

Re-inventing the wheel: the Strategic Dialogue for the Automotive Sector Baden-Württemberg (SDA BW) as key element of an innovation and transformation strategy of the automotive region Baden-Württemberg



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State Agency for New Mobility Solutions
and Automotive Baden-Württemberg

11.1 Million

inhabitants (2020)

GDP in € (2020)

500.8 Billion



Highest spending on R&D (2019)

5,8% of GDP

over **25%**

of German automotive production

Future mobility solutions from Baden-Württemberg

Major cluster and network initiatives



State Agency for New Mobility Solutions
and Automotive Baden-Württemberg



Automotive in
Bewegung



www.e-mobilbw.de




Complexity of transformation

Electric Mobility is part of a profound process of structural change and affects the entire automotive sector

- **Structural change**
Change in value added in the automotive sector as a whole (incl. ICT and energy sectors)
- **Technological change**
Introduction of new technologies in the course of electrification and digitalization of mobility
- **Energy & Infrastructure Transition**
The electrification of mobility only unfolds its full positive effects when regeneratively generated electricity is used
- **Transportation/Mobility Turnaround**
The transport system and the social, cultural and economic aspects of mobility are undergoing fundamental change

How...

- can we make the growing transport of people & goods and the rising demand for mobility in the future as **safe, climate-friendly and resource-conserving as possible**?
- can electric, networked and automated mobility, combined with a permanently secure and affordable energy supply, become a **sensible development component** of the **cities and communities** of the future?
- Baden-Württemberg can transform itself from a world-renowned location for the automotive industry into a **successful provider of innovative and intelligent mobility solutions** within the global market?

 Both electrification and digitization of mobility are taking place at an increasing pace and are gaining elementary importance for Baden-Württemberg as a business location.

The Strategic Dialogue for the Automotive Sector in Baden-Württemberg

A Holistic Approach



The Strategic Dialogue for the Automotive Sector in Baden-Württemberg (SDA BW)

- Initiative of the state government of Baden-Württemberg since 2017
- Systemic approach to the transformation process of the automotive industry
- Strategic cooperation framework for politics, economy and society
- Around 470.000 people in Baden-Württemberg work directly or indirectly in the automotive industry.

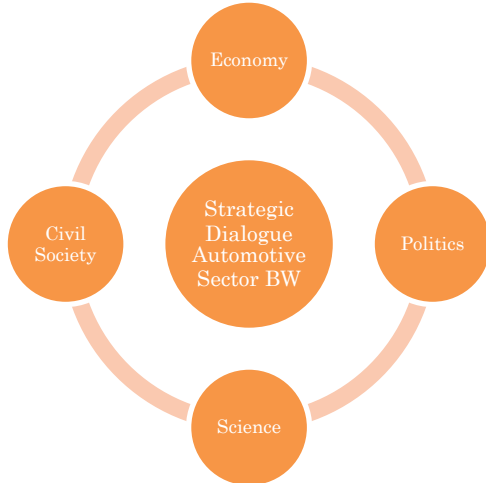
Starting Point:

- The transformation process towards sustainable and intelligent mobility is a disruptive, multi-dimensional and far-reaching challenge for all stakeholders.
- Both the automotive product and the entire processes of development, production or sales must be consistently questioned and adapted.
- The biggest challenge is not just the introduction of new technologies, products and services, but the temporal parallelism of change requirements and the complexity and dynamics of the transformation process.

The Strategic Dialogue for the Automotive Sector in Baden-Württemberg

Stakeholders and Goals

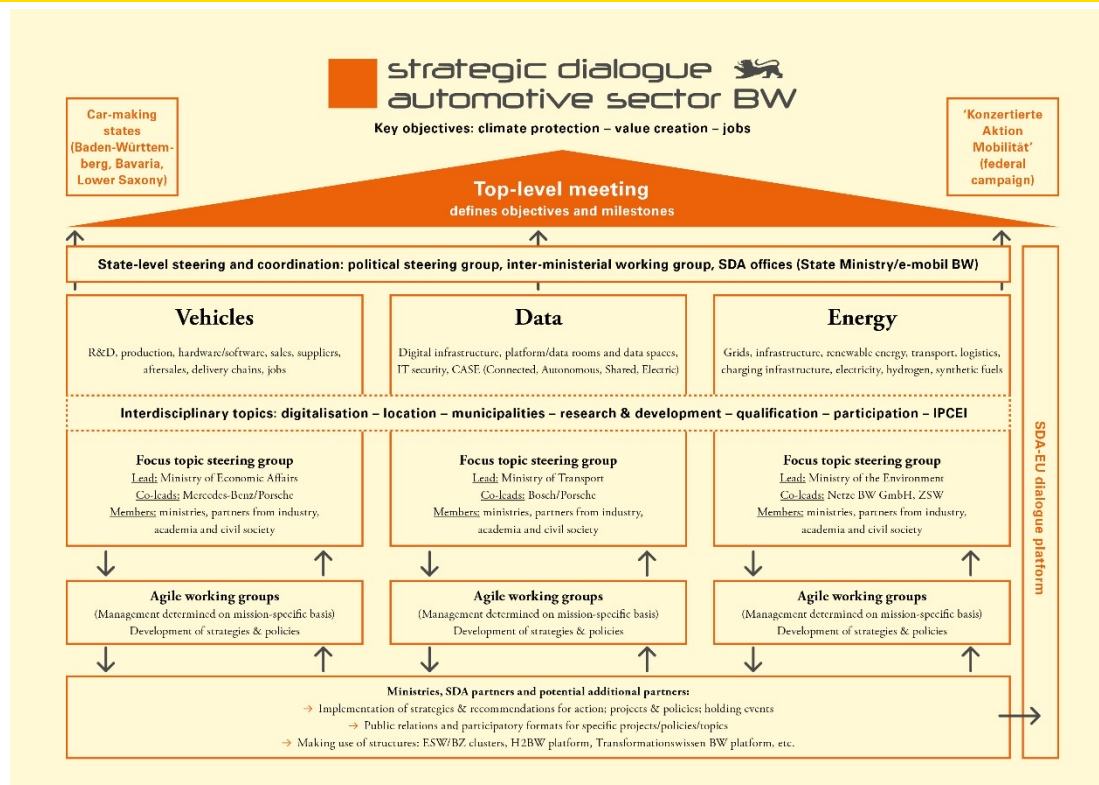
- The transformation requires a technological open, systemic and intersectoral approach that brings together actors from industry, science, society and politics in close cooperation and links them across the boundaries of industries and technologies.



- SDA BW aims at successfully shaping the transformation process in the automotive industry in Baden-Württemberg by:
 - indicating fields of action with high relevance for politics on State, Federal and EU level
 - opening up opportunities for cooperation and networking
 - identifying and promoting instruments that are suitable for the transformation process of the automotive industry and the shift towards climate friendly, automated and electric mobility
 - developing recommendations for politics and industry

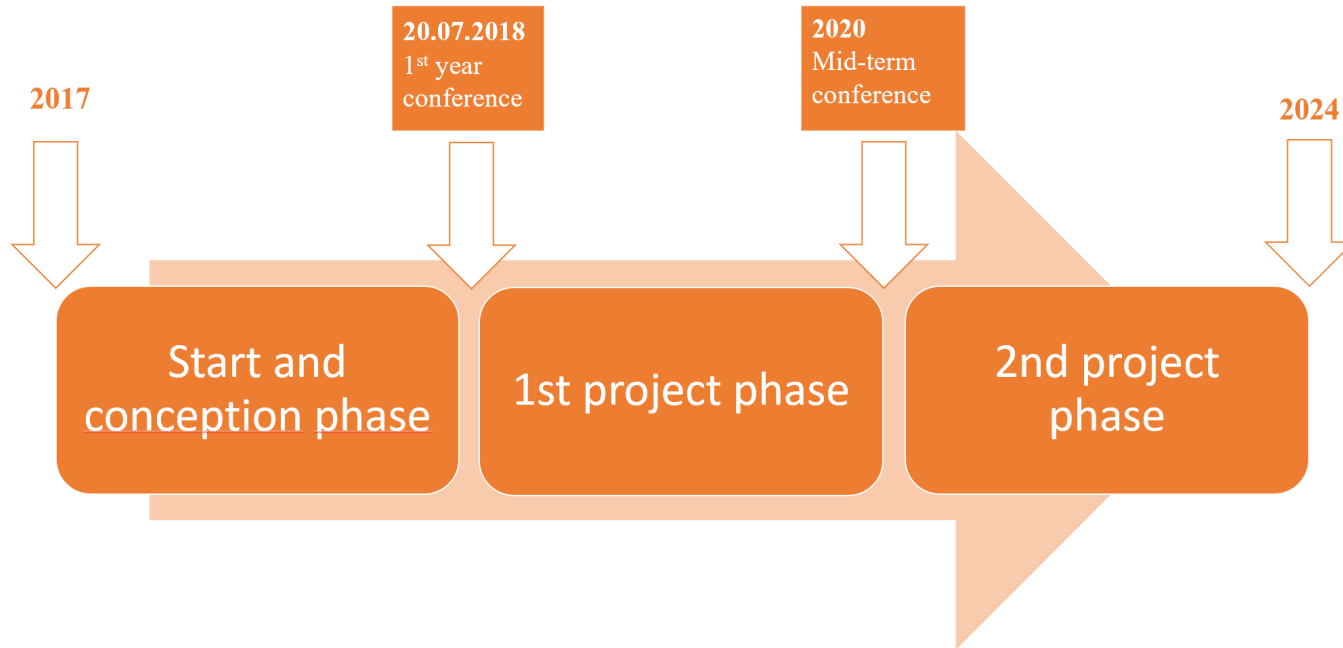
Strategic Dialogue for the Automotive Sector BW

Managing the transformation process: how do we collaborate?



Phases of the SDA

An approach of economic change management



Source: e-mobil BW,
The Road to the
Mobility of the Future
runs through Baden-
Württemberg (2018)

SDA BW – facts and „lessons learned“

Project phases I and II:

- Launched in 2017, phase I of the Strategic Dialogue was concluded with an interim review conference in 2020.
- The second half of the Strategic Dialogue (2020-2024) is designed as a visibility and ramp-up phase.

Results so far:

- 52 projects in ten focus fields, involving 300 experts from industry, academia, research, and civil society.
- Strengthened interdepartmental and intersectoral cooperation
→ e.g. joint qualification activities by three different ministries

Accelerating the automotive transformation by using a dual-mode strategy



Scaling



Innovation for climate neutrality



Spotlight 1

Research and development projects in the field of technology

Battery

AgiloDrive: a new, agile production system for electric motors based on modular product and production kits as well as fully digital process chains

DigiBattPro 4.0: holistic digitalization of battery cell production

Fuel Cell

HyFab: research factory for fuel cells and hydrogen

Automated Driving

U-Shift: driverless, electrically powered vehicle concept which defines a new type of mobility by separating the driving module and the transport capsule

Spotlight 2

Development and roll-out of charging infrastructure

Rollout Charging Infrastructure

SAFE BW: a network of around 400 charging stations in a grid of 10 x 10 kilometers

Follow-up projects for consolidation and further expansion of charging infrastructure

Grid Integration

INPUT: pilot projects for the intelligent grid connection of parking garages and underground garages

NETZLABORE: projects of the network operator Netze BW to investigate under real conditions how the integration of electric vehicles into the power grid can be successful

Spotlight 3

Real laboratories and demonstration projects

Fuel Cell Technology

H2Rivers and H2Rhein-Neckar: a showcase for fuel cell mobility in the Rhine-Neckar metropolitan region in the cities of Mannheim, Heidelberg and Ludwigshafen

Automated Driving

RABus: real laboratory for automated bus operation in public transport in the city and in the country in Friedrichshafen and Mannheim

Testing Field Autonomous Driving Baden-Württemberg (TAF BW): real laboratory for applications of automated and networked driving, which was set up in Karlsruhe, Heilbronn and Bruchsal

Spotlight 4

Research infrastructure, transfer measures and platforms

Research Infrastructure

InnovationsCampus Future Mobility (ICM): the University of Stuttgart and the Karlsruhe Institute (KIT), in cooperation with other research partners from Baden-Württemberg, are pooling their expertise to develop new mobility products as well as production technologies and systems for sustainable and digital mobility of tomorrow.

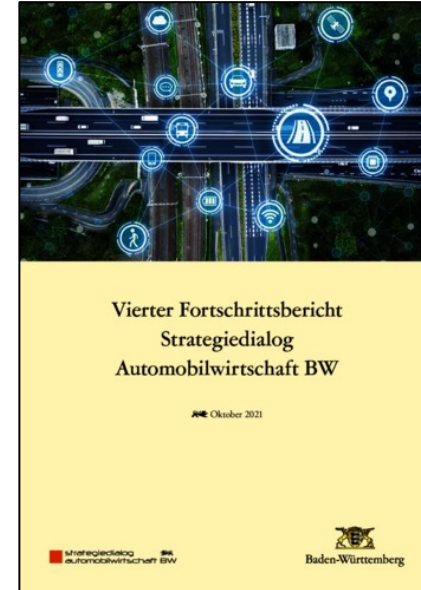
Knowledge transfer and enabling

Transformationswissen BW: To support medium-sized companies in Baden-Württemberg, the information centre for the transformation of the automotive sector in Baden-Württemberg (Landeslotsenstelle Transformationswissen BW) offers a new platform that provides orientation in the transformation process of the automotive industry. The state agency for new mobility solutions and automotive, e-mobil BW, coordinates this pilot office that was created as part of the SDA BW.

Presentation by
Katja Gicklhorn
Session G3

More information

- German website with additional information:
<https://stm.baden-wuerttemberg.de/de/themen/strategiedialog-automobilwirtschaft/>
- English website (hosted by e-mobil BW):
<https://www.e-mobilbw.de/en/network/strategic-dialogue-for-the-automotive-sector-in-baden-wuerttemberg>
- annual report on Strategic Dialogue for the Automotive Sector Baden-Württemberg (available in German language)



Thank you!

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e-mobil BW,
Wolfgang Fischer
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