

Innovation Network

# FutureCar

2020-2021 - Phase VI:

» Vehicle Technologies and Trends  
within the Transformation of  
Future Mobility«



FutureCar

# Fraunhofer Institute for Industrial Engineering IAO

## Profile of the institute and its eight areas of research

Urban Systems Engineering

Digital Business

Service and Human Resources Management

Organisational Development and Work Design

Mobility and Innovation Systems

Human-Technology-Interaction

Cognitive Engineering and Production

Responsible Research and Innovation



Fraunhofer Institute IAO 1981  
University of Stuttgart IAT 1991  
Founded



Prof. Dr.-Ing. Prof. e.h. Wilhelm Bauer  
Univ.-Prof. Dr.-Ing. Oliver Riedel  
Univ.-Prof. Dr.-Ing. Dr.-Ing. E.h. Dr. h.c. Dieter Spath  
Management board

### Numbers in 2018:



42.6  
M€ finance volume



173  
Publicly funded projects



637  
Employees



30  
EU-projects



226  
Scientific publications



337  
Industry projects

# Fraunhofer IAO - Mobility and Innovation Systems

Our knowledge can help you to solve the challenges of shaping the mobility of tomorrow

Open innovation and co-creation

Systematic planning of innovative and open value-added systems

Digital infrastructures and business models

Use of up to date technology and user acceptance

Sustainability, diversity and generationen-orientation

Efficient use of resources and circular economies

Integration of autonomous systems

Seamless integration of new mobility offerings

Supply of charging infrastructures and renewable energies

Maker movement and citizen-driven innovation

Research intelligence for modern innovation systems



# In a nutshell: The Innovation Network FutureCar

A platform for joint and pre-competitive research on automotive technologies and trends

- Support in understanding and solving the challenges of a transforming automotive industry
- Organisation and content by Fraunhofer and invited experts
- Three conferences per year plus additional services
- 2 year membership contract
- € 20 K membership fee p.a.<sup>1</sup>

## Industry pain points



Transformation of the automotive industry

⚡ New vehicle technologies

⚡ New market players

⚡ Increasing complexity

⚡ High uncertainty



Innovation in mobility pre-development

⚡ Need of innovative idea generation

⚡ Specific and unknown user needs

⚡ Need of open mindset and external input

## Solutions and benefits through FutureCar



Future technology and trend scouting

+ Identification of new technologies and trends

+ Validation of newly arising technologies

+ Providing a knowledge lead



Strength through collaboration

+ Bring together different players for new links and contacts

+ Identification of new partnerships

+ Exchange of opinions and collaborative learning



Gateway to Fraunhofer Society research

+ Gateway to the research world and scientific insights

+ Conjoint writing of funding applications

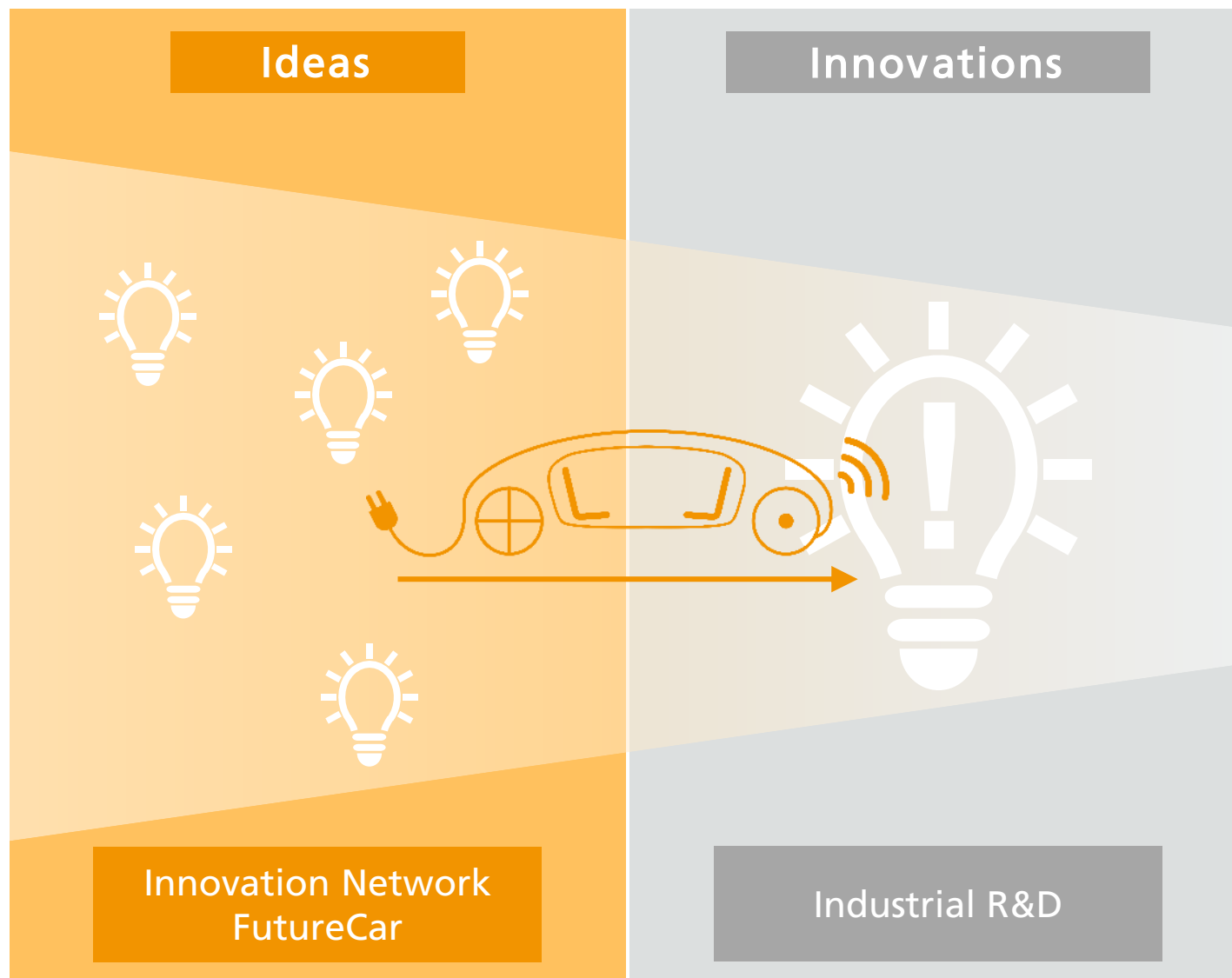
+ Support in research and development



## Innovation Network FutureCar

A platform for joint research and pre-competitive dialogue

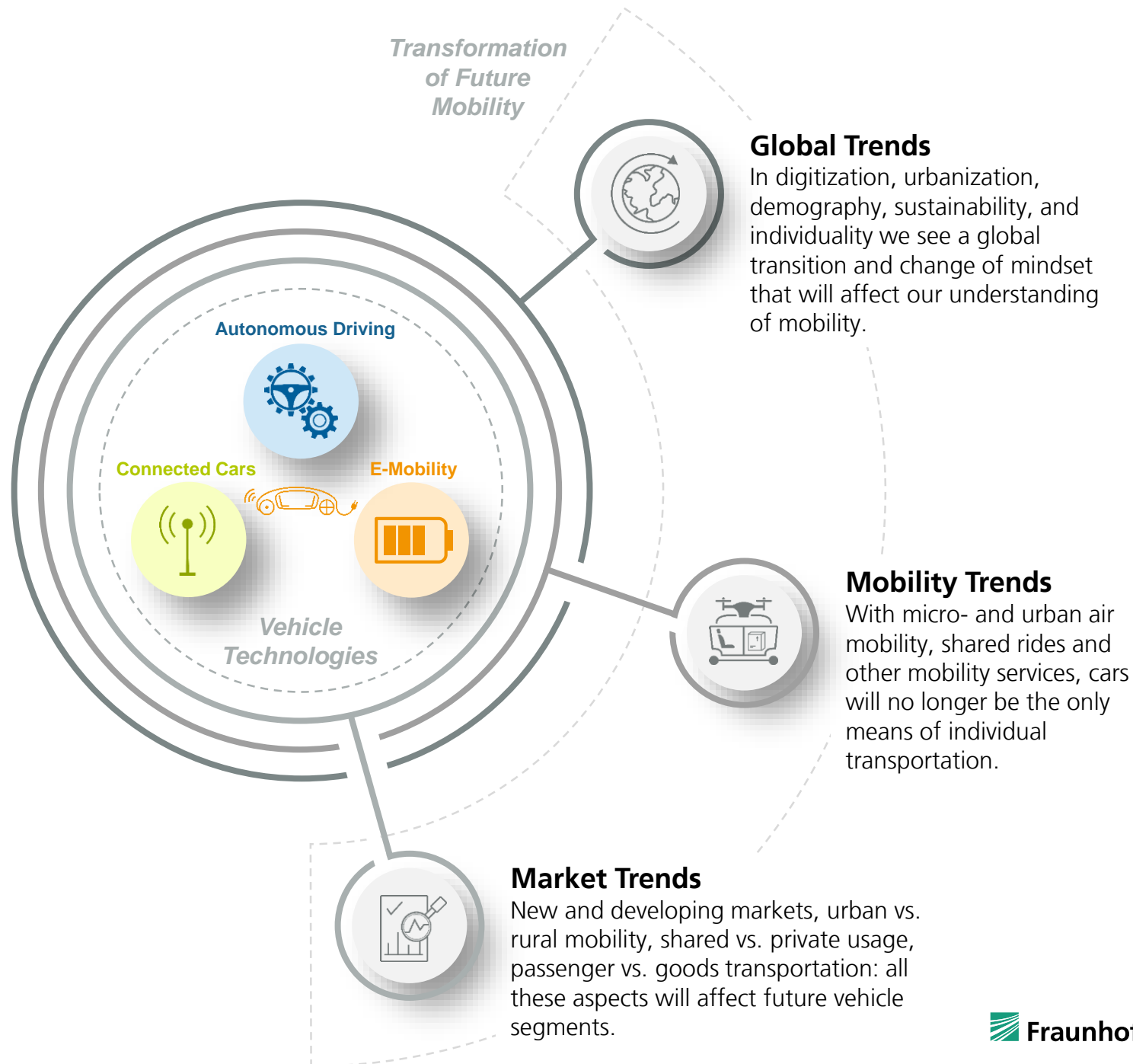
- Discussion of topics and ideas which are **ahead of corporate R&D** programs
- Open exchange of opinions leading to a **common understanding of early stage technologies**
- Meeting platform for like-minded innovators on a **multidisciplinary and cross-company** basis





## FutureCar Phase VI »Vehicle Technologies and Trends within the Transformation of Future Mobility«

- Major transformation of established mobility systems
- Future vehicles are highly influenced by the »CAE« technological drivers
- **Global trends, new mobility concepts and changing markets** are shaping this transformation
- Success in future automotive business requires this **holistic understanding of change**





## Global Trends

Social movements and worldwide challenges will affect future mobility on a global scale



## Mobility Trends

New means of transportation and services will revolutionize today's mobility understanding



## Market Trends

Shifting market demands will require customized mobility solutions





## E-Mobility

The exit from fossil fuels will require more than equipping vehicles with larger batteries



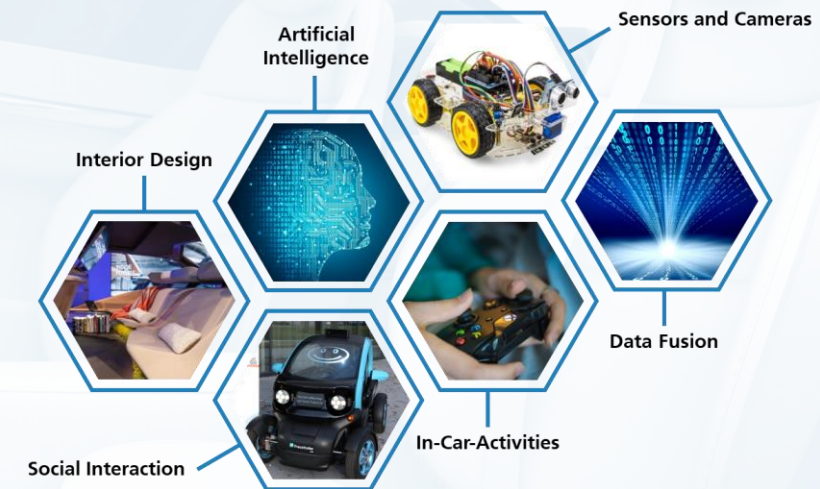
## Connected Cars

Connectivity and data-based services will enable the transformation towards fully digitized vehicles of the future



## Autonomous Driving

Increasing automation will change future vehicles as well as the entire mobility ecosystem



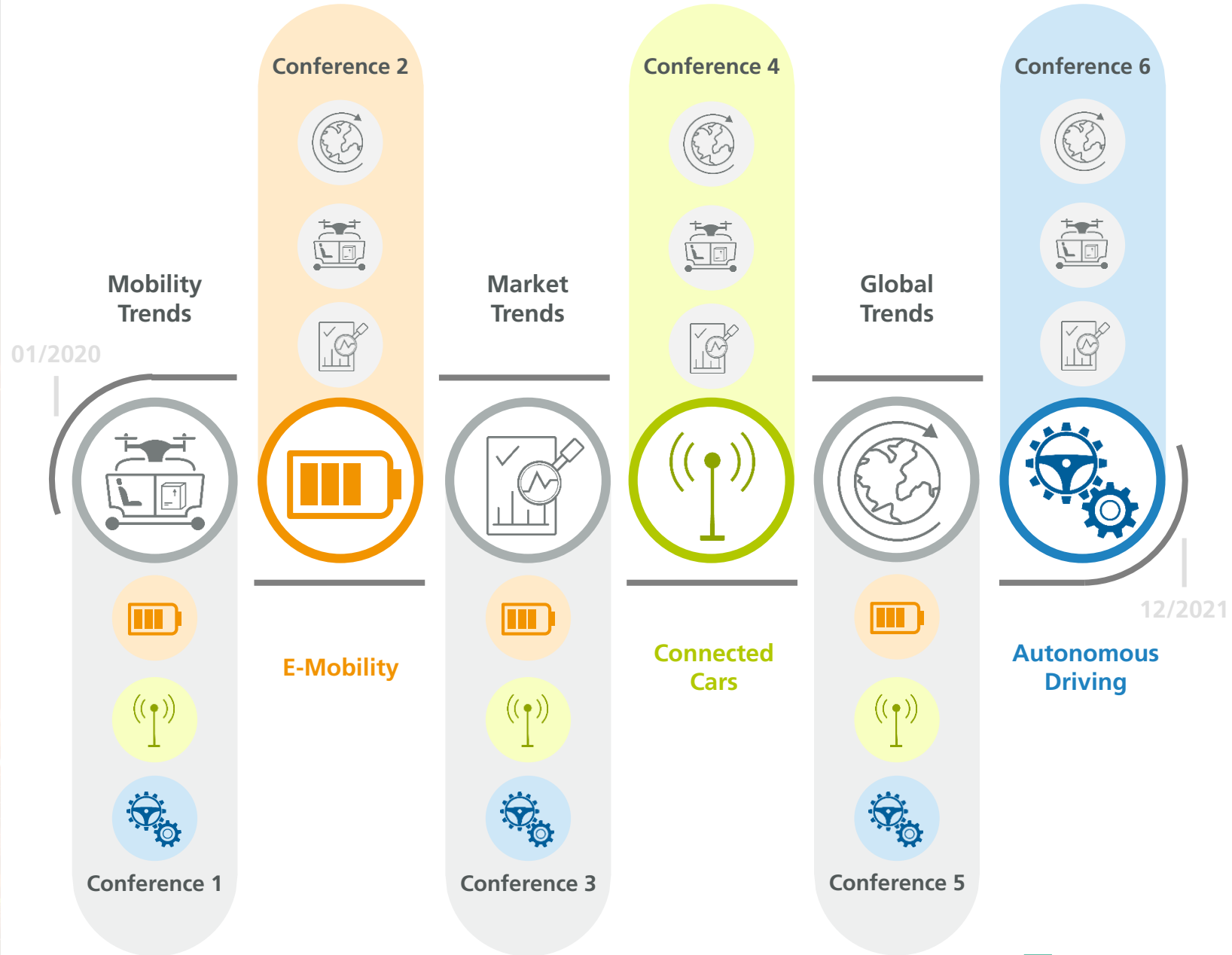




# FutureCar Phase VI

## Dedicated conferences on vehicle technologies and trends within the transformation of future mobility

- Six two-day network conferences are core elements of the Innovation Network FutureCar Phase VI
- Concentrating on one main topic and three side topics per conference. All technological drivers are addressed and discussed four times on different levels.





## Network conferences

Two-day conferences in changing locations with a versatile program are core elements of the FutureCar Innovation Network

- The broad program provides **insights in different company and research labs** for a cross-company exchange.
- During the conferences there is **time for in-depth discussions and networking.**

### Guided Tours



Visit of ZAL TechCenter Hamburg



**We visit and experience** R&D centers, labs, and creative workspaces.

- E-Drives Lab, Fraunhofer NAS
- Faurecia R&D Center, Hagenbach
- Floatility MakerSpace, Hamburg
- BMZ Battery Plant, Hanau
- e.GO Prototype Factory, Aachen
- Mobility Innovation Lab, Fraunhofer IAO

*Examples from last network  
Phase V in 2018/2019*

### Presentations



Speaker session at INC Aachen



**We present and discuss** current and relevant network topics.

- Presentations by IAO as impulses and discussion starters
- Presentation of research findings by other Fraunhofer Institutes
- Presentation of innovations by industry partners and external speakers
- StartUp pitches by selected automotive entrepreneurs

### Workshops



Design workshop "Creating trust in autonomous vehicles"



**We conjointly work** in group and creativity workshops.

- Brainstorming of new project ideas
- Elaboration of project proposals
- Discussion of current issues in automotive industry
- Collaborative development of future network topics and fields of interest



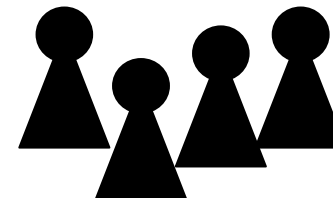
## Partners and network Members from industry and research meet external guest experts

- The FutureCar network brings together different players and experts in the fields of future automotive technologies and mobility trends.
- The permanent network members benefit from all provided contents, the additional services as well as the gateway and early stage access to cutting-edge research.



FutureCar

Permanent members



Guest experts in network meetings



Science and public sector



Organization and content development by Fraunhofer

Topic-specific presentations from scientific and political institutions

Industry



Joint financing through several industry partners

Topic-specific presentations by guest experts from the industry



## Additional services

### Support and additional information on a regular basis

- Innovation Networks base on collaboration and constant exchange of ideas about new technologies and their potentials
- Knowledge transfer through regular updates on the automotive industry and latest technology trends as well as interesting funding programs
- Additional meetings throughout the phase VI for content related networking opportunities

### Forum FutureCar:

- Annual, public conference on a future mobility topic
- Free of charge for FutureCar members



### FutureCar Newsletter:

- Monthly news covering the six pillars of E-Mobility, Connected Cars, and Autonomous Driving as well as Global Trends, Market Trends, and Mobility Trends
- Additional updates from industry and research

### Funding Program Screening:

- Quarterly update on relevant funding programs for public project applications in FutureCar topics
- Support in consortia finding and application process

### Special Meetings:

- TechDays, ThinkTanks, and RoundTables covering specific focus topics
- In-depth discussion and information during one day meetings



# Terms and conditions

## Two-year contract for a company-wide membership including six conferences and additional services

- FutureCar is collectively financed by all members and organized by Fraunhofer IAO
- Membership includes the attendance at all three conferences per year, including subsequent minutes, workshop results and presentations shared by the speakers
- Additional services during the whole network term and access to the Fraunhofer Society's entire research community

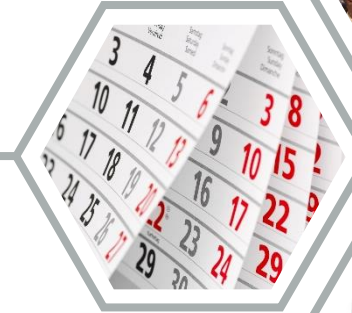
### Network Term

- Two-year contract, 01/2020 - 12/2021



### Network Schedule

- Three two-day conferences per year (~March, July, October)



### Membership Fee

- € 20 K p.a.
- € 10 K p.a. with SME<sup>1</sup> discount



### Meeting Attendance:

- Company-wide membership, not limited to specific groups or business units
- Four attendees max. per conference (exceptions possible)

### Network Language:

- Slides and newsletter: English
- Communication: German (and English if necessary)

<sup>1</sup> < 250 employees and either revenue < € 50 M p.a. or balance sheet < € 43 M p.a. (Art. 2 des Anhangs zur Empfehlung 2003/361/EG)



## Contact us!

We are looking forward to get in touch with you!

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