Baden-Württemberg

Eighth progress report on the strategic dialogue for the automotive sector in Baden-Württemberg

November 2025

Annual Progress Report 2025

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Interview with the Minister-President

The strategic dialogue for the automotive sector in Baden-Württemberg (SDA) has now run for more than eight years. What do you believe to be the most important of its findings – and what will be its legacy beyond 2025?

When we began the SDA, it was clear that the change within the automotive sector goes further than anything we have witnessed before. We therefore consciously set up the SDA not only to accompany this transition, but to actively shape it.

That made it essential to bring together stakeholders from the economy, academia, politics and civil society for the long term. Close cooperation has fostered a new approach to working together; one that will hopefully persist far beyond the time scale of the SDA. We have established structures that will continue to pay dividends in the future, including the Transformationswissen BW guidance office as well as the research and innovation networks.

The SDA is emblematic of the strengths of Baden-Württemberg: collaborating on solutions, taking pragmatic action and consistently investing in the future. All this is firmly anchored in the DNA of our state and will help us overcome the challenges we face.

The change within the automotive sector over recent years has been profound. What is Baden-Württemberg's current economic, technological and social standing in the context of international competition?

Without question, the present situation is a major test for the automotive sector in Baden-Württemberg. There are multiple ongoing crises, ranging from geopolitical tensions to disrupted supply chains and huge increases in energy prices. At the same time, the surge in technological change is proving a challenge even within robust industries.

Yet Baden-Württemberg has a very sound foundation for remaining successful. It has an extremely strong industrial base, a dense network of research institutes and universities, and many highly qualified experts. The SDA stakeholders have worked together closely to devise solutions that can tackle the challenges posed by the transition. Examples include the qualification programmes for suppliers, the Zukunftswerkstatt 4.0 innovation hub for trade and service, the expansion of test and research infrastructure in the fields of batteries, hydrogen and digital vehicle development, and new formats such as the FOSS community for collaborations relating to automotive software. Such initiatives help spread knowledge and support companies as they transition to a new age of mobility. Our firms and their employees have already demonstrated great adaptability in this difficult period, finding ways to integrate new technologies into production and development.

Let us not be under any illusions: we are in the midst of considerable change. But Baden-Württemberg has repeatedly proven its ability to seize on the opportunities that change presents, with our hard work, innovative strength and cohesion always providing the decisive edge. We will need to draw on these same virtues once again in order to successfully shape the transition. I am convinced that Baden-Württemberg will remain a shining example when it comes to successfully implementing change.

New technologies such as artificial intelligence, data-based mobility and the circular economy are rapidly changing the industry. What role does Baden-Württemberg play in this regard?

Technological progress is the foundation of our prosperity. But it doesn't just occur by itself – we have to make it happen. In recent years, Baden-Württemberg has strategically positioned itself at the interface to future trends such as artificial intelligence, software development for vehicles, and climate-friendly production that makes efficient use of resources. If Baden-Württemberg wants to remain a leading industrial location in the future, we have to ensure that we not only participate in these fields but also make our own special mark.

Our stand-out strength is our blend of engineering skill and digital expertise. With initiatives like the Innovation Park AI in Heilbronn, the living labs for automated driving, and the research centres for battery cells and hydrogen technologies, we bridge the gap between research and industrial application. This is decisive for ensuring that new technologies are not only crafted in labs but also create value in Baden-Württemberg.

Winfried Kretschmann, Minister-President of Baden-Württemberg

We have always succeeded when combining new technologies with a sense of responsibility. I know that if we retain this mindset, we will remain a leader in the digital and ecological technologies of the future.

The technological transition can succeed only with the right personnel and with social acceptance. How can Baden-Württemberg support companies and individuals through this change?

The transition is not an abstract process: it has a tangible impact on people who work in companies and workshops or who are currently in training. When technologies change, so too do job descriptions.

In the context of major upheaval, it is particularly important that the people of Baden-Württemberg are not left behind. Our efforts to deal with the transition must not be limited to strategy papers and funding programmes, they must be felt in everyday life through secure jobs, new opportunities for gaining qualifications, and modern infrastructure that makes life easier. When people see that change also delivers improvement, that establishes trust. And there cannot be a successful future without trust.

Many of our companies, especially small and medium-sized enterprises, are faced with enormous change. They need to develop new skills, reimagine their supply chains and – in difficult economic circumstances – invest in future technologies while keeping their workforce on board. The SDA has consciously created structures to support companies in this phase, enabling them to access knowledge, tap into options for further qualification and develop new business models.

Mobility needs energy. What is the situation for Baden-Württemberg in terms of supply reliability and cost-effectiveness?

A secure and affordable energy supply is the prerequisite for a functioning economy and a successful transition. The last few years have shown us how vulnerable global energy markets are.

Within the SDA, energy has been classed as a dedicated Focal topic: from the very beginning. The motivating factor was not only climate action, but specific concerns relating to supply reliability, grid infrastructure and cost-effectiveness. Together with industry, grid operators and research institutes, we worked to develop practical strategies for enabling the ramp-up of electric mobility and hydrogen technology. These strategies include interdisciplinary agreements on the integration of charging infrastructure into the grid, the establishment of hydrogen refuelling infrastructure for commercial vehicles, and the funding of in-state projects relating to storage and the grid.

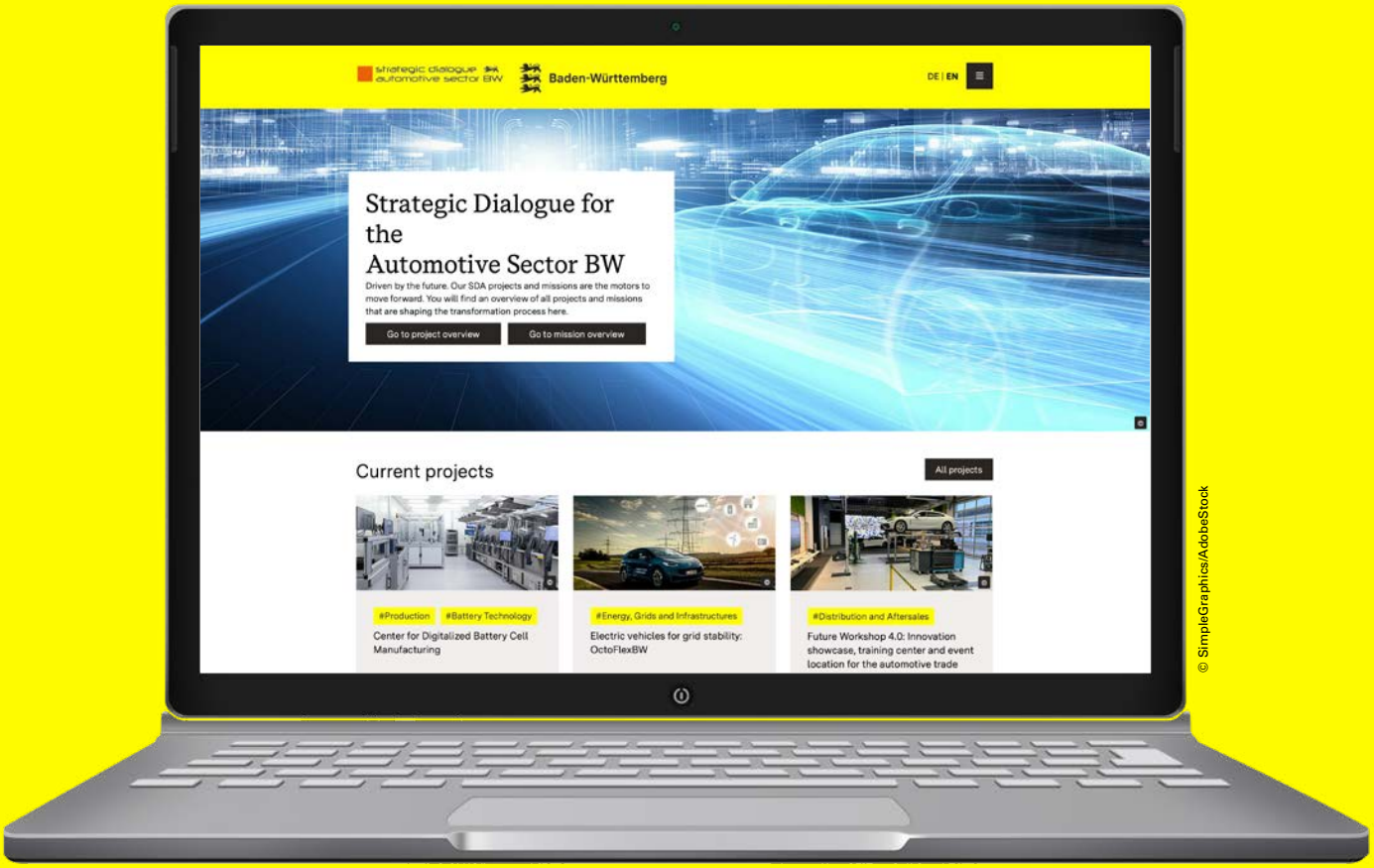
Such projects are not an end in themselves, but help give companies planning security.

Looking ahead, how should Baden-Württemberg continue to develop over the coming years and what role should the automotive sector play in this regard?

Baden-Württemberg has been shaped by the automobile for more than a century. This industry has been the bedrock of our prosperity and it will remain a core pillar of our state into the future, even as it changes and evolves. And it is precisely this change that the SDA supports.

For more than eight years, stakeholders from the economy, academia, politics and wider society have worked to shape the transition of our leading sector. This process has created something that goes far beyond individual projects, representing a new form of collaboration that builds trust while powering operational solutions across different sectors and organisations.

I believe that Baden-Württemberg is in a good position. Not because everything will be easy, but because we are a state that takes responsibility and sticks together. We have understood that change also presents opportunity. If we can preserve this spirit, then Baden-Württemberg will continue to demonstrate that economic strength, innovation and social responsibility are not mutually exclusive – but instead jointly point the way to a positive future.



Project overview and missions

available at www.sda.e-mobilbw.de/en

Year eight of the strategic dialogue for the automotive sector in Baden-Württemberg (SDA)

The strategic dialogue for the automotive sector in Baden-Württemberg (SDA)

The automotive sector is one of the most important branches of the Baden-Württemberg economy. Generating approximately a third of industrial gross value added in the state, it is strongly geared towards exports, features a high innovation density and accounts for more than 470,000 jobs – from vehicle construction and the supplier industry to machinery construction, materials, software, electronics, logistics, energy supply and the vehicle trade. Baden-Württemberg has responded swiftly to the profound technological, economical and geopolitical upheaval occurring in this field: back in 2017, it formed the strategic dialogue for the automotive sector in Baden-Württemberg (SDA) as an independent working and dialogue format providing structured guidance for the transition of the sector.

The SDA creates a framework for a continuous exchange between politics, the economy, academia and social stakeholders. In an increasingly complex environment, it helps with the early detection of challenges, joint development of problem-solving approaches and implementation of specific initiatives. Though it plays no role in steering the transition, it nevertheless boosts mutual understanding, promotes coordinated activities and makes it easier to utilise existing resources and skills in the state.

In terms of content, the SDA is divided into three strategic focal topics – vehicles, energy and data – which are each coordinated by a state ministry and crafted in conjunction with partners recruited from practical settings. These focal topics are backed up by the three interdepartmental 'interface topics' of digitalisation, research and development, and participation. In this way, it is ensured that technological, academic and social perspectives are taken into account in all areas.

Implementation is largely project-specific, with recent cases often favouring a breakdown into 'missions': time-limited working formats that Focus on a particular topic and respond to specific challenges. Strategic input and progress assessments are submitted once a year in the form of a top-level meeting during the SDA annual event. Here, representatives from the State Government, the economy, academia, and further partners discuss the latest developments and challenges. In-depth talks are held within the steering groups of the respective focal topics. The SDA is coordinated by a joint office at the Ministry of State Baden-Württemberg and at the state agency e-mobil BW.

The breadth of topics handled by the SDA reflects the interlinked nature of the transition: not only is it about new drives and charging points, it also involves the interplay of industry, energy, digitalisation, qualification and social acceptance. The focal topic of 'vehicles' concentrates on innovative strength, employment and industrial value creation, for example via new vehicle architectures, software integration and the qualification of specialist personnel. 'Energy' is the focal topic that deals with sound infrastructure, incorporating issues such as high-performance charging, hydrogen for heavy goods traffic, grid integration and regulation. In contrast, the focal topic of 'data' brings together digital infrastructure, open-source software, artificial intelligence and connected mobility solutions. These are complemented by the trio of 'interface topics' that influence all three focal topics: 'digitalisation' addresses smart city applications and cybersecurity, 'research and development' involves pilot projects and the transfer of technology, and 'participation' encompasses dialogue-based formats and regional participation.

Examples of recent missions within the SDA include the establishment of a free and open-source software community (FOSS) for developments in the field of vehicle software, combined charging and hydrogen infrastructure (PiLaTes, LWT), automated shuttle traffic (RABus), municipal mobility solutions (InKoMo BW), and qualification and consulting options for small and medium-sized enterprises via the transition knowledge platform Transformationswissen BW. Many of these missions are pilots, initiate follow-up projects or provide inspiration for new funding instruments and regulatory developments.

The SDA is increasingly having an impact beyond Baden-Württemberg. This became particularly clear with the Strategic Dialogue on the Future of the European Automoti-

ve Industry, which was launched by the EU Commission in 2025. Issues such as decarbonisation, digitalisation, employment, competitiveness and resilience are at the heart of this format, with many running along the same lines as in the SDA. Not only is Baden-Württemberg a catalyst in this regard, findings from the European process also flow back into its own state-level projects, networks and political decisions. In addition, Baden-Württemberg's experiences influence German-wide strategic processes and the state also benefits from an active exchange with other regions.

The SDA has proven itself a viable format in the transition process over the years. It brings together a range of stakeholders for the long term, translates complex challenges into shared working processes and generates the conditions required for specific solutions in the state. Pilot applications have been guided towards practical implementation, companies and municipalities integrated into innovation processes, and political decisions based on a broader foundation of knowledge. In a phase of growing uncertainty, global market turbulence and technological upheaval, the SDA is a key means of structuring an effective exchange, detecting where action must be taken at an early stage and providing a pathway to purposeful implementation. It is particularly strong in promoting continuous interdepartmental collaboration. Operating in a complex field that does not offer easy solutions, the SDA creates reliable working structures, boosts trust and enables coordinated action to be taken by politics, the economy, research and wider society.

Focal topic: vehicles

Working report

Mastering the structural change within the vehicle industry is one of the decisive tasks for Baden-Württemberg as an industrial location, and will remain so in the coming years. Yet activities in this regard no longer centre solely on the technological shift to electrified drives. Instead, it is increasingly clear that these developments are impacting the entire value chain and calling into question existing structures within the sector. Innovative technologies and new value creation models are hugely important factors in this upcoming transition. Research and development, manufacturing, and software integration must be combined and at the same time fundamentally reimagined.

The focal topic 'vehicles' addresses this structural change. Over the last eight years, priority has been given to the strategic anchoring of forward-looking technologies and their industrialisation in the automotive sector. Many of the projects initiated thus far, such as in the field of battery cell production at the Center for Digitalized Battery Cell Manufacturing located at Fraunhofer Institute for Manufacturing Engineering and Automation (IPA) and in the autonomous driving undertaken within the collaborative project 'U-Shift', are a demonstration of academic excellence and a focus on industrial application.

Another trailblazing development is the decision made by imec, a world-leading research and innovation hub for nanoelectronics, to choose Heilbronn as the site for a new semiconductor competence centre known as the Advanced Chip Design Accelerator (ACDA). This will boost the application of chiplet-based technologies, sensor systems and AI components in the automotive sector.

Software and digitalisation (in the 'software-defined vehicle') have been identified as vital factors for future competitiveness. The funding programme for the free and open-source software community (FOSS), which was launched in early 2025 in the form of consulting vouchers, offers specific support to small and medium-sized enterprises looking to expand their expertise. This has been complemented by the opening of a central contact hub located at e-mobil BW.

Structural change poses major challenges, especially for small and medium-sized enterprises in the supplier industry and in the vehicle trade. In order to provide direction to this evolving target group and ensure the transfer of knowledge relating to strategic decisions, a guidance office has been established and consolidated at e-mobil BW. This step was taken as part of the Transformationswissen BW project funded by the Ministry of Economic Affairs, Labour and Tourism Baden-Württemberg. The guidance office is tasked with simplifying access to existing target group-specific support programmes. It currently works with more than 40 partners in the areas of qualification, networking and knowledge transfer. The development and transfer of knowledge in the sector is also furthered by topic-specific events with regional partners and the publication of various brief topic-specific studies.

The 'Zukunftswerkstatt 4.0', a future car repair shop and future car dealership has been formed in Esslingen am Neckar to provide targeted support to the vehicle trade during the transition. The programmes are expressly aimed at companies in the vehicle trade. It assists car dealerships and car repair shops in dealing with the manifold changes resulting from the technological transition process. The goal is to provide a current and future overview of innovative technologies and systems for the benefit of sector-specific stakeholders at every stage of customer processes in sales and aftersales. In addition, the processes practised at car dealership companies are critically assessed and new business models are tested.

International networking and multifaceted in-depth collaboration with international partners are likewise important when it comes to effectively guiding and shaping structural change in Baden-Württemberg. Close cooperation with locations such as Ontario in Canada and delegation trips to destinations including Finland, China and the USA have fuelled a fruitful exchange that can be used to bolster international competitiveness.

Future success will depend on the ability to shore up the progress made so far, building on successes relating to the focal topic 'vehicles' and to the SDA in general.

© Katja Bartolec, Ministry of Economic Affairs, Labour and Tourism Baden-Württemberg

Dr. Nicole Hoffmeister-Kraut,
Minister for Economic Affairs, Labour and Tourism Baden-Württemberg

The automotive sector is currently facing a wide-ranging set of challenges. Customer hesitancy with regard to electric mobility, dynamic developments on the global market, and trade restrictions are putting our manufacturers and suppliers under pressure. My priority is clear: we want to create the right framework conditions to strengthen Baden-Württemberg's role as a world-leading automotive location, thereby securing value creation and future-proof jobs for our state. Innovation, digitalisation, the integration of future technologies into the vehicle and competitive location factors are key to overcoming these crisis conditions.

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Britta Seeger, Member of the Board of Management of Mercedes-Benz Group AG, Human Relations and Labour Director

The German automotive sector is tasked with navigating substantial challenges. Decisive action is needed, not only due to the transition in drive technology but also in response to the ongoing disruption in both the global economy and trade policy. For Germany to maintain its status as an industrial location, it is essential to embrace competition and set the course for the future. Highly skilled workers are our most important resource in this regard. With 'skilled workers for the automotive sector', a mission forming part of the SDA, we have defined the action areas that are decisive to the success of our sector. This requires collective action.

© Dr. Ing. h.c. F. Porsche AG

Andreas Haffner,
Member of the Executive Board, Human Resources and Social Affairs, Dr. Ing. h.c. F. Porsche AG (2015-08/2025)

Our sector is undergoing fundamental change. Framework conditions have evolved in the blink of an eye, with proven business models frequently rendered obsolete. Suppliers and OEMs are feeling the pinch, which makes the active exchange within the SDA all the more vital. Among the shared successes to date is the Transformationswissen BW guidance office: as part of a holistic approach in the wider context of the transition, this office advises small and medium-sized enterprises on their opportunities. With the transition taking on ever more radical proportions, we must remain committed to quick and concerted action in the future.

Focal topic: data

Working report

In 2025, work within the key topic of 'data' was shaped by global political issues and economic challenges. How will Baden-Württemberg's export-focused automotive sector overcome US tariffs and price wars with Chinese OEMs?

The dialogue for the automotive sector in Baden-Württemberg (SDA), which was launched in 2017, has lost none of its topicality – and the transition remains the core task. The SDA's key topic of 'data' works on technological fields in which the Baden-Württemberg automotive sector will have to continue pushing innovations to succeed on the global markets in the future.

1. Self-driving stack: In order to enable fully driverless mobility, software, sensors and actuators must be upgraded to ensure they act safely in all traffic situations. Baden-Württemberg is aiming high: Self-driving systems must contribute to a 'Vision Zero' future with zero road fatalities. Many SDA projects have worked towards achieving this vision. Citizens could gain an impression of the future of mobility as passengers in a self-driving shuttle at the Real-world laboratory for Automated Bus operation (RABus). At the Test Area Autonomous Driving Baden-Württemberg (TAF BW), cutting-edge technologies can be trialled in a virtual reconstruction of Karlsruhe before entering into service on road traffic.

2. Chips and power electronics: Microprocessors are necessary for modern vehicle functions and are therefore a decisive component in the transition of the automotive sector. However, Europe plays only a small role in development and production of microelectronics. Chip design and manufacturing must be built up in Europe, not least to ensure technological independence. This is what makes it so important that imec – the world's leading semiconductor research institute – settles at IPAI in Heilbronn, Baden-Württemberg. With a focus on the automotive sector, this project further expands the already excellent research and corporate landscape in Baden-Württemberg. In order to succeed in this critical area, the entire cluster around the SDA is encouraged to establish links with imec.

3. Fahrzeug- und Fertigungssoftware: The transition of the automotive sector also means using software at every point of the value chain, ranging from the integration of mechanical vehicle components right through to AI-controlled factories. The core SDA project formed for this purpose is dedicated to open-source software development within the Baden-Württemberg automotive sector. Open-source software (OSS) gives companies a decisive opportunity to pool resources, save costs and generate standardised solutions through the widespread use of OSS. The establishment of a new free and open-source software community (FOSS) in Baden-Württemberg is a key part of the work in the SDA. In the future, this community is expected to help firms within the automotive sector – especially small and medium-sized enterprises – to benefit even more from opportunities provided by software.

Global competitiveness depends on success in the fields described above. Even an economically strong region like Baden-Württemberg needs partners in order to compete long-term with rivals around the world. Baden-Württemberg's expertise can play a key role in this regard and the aim is to make it a larger part of European collaboration.

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Winfried Hermann,
Minister of Transport Baden-Württemberg

The automotive sector in Baden-Württemberg wants to stay successful in the future. Competitive and transition-related pressure remains high. In the SDA, we work together with the automotive sector to create the conditions needed for a successful transition. Self-driving and connected vehicles are the biggest focus within the key topic of 'data' – and from experimental autonomous shuttles to mass produced cars, Baden-Württemberg is a leading player today. When vehicles become fully self-driving in the future, they will also come from Baden-Württemberg if we continue to work ambitiously and collaboratively toward this future.

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Dr. Jochen Breckner, Member of the Executive Board, Finance and IT, Dr. Ing. h.c. F. Porsche AG

In the focal topic of 'data', the SDA partners, Porsche and MHP have celebrated fresh successes within the last year. In one of our projects we worked together to enhance the best digital solutions from the KI-Kommune hackathon and put these into practice. As part of the free and open-source software mission, Porsche and its partners have established a network of small and medium-sized enterprises. These SMEs can now receive consulting – funded by the state of Baden-Württemberg – to explore the opportunities presented by free and open-source software. Now and in the future, it will remain decisive for us to maintain a dialogue and swiftly seize our opportunities. The world won't wait.

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Volker Schilling,
Member of the Board of Management of Bosch Mobility, Robert Bosch GmbH

Mobility is in an era of profound change, with software, AI and new electronics turning cars into constantly evolving digital platforms. Bosch is actively powering this development through the smart combination of hardware and software.
The SDA has helped strategically anchor software-defined mobility on a state-wide level. We are particularly proud of the shared progress we have made on the key future topic of open-source software. While Germany and Baden-Württemberg are rich in expertise and innovative strength, they must act faster in the context of global competition. For this purpose, homegrown value creation must be strengthened on the basis of attractive framework conditions for local companies, intensive cooperation, an openness to technology and reduced bureaucracy.

Focal topic: energy

Working report

Over the last year, the focal topic of 'energy' within the strategic dialogue for the automotive sector in Baden-Württemberg (SDA) has continued to address concrete issues and tasks via the framework of time-limited topic-specific missions. After a total of eight SDA missions were concluded in the run-up to the annual event in 2024, the following missions were successfully addressed and completed during the last twelve months:

- **Mission X:** DAC in Baden-Württemberg – industrialisation of direct air capture plants
- **Mission XI:** Holistic cross-technology depiction of areas of tension in relation to the expansion of energy infrastructures for commercial road vehicles
- and buses
- **Mission XII:** Demo fleet and operator models for H_2-based logistics
- **Mission XIII:** Demand and location analysis of truck charging in Baden-Württemberg
- **Mission XIV:** Demand localisation of electricity and hydrogen for logistics in Baden-Württemberg

During the last year, one point of emphasis within the focal topic of 'energy' was the ramp-up of electric mobility in the area of commercial vehicles and the expansion of corresponding charging infrastructure. A centralised platform for supporting the expansion of truck charging infrastructure in Baden-Württemberg was launched with the initiation of a state competence network for truck charging. The state competence network for truck charging aims to generate suitable framework conditions and introduce operational measures in order to install a large number of truck charging points in Baden-Württemberg as quickly as possible. This competence network is organised along the lines of four taskforces named 'grid integration', 'truck charging infrastructure locations', 'funding and business models' and 'monitoring and forecasting'.

A twice-yearly exchange has also been established with affected grid operators in Baden-Württemberg, who are responsible for the grid connection of charging points that are located at unstaffed motorway car parks within the federal truck fast-charging network. By including the National Centre for Charging Infrastructure (operated by NOW GmbH) in this exchange, it is possible to directly address and answer queries relating to the grid integration of charging infrastructure.

The following represents an overview of additional ongoing missions within the focal topic of 'energy' as of August 2025:

- **Mission IX:** Charging and hydrogen refuelling infrastructure for long-distance trucks
- **Mission XV:** Exchange with affected grid operators on charging infrastructure for heavy commercial goods vehicles at unstaffed motorway car parks in Baden-Württemberg
- **Mission XVI:** DACfit – development of a practical test for new DAC plants under realistic environmental and climate conditions of future DAC locations
- **Mission XVII:** Technical and economical requirements for the electrification of bus fleets – decision-making support for the use of electricity and hydrogen in local public bus services
- **Mission XVIII:** Hydrogen and fuel cell applications in China – a current assessment

For more detail on the specific goals and available results of the missions listed here, please see the corresponding mission reports.

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Thekla Walker,
Minister for the Environment, Climate
and the Energy Sector Baden-Württemberg

The mobility and energy transition in Baden-Württemberg is gathering ever more pace. Not only has the number of approvals for electric vehicles significantly increased in recent months, the share of renewable energy in our energy system is also showing steady growth. Combined with a demand-oriented charging infrastructure for cars and trucks alike, this provides a clear path to a climate-neutral mobility system. We must build on this by furthering the expansion of renewable energies. The power grids must be strengthened in a demand-oriented manner, with obstacles to the ramp-up of infrastructure for a climate-neutral transport sector being eliminated. The wide-ranging activities undertaken within the SDA's focal topic of 'energy' provide a very solid foundation for these efforts.

© Netze BW

Dr. Martin Konermann,
Chief Technical Officer, Netze BW GmbH

As part of the ongoing decarbonisation of the transport sector, applications have been submitted for the grid connection of truck fast-charging sites at 120 unstaffed service stations. At the distribution network operator Netze BW, we are focused on implementing these within our network area in the coming years. Progress has also been made in bidirectional charging, with automotive manufacturers, politicians and network operators working together to enhance the technical and regulatory framework conditions. The SDA's bidirectional charging project makes a decisive contribution to overcoming existing hurdles and gathering vital practical experience.

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Prof. Dr. Frithjof Staiss,
CEO of the Center for Solar Energy and
Hydrogen Research Baden-Württemberg
(ZSW)

Hydrogen and its derivatives will play an important role in the defossilisation of mobility. The European Clean Vehicles Directive has helped get things started with regard to public transport and municipal vehicles. This must now be followed by the next steps in the ramp-up of infrastructure and vehicle production to ensure that technology providers from Baden-Württemberg can establish an international foothold in additional segments such as heavy-duty traffic, construction site vehicles and special vehicles.

Interface topics at a glance

Working report on digitalisation

In order to improve the competitiveness of local automotive manufacturers and suppliers, a significant increase in the performance of the state is also necessary. Swift digitalisation is required, as is the deployment of data and its utilisation on all administrative levels with the help of AI, in order to craft more efficient and transparent processes while promoting innovation and growth.

This is why the Ministry of the Interior, Digitalisation and Local Government Baden-Württemberg has set up a pair of lab formats called ‘Smart City Data Labs@bw’ and ‘Smart City LoRaWAN Integration Labs@bw’. When used in example applications relating to ride-sharing potential or the reduction of traffic searching for a parking space, these projects have demonstrated how city and traffic planning can be evidence-based and continuously improved via data analysis. A smart approach to tackling slippery roads has also helped save time and reduce personnel requirements by using sensors and data communication to monitor and forecast the ground moisture.

These projects were and are technically integrated into the broader goal of forming a sustainably interlinked data infrastructure for Baden-Württemberg. Step by step, data of public or economic relevance is being made available online in machine-readable form via the state portal ‘daten.bw’. The system is also linked to the platforms at national and EU level. In addition, the State Government is currently working on a data strategy together with all interested stakeholders. This should help make the handling of data in Baden-Württemberg that much safer and more independent, turning the state into an ‘AI-ready’ location fit for the future

Thomas Strobl,
Deputy Minister-President and Minister of the Interior, Digitalisation and Local Government Baden-Württemberg

In order to help actively shape the far-reaching change occurring in the automotive sector, we provide funding for data pools and artificial intelligence. Since 2016, we have focused on establishing technical infrastructure such as fibreglass cables, mobile communications and satellite communications, boosting cybersecurity, and implementing lean and practicable regulations for digital products and services. This enables companies to make further advances with innovations in and from Baden-Württemberg.

Working report on research and development

In the face of global challenges such as resource scarcity and changing mobility needs, bright minds and innovative solutions are essential. The SDA cross-sectional issue 'research and development' acts as an enabler, strengthening the links between academia, research and industry to develop solutions for future mobility.

The 'Innovation Campus Future Mobility' (ICM) has been funded since 2021 as a research platform for innovative mobility and production technologies. Researchers at ICM are working on tomorrow's solutions, including AI in production, electric motors without rare earths, and resource conservation by design. The consolidation of ICM funding has secured long-term planning for forward-looking research projects.

Baden-Württemberg's 'University Financing Agreement III' increases basic funding for universities, while the 'Zukunftsprogramm Hochschule 2030' concept promotes a more attractive range of study programmes to secure the long-term availability of academic professionals for Baden-Württemberg. The recommendations for action resulting from the SDA mission 'Academic STEM Professionals' are continuously implemented.

The promotional campaign THE NERD LÄND aims to inspire more students to pursue STEM study programmes. In order to boost the appeal of STEM curricula, three calls on 'Attractive STEM Studies' provide around €5 million for 23 STEM projects at the interface between schools and universities, as well as for the viable development of STEM study programmes.

The new office 'Südwissen' will channel demand for further education and training at universities and develop sector-specific and demand-driven programmes.

Petra Olschowski,
Minister for Science, Research and Arts
Baden-Württemberg

Our academic skills initiative helps us bolster STEM at our universities and craft appealing study programmes. Modern curricula and targeted marketing bring young people closer to STEM subjects and fuel their enthusiasm for STEM study programmes. Additional initiatives such as the 'Innovation Campus Future Mobility' (ICM) create the ideal conditions for the development of innovative and digital mobility solutions. We strengthen universities, promote lifelong learning, and create spaces for innovation and knowledge transfer. Only with bright minds and bold ideas will Baden-Württemberg remain a magnet for innovation and a leader in future technologies.

Working report on participation

Have you shared mobility data today?

Whether they know it or not, people share mobility data. It is key to future value creation in the automotive sector and a prerequisite for digital solutions. In order to explore social perspectives in greater depth, a civil dialogue led by the Fraunhofer ISI was conducted on the topic of mobility data as part of the interface topic of 'participation'. The aim was to record the needs and attitudes of people in Baden-Württemberg.

Citizens' workshops were held and the results were subsequently validated by means of an online survey featuring 1,377 respondents.

The results revealed an ambivalent view of digital mobility solutions. Many respondents have not yet seen any benefits, which makes clear that action must be taken with regard to the solutions themselves and their communication. A poor internet connection was a particular obstacle in rural areas.

At the same time, many respondents did identify personal benefits such as fewer traffic jams or shorter journey times. Direct benefits were prioritised over indirect benefits such as reducing CO_2. It is important that people are informed of the utilisation and purpose of the relevant data, with consent for data transfer highly influenced by the data type and particular concerns relating to sensitive information. Consent is granted most willingly in the case of anonymised usage data.

Commercial use is seen as acceptable if the providers are competent and trustworthy, with confidentiality, data protection and security are the most important requirements. According to the survey, companies and the public sector are considered the most competent at handling data.

Further information is available here: https://www.isi.fraunhofer.de/en/joint-innovation-hub/oeffentliche-einrichtungen/2023-buergerdialog-mobilitaetsdaten.html

Barbara Bosch,
State Councillor for Civil Society & Civic Participation in the Ministry of State Baden-Württemberg

As State Councillor for Civil Society & Civic Participation, I consider it vital to hold open discussions with citizens in order to explore their needs and interests regarding the digital evolution of mobility. Our civil dialogue on the topic of mobility data helped us discover people's motivations, worries and hopes – and how they picture future policy in this area. This civil dialogue demonstrated that we can pursue data-powered innovations while also accounting for people's doubts and concerns.

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