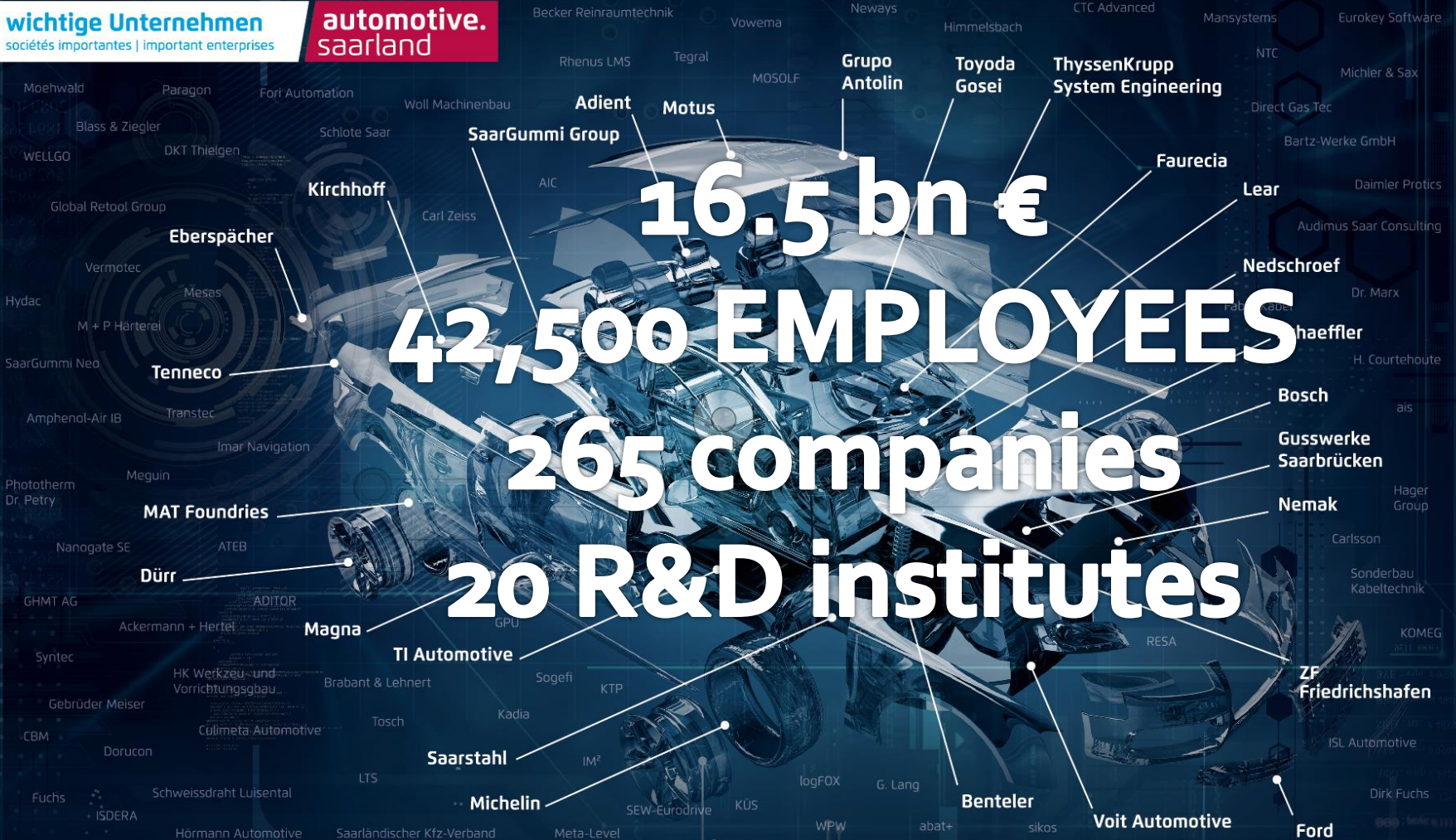
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16.5 bn €

42,500 EMPLOYEES

265 companies

20 R&D institutes



Fields of work in cluster work



Networking and further education



Key Account Strategy



Internationalization



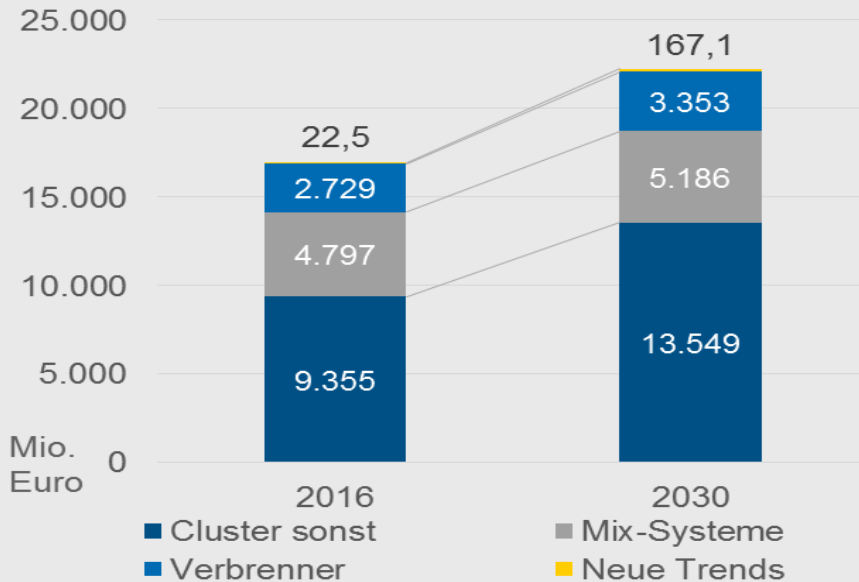
Saarland technology skills presentation



Structural change workshops

Study on the prospects of the Automotive Cluster Saarland

Challenges identified in our industry



Most likely scenario according to forecasts in 2017

Source: iw Consult / Fraunhofer IAO 2017

Cluster otherwise:

systems not directly affected by the trends, e.g. body, chassis, interior, exterior

Mixed systems:

usable for electric mobility, hybrid drives, pure combustion engines, e.g. transmissions

Combustion engines:

can be used for hybrid drives, pure combustion engines, but not for electromobility, e.g. combustion engine, exhaust technology

New trends:

electrical systems, automation, networking

1. Prototype construction bipolar plates for fuel cell stacks
2. Recirculation pump, air compressor, dosing valve for fuel cells stationary fuel cell
3. Handling of bipolar plates or foils
4. Development and production test stands for fuel cells
5. Hydrogen infrastructure and filling station
6. Cross-border transport of hydrogen in the Greater Region
7. GenComm project Electrolysis and H2 filling station
8. Gas filter and measuring cell for testing H2 cleanliness at 700 bar hydrogen filling stations, valves, sensors
9. Plant construction for the production of fuel cell components, collaboration in various research groups
10. Electrochemical storage: PEM fuel cells and redox flow batteries
11. Sensor system for hydrogen purity, embrittlement and storage
12. Methanisation of hydrogen, development of hydrogen compatible pressure sensors
13. Development of production systems for fuel cells, electrolysers, refuelling systems



14. Quality assurance of fuel cell components
15. Level meters in hydrogen tanks
16. Public transport, H2 buses and rail transport
17. Media-carrying lines for hydrogen vehicles
18. Assembly automation for fuel cells
19. Production of pressure vessels H2 production & storage
20. Assembly plants for fuel cells
21. HydroHub Fenne, hydrogen production on an industrial scale
22. H2 hybrid buses (battery/fuel cell)
23. Stationary fuel cell and hydrogen supply Steel production with hydrogen containing coke gas
24. Valves for hydrogen tanks and gas filling stations