

CLEAN
ENERGY
WIRE

Climate, clean air and the digital age: Shifting gears in car country?

Stuttgart. How the hometown of Daimler and Porsche is dealing with the challenges of climate policy, urban transport and electric mobility

Media study tour for journalists

26 – 29 March 2017, Stuttgart/Baden-Wuerttemberg



In Germany, the birthplace of the automobile, three iconic carmakers, BMW, Daimler, and VW, are facing their greatest challenge ever: the mobility revolution to create a green transport future. Tarnished by the scandal over VW's manipulation of emissions tests, and facing new and powerful competitors in Google, Tesla, Apple, and Uber, German carmakers have awoken late to the age of decarbonisation, self-driving vehicles, and car sharing.

A watershed moment: *"The crucial question is no longer whether we will enter a new mobility era, but what role Germany will play in it."*

Henning Kagermann, chairman of Germany's National Platform Electric Mobility (NPE)

The fate of the car industry in Germany – a nation that prides itself on having invented the automobile, and still resists speed limits on its *autobahn* – is often seen as a barometer of the entire country's economic health.

The 'Dieselgate' emissions cheating scandal dealt a heavy blow to carmakers' claim to global technological leadership – and has brought into sharp focus the question: "To what extent are German carmakers still welded to the conventional engine?" This business model earns them phenomenal profits, but carmakers will have to find an alternative in the coming decades if the transport sector is to become fossil-free. The timing could not be worse. Companies are facing a perfect storm created by the 'mobility megatrends' of electric engines, autopilot vehicles and carsharing.

Politics and the car industry: *"Politicians start to wonder: 'What is really in the interest of the car industry? Should we protect it in the short term? Or should we not better try to give it a good position for the longer term?'"*

Peter Mock, Europe Managing Director, International Council for Clean Transportation ICCT

Leader or laggard? I: *"We said before that if you are too early, you lose money. Now the view is if you are too late, you lose the market."*

A Daimler manager quoted by Reuters news agency

Against this background, we are inviting journalists to join us on a tour of Stuttgart. The hometown of both Daimler and Porsche, Stuttgart is an ideal place to study practically every aspect of what makes climate policy, local transport, pollution problems and global technological trends such a potent blend:

- ➔ Surrounded by the steep hills of the Neckar valley, Stuttgart is plagued by a combination of intense car traffic, congested roads, high levels of air pollution and an inadequate public transport infrastructure.
- ➔ Every third industrial worker in the Stuttgart region works in the car industry. With an annual turnover of 65 billion euros, the car industry accounts for more than half of the total turnover of manufacturing industries in the area.

- ➔ Politically, environmental issues play a key role in Baden-Württemberg: Despite the dominance of the car industry, the state is the only one in Germany to be led by a Green state premier, with the Green Party being the largest group in the state legislature. Following a bitter controversy over the destruction of green space and high costs of the “Stuttgart 21” project to transform the central station, the city also became the first state capital with a Green mayor.

The Clean Energy Wire media study will take a deep dive into this fascinating microcosm of environmental issues, political dynamics and economic challenges:

- ➔ In top-level meetings with policy-makers, the car industry and analysts, we will ask which policy and regulatory framework the transport sector needs as it moves towards decarbonisation.
- ➔ Various on-site visits will give participants insights into the car industry, new technologies and the realities of today’s transport in one of Germany’s most-polluted cities.

Leader or laggard? II: In sustainable mobility, Germany isn’t out in front. One measure is the number of electric vehicles: at the start of 2016, there were only 25,502 pure electric cars registered in Germany - around four times as many as in California alone.

Germany currently looks incapable of fulfilling its official target of putting a million electric vehicles (EVs) on the road by 2020, which experts say is crucial to reaching the country’s 2020 target of reducing carbon dioxide (CO2) emissions by 40 percent compared to 1990 levels.

Content

- ➔ **The programme: Who? What? When?**
- ➔ **From A to L:** Background info on the programme
- ➔ **Organisational** details
- ➔ About the **organisers**
- ➔ Suggested **readings**

The programme: Who? What? When?

Sunday, 26 March 2017

16.00 **Small valley, big mess: A snapshot of Stuttgart's traffic and pollution problems**
 Meeting with members of BI Neckartor, a citizen's initiative active at Germany's most-polluted intersection, the "Neckartor" in downtown Stuttgart
Location: Turm-Forum (Tower Forum) at Stuttgart Central Station



Transfer to hotel with public transportation

18.30 *Introduction and outline of the programme by Sven Egenter, Executive Director, Clean Energy Wire*

19.00 **Taking the fast-speed *autobahn* into an uncertain future: The opportunities and challenges of transforming the German car industry**



Dinner session with Christian Hochfeld, Executive Director, Agora Verkehrswende

Overnight stay at hotel „Park Inn by Radisson Stuttgart“, Hauptstätter Straße 147, 70178 Stuttgart

Monday, 27 March 2017

7.45 *Transfer with public transportation*

8.30 **The daily reality of managing inner-city traffic in the birthplace of the combustion-engine motor car**



Visit to Stuttgart's "Integrated Traffic Control Centre", meeting with Wolfgang Forderer, Head of Mobility Department, City of Stuttgart

Location: Integrierte Verkehrsleitstelle Stuttgart, Mercedesstr. 33, 70372 Stuttgart

Transfer with public transportation

10.30 **The case of EnBW: From fossil utility to smart electric mover. Innovation culture and electric mobility.**



Presentation by Uli Huener, Head of Innovation and Dr. Hendrik Adolphi, Head of Technical Facilities Power/Gas: "Net infrastructure for today's mobility"

Location: EnBW Company Builder, Innovationsinkubator, Birkenwaldstraße 34, 70191 Stuttgart

12.30 *Lunch*

Transfer with public transportation

14.30 **The local politics of pollution, congestion and car industry jobs – the case of Stuttgart**

E

Meeting with Fritz Kuhn (The Greens), Mayor of Stuttgart

Location: Stuttgart town hall, Marktplatz 1, 70173 Stuttgart

Transfer with public transportation

16.30 **Developing new business models for smarter, cleaner mobility: The stakes for the German automotive industry.**

F

Mobility research at the Fraunhofer Institute for Industrial Engineering IAO

Presentation by Professor Oliver Rieder, Member of the Management Board, Fraunhofer IAO

Location: Fraunhofer-Institut für Arbeitswirtschaft und Organisation IAO, Nobelstraße 12, 70569 Stuttgart

Transfer with public transportation

19.00 **Stewards of change: The IG Metall trade union and its plan how the automotive industry can combine building clean car with keeping the jobs**

Dinner session with Dr. Frederic Speidel, Automotive Industry Working Group at IG Metall

Location: Restaurant Kleinigkeit – Essen und Trinken, Strohhberg 1, 70180 Stuttgart

Overnight stay at hotel „Park Inn by Radisson Stuttgart“, Hauptstätter Straße 147, 70178 Stuttgart

Tuesday, 28 March 2017

8.00 *Transfer with public transportation*

9.00 **Project Mission E in Zuffenhausen: How a zero-emission strategy plays out with the world's prime sports car maker**

H

Visit to Porsche AG

Lunch

Transfer with public transportation

14.00 **Of gearboxes and smart apps: What policy-makers can do to set the right framework for digitilisation**

I

Meeting with Thomas Strobl (CDU), Deputy Prime Minister of Baden-Wuerttemberg, Minister of the Interior, Digitalisation and Migration

Location: Ministerium für Inneres, Digitalisierung und Migration, Willy-Brandt-Straße 41, 70173 Stuttgart

Transfer with public transportation

15.30 **Cutting emissions, steering structural change in the car industry: How is Baden-Wuerttemberg performing?**



Meeting with representatives of the opposition FDP party group in the state legislature: Dr. Hans-Ulrich Rülke, Chairman of the group; Jochen Hausmann, Transport Policy Spokesman; Professor Erik Schweickert, Chairman of the legislature's Economic Committee

Location: Landtag Baden-Wuerttemberg, Haus der Landtags, Konrad-Adenauer-Str. 3, 70173 Stuttgart

Transfer (on foot)

17.30 **Of moss and men: Could living walls of “Zackenmützenmoos” (*lat. Racomitrium lanuginosum*, *engl. woolly fringemoss*) shield Stuttgart from toxic car pollutants?**

Meeting with Dr. Rayk Rinke, Office for Environmental Protection, Section for Urban Climate, City of Stuttgart

Location: Canstatter Straße (meeting point: Heinrich-Baumann-Steg)

19.30 **Dinner**

Location: Café Kaiserbau, Marienplatz 12, 70178 Stuttgart

Overnight stay at hotel „Park Inn by Radisson Stuttgart“, Hauptstätter Straße 147, 70178 Stuttgart

Wednesday, 29 March 2017

08.00 *Bus transfer to Untergruppenbach (from Park Inn hotel)*

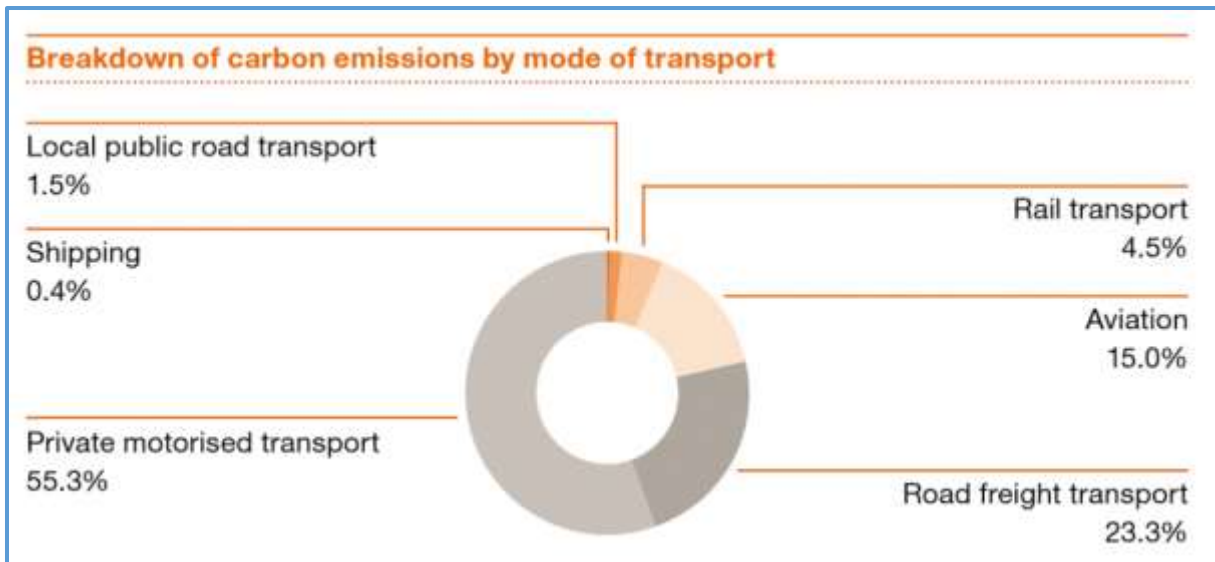
09.00 **Transmission into a different environment: What new technologies mean for the huge German automotive suppliers industry**



Visit of Magna Powertrain/GETRAG, the world's largest supplier of transmission systems for passenger cars and commercial vehicles

12.00 *Bus transfer to Stuttgart Central Station*

13.00 *End of the programme, individual departure of participants*



Carbon emissions in the German transport sector by mode of transport; Source: PWC (2015)

From A to Z:

Background info on the programme items



Bürgerinitiative Neckartor (Citizen's Initiative Neckartor, BI Neckartor) was founded by residents near Germany's most polluted intersection, Neckartor, in the heart of Stuttgart. Their goal is to raise awareness about traffic-induced air pollution, which regularly exceeds nitrogen dioxide (NO₂) and particulate matter (PM₁₀) thresholds, posing a threat to public health and the environment. Stuttgart's special topography, in a basin valley surrounded by steep slopes, is conducive to a build-up of air pollution. And it is notorious for its traffic jams - among the top four bottlenecks in Germany. This makes organising and managing urban mobility a big challenge for decision-makers. Stuttgart is also home to one of the most hotly and publicly debated large infrastructure projects in Germany, "Stuttgart 21", the project to extend and renovate the central train station. The station will be rebuilt entirely underground by 2021 at an estimated cost of 6.5 billion euros, though critics expect it to cost much more. The controversy polarised the public, leading to a referendum in 2011 in which 58 percent of voters agreed to continue construction begun in 2010.

- Official website of Stuttgart (in English and German): <http://www.stuttgart.de/en/>
- Flyer of Stuttgart's voluntary project "Feinstaubalarm" (fine particulate alarm) to actively involve citizens in reducing air pollution (in English): <http://www.stuttgart.de/img/mdb/item/573353/119434.pdf>
- Official website of "Feinstaubalarm" (in German): <https://www.stuttgart.de/feinstaubalarm/>
- Current particulate matter measurements at the Neckartor, (in German): <http://www.mnz.lubw.baden-wuerttemberg.de/messwerte/s-an/s-an.htm>

- ➔ Official website of the Stuttgart 21 project (in English): <http://www.bahnprojekt-stuttgart-ulm.de/en/>

B

Agora Verkehrswende (mobility transition) is a joint initiative of the Mercator Foundation and the European Climate Foundation (ECF). In order to achieve Germany's climate protection goals and honour the Paris Agreement, carbon emissions from road vehicles, ships and aircraft must be reduced to almost zero by 2050. Following the success of the two foundations' Agora Energiewende initiative, which since 2012 has helped stimulate stakeholder and public support for transforming the power sector, Agora Verkehrswende was created in 2016. The aim was to catalyse public discourse over the decarbonisation of Germany's transport sector.

Agora Verkehrswende's Advisory Council brings together stakeholders from politics, business, media and civil society for regular discussions and debate. It is chaired by Achim Steiner, the former UN Under-Secretary-General and Executive Director of the UN Environment Programme. Agora Verkehrswende's permanent staff are engineers, economists, urban planners and political scientists. It has a starting budget of 5 million euros.

Note: Like the Clean Energy Wire, Agora Verkehrswende is a project funded by Stiftung Mercator and the European Climate Foundation.

- ➔ Agora Verkehrswende official website (in English): <http://agora-verkehrswende.de/en/index.html>
- ➔ Agora Verkehrswende detailed project description (in English): http://agora-verkehrswende.de/assets/Project-Description-Agora-Verkehrswende_20160804.pdf

C

The **Integrierte Verkehrsleitzentrale (Integrated Traffic Control Center, IVLZ)** is in charge of Stuttgart's traffic control and management, set up in 2006. It consolidates up-to-the-minute traffic information from local police, public transport providers and other traffic-related municipal agencies to relieve congestion, for example via real-time adjustments in car-park routing systems, traffic light cycle times and rerouting. Stuttgart faces a real challenge: as a vibrant economic center, the region's need for mobility is growing, while the topography limits significant expansion of the existing infrastructure. The IVLZ is one example of an attempt to address the issue. To reduce air pollution, make the city more environmentally friendly and less noisy, city officials developed the action plan "Nachhaltig mobil in Stuttgart" (Sustainably mobile in Stuttgart), headed by Stuttgart's Green Party mayor Fritz Kuhn. The plan identifies nine measures to tackle the problem, such as improving integrated traffic monitoring and management, establishing a universal payment system for all mobility services and strengthening their interconnectedness, increasing capacity and quality of public and emission-free transport, and engaging in demand-side management through public relations activities. Whether these will be sufficient to green the Neckar basin remains to be seen.

- Short description of IVLZ (in German): <https://www.stuttgart.de/nachhaltig-mobil>
- Brochure of Action Plan Sustainably mobile in Stuttgart (in German): <http://www.stuttgart.de/img/mdb/item/518335/93141.pdf>

D

EnBW is one of the largest German energy providers, supplying electricity, gas, water and energy-related products and services to 5.5 million customers in its main markets Germany, Austria, Switzerland and Turkey. The company has around 20,000 employees. It is majority-owned by the state of Baden-Wuerttemberg and the Oberschwäbische Elektrizitätswerke, a consortium of municipal governments, which reflects the company's ties to the region.

Since the German government decided to phase out nuclear power by 2022 and decarbonise the economy by 2050 through renewable energy development, EnBW has had to significantly restructure its core business operations. Its EnBW Strategy 2020, begun in 2013, seeks to double the company's share of installed output from renewable energies to 40 percent by 2020. Furthermore, it foresees high investments in (new) transport and distribution networks and will rely on exploiting new, innovative, energy-related product and services markets for stable revenues in the future. In addition to smart home technology and smart grids, energy providers like EnBW need to address electric mobility: as customers and government demand that electric cars be powered by renewable energy, this in turn boosts overall electricity demand. It also means energy providers have to find effective and efficient ways to connect their power generation sites to the electric car and mobility customer. This requires technology and physical infrastructure for smart new grids and charging stations, raises questions about universal car charging payment systems across energy providers, and how to manage the changing relationship of supply and demand for electricity.

- EnBW's official website (in English): https://www.enbw.com/index_en.html
- Overview of EnBW's Strategy 2020 (in English): https://www.enbw.com/company/the-group/about-us/group-strategy/strategy-2020/index_en.html
- Overview of EnBW's business segments (in English): https://www.enbw.com/company/the-group/business-segments/index_en.html

E

Green Party politician **Fritz Kuhn** has been mayor of Stuttgart since 2012. He has supported the action plan "Sustainably mobile in Stuttgart" (see above), as well as the city's renewables-based energy concept "Urbanisierung der Energiewende in Stuttgart" (Urbanisation of the energy transition in Stuttgart). Prior to that, from 2002 until 2013, he was a member of the German parliament (Bundestag) and, from 2005, Deputy Chairman/Vice President of the Green Party parliamentary group. Kuhn was a member of Baden-Wuerttemberg's state parliament from 1992 to 2000 and from 1984 to 1988. He studied German philology and philosophy and holds a degree from the University of Tübingen.

- Summary of Fritz Kuhn's CV (in German):
<https://www.stuttgart.de/oberbuergermeister#headline58aae458e4963>
- Overview of Stuttgart's renewable energy concept "Urbanisation of the energy transition in Stuttgart" (in German): <https://www.stuttgart.de/energiekonzept>
- Full report of "Urbanisation of the energy transition in Stuttgart" (in German):
<http://www.stuttgart.de/img/mdb/item/555993/113967.pdf>


F

Fraunhofer Institute for Industrial Engineering (Fraunhofer IAO) belongs to the Fraunhofer-Gesellschaft, Europe's largest application-oriented research institution with 69 institutes and research units and 24,500 employees. About ninety percent of Fraunhofer's 2.1 billion-euro annual research budget comes from contract research, mostly for industry and publicly financed research projects. The core expertise of Fraunhofer IAO is organisational structures and technologies. It analyses mega trends such as digitalisation, urbanisation, future mobility and demographic change and consults a wide range of clients. Whether for major corporations or public sector institutions, Fraunhofer IAO offers its knowledge on how to successfully and sustainably introduce new business models, innovations and more efficient processes under those present and future trends.

Stuttgart as a city, but especially the automotive industry in the region will face significant structural transformation along the entire value-chain. Fraunhofer IAO has specialised research units for Mobility and Urban Systems Engineering (MUSE), Service and Human Resources Management, and Corporate Development and Work Design. In summer 2016, it published the study "Success with electric mobility [...]". Fraunhofer IAO offers expertise in trends directly and indirectly affecting the automotive industry. Using their analyses and projection, they provide a view into future mobility and cities and advise on the transformation of automotive manufacturing, its business models and corporate organisational structures.

- Official website of Fraunhofer IAO (in English):
<https://www.iao.fraunhofer.de/lang-en/>
- Official website of Fraunhofer-Gesellschaft (in English):
<https://www.fraunhofer.de/en.html>
- Link to download Fraunhofer IAO's study "Success with electric mobility. Case studies of user-friendly services and innovative business models" (in English):
http://www.elektromobilitaet-dienstleistungen.de/wp-content/uploads/2016/08/Success-with-electric-mobility_Case-studies_2016.pdf
- Other publications by Fraunhofer IAO (in English):
<https://www.iao.fraunhofer.de/lang-en/publications.html>

Prof. Oliver Riedel is a member of Fraunhofer IAO's Board of Directors. Since November 2016, he has been Managing Director of the Institute for Control Engineering of Machine Tools and Manufacturing Units and holds the Chair for Information Technology in Production at the University of Stuttgart. He has more than

20 years of experience in safeguarding product development and production processes based on information technologies, mainly in the automotive and energy industries. He held leading positions at Audi and Volkswagen Group, where he was responsible for process integration and information management in the production process, as well as controlling the planning process and production-related IT. Prof. Riedel holds a degree in Engineering Cybernetics from the Technical University of Stuttgart, where he completed his PhD in the Faculty of Engineering Design and Production Engineering.

- ➔ Brief summary of Prof. Riedel's CV (in English):
<http://www.prostep.org/en/profile/board.html>



IG Metall (German metalworkers union) is Germany's largest trade union, representing over 2.2 million workers in the metals and manufacturing industries, primarily the automotive branch. Its influence is not to be underestimated, and its status is supported by Germany's highly institutionalised system of "codetermination". Mandated by law, companies with more than 2,000 employees must form a supervisory board comprised equally of shareholder and labour representatives. IG Metall's influence in the automobile industry can be seen in the steady wage increases it has negotiated for its workers through collective bargaining.

The unfolding, potentially disruptive transformation of the industry through autonomous, low-carbon and digitally interconnected mobility, and the recent "dieselgate" emissions scandal raise great concerns among union workers regarding job security. Both workers and unions are deeply aware of the challenges and threats this may pose to sustaining and protecting employment. But IG Metall also recognises new opportunities. The union is advocating not only to make conventional cars more environmentally friendly, but also to proactively accelerate the development of electric mobility. IG Metall sees continuing education and retraining as essential to preparing workers for the future. It has supported large-scale battery cell production in Germany, as an example of how manufacturing jobs in the new, electrified era of the automobile can replace those making conventional drivetrain components (such as combustion engines, transmissions, gears, cooling and exhaust systems).

- ➔ Official IG Metall website (in German): <https://www.igmetall.de/>
- ➔ IG Metall article/statement on its plan to secure employment in light of electric mobility and the recent diesel emissions scandal (in German):
<https://www.igmetall.de/auto-und-klima-24270.htm>
- ➔ Past IG Metall publications available in English: <https://www.igmetall.de/suche-nach-englischen-dokumenten-1500.htm>



Porsche is Germany's most iconic and successful sports car manufacturer. Although it is one of twelve brands consolidated under the umbrella of the Volkswagen Group, it holds 52.2 percent of the Volkswagen Group's common shares. With more than 25,000 employees, about half in Baden-Wuerttemberg, Porsche posted a record

21.5 billion euros in revenues and 3.4 billion euros in operating profit in 2015. Out of 225,121 cars delivered in 2015, nearly fifty percent went to the USA and China.

Baden-Wuerttemberg is Porsche's birthplace and home state, with headquarters and main production in Zuffenhausen – just outside Stuttgart. Its research and development center in Weissach and aftersales in Ludwigsburg are also nearby. Including neighbouring car manufacturer Daimler and many local suppliers, the car industry employs a third of the region's industrial workers. In 2015, Porsche said it would invest more than 1 billion euros in its first all-electric sports car, dubbed "Mission E", scheduled to launch by 2020. 700 million euros were slated for production sites in Baden-Wuerttemberg, creating more than a thousand new jobs. Porsche says it seeks to set new standards to compete with electric car pioneer Tesla and German rivals, not just in electric mobility, but also in digitalisation and connectivity. For convenience and a ubiquitous power supply, Porsche is also working together with the BMW Group, Daimler AG, Ford Motor Company and Audi to create the most comprehensive and powerful car-charging network in Europe. By 2020, more than a thousand high-powered charging points are to be available to customers.

- Porsche's official website: <http://www.porsche.com/>
- Porsche's official newsroom (in English): <https://newsroom.porsche.com/en.html>
- Key company facts and figures (in English):
<https://newsroom.porsche.com/en/company/porsche-at-a-glance-10897.html>
- Interview with Chairman of the Executive Board, Oliver Blume, on Mission E (in English): <https://newsroom.porsche.com/en/company/porsche-oliver-blume-ceo-interview-mission-e-12186.html>
- Press release on quick-charge stations (in English):
<https://newsroom.porsche.com/en/technology/porsche-electromobility-quick-charging-station-network-13200.html>



Since May 2016, **Thomas Strobl** has been Deputy Minister-President of Baden-Wuerttemberg as well as Minister of the Interior, Digitalisation and Migration. He is not only responsible for internal security matters and overseeing the state's police and rescue/emergency forces, but also for leading the way in the state's successful, vanguard digitalisation. In December 2016, Strobl, a member of the conservative Christian Democratic Union (CDU), and the Green Party's first state Minister-President Winfried Kretschmann, announced the kick-off of Baden-Wuerttemberg's interdepartmental digitalisation strategy "digital@bw". The strategy focuses on maintaining the state's innovation and economic success, while empowering citizens to benefit from all fields of digitalisation, be it smart home, smart city or improved state administration and mobility, among others. In 2016, the government invested more than 100 million euros in broadband expansion, as the backbone for all digitalisation efforts.

Before his appointment, Strobl was a member of the Bundestag for the conservative CDU/CSU for nearly 18 years. From 2014 until 2016, he was Vice President of the

CDU/CSU parliamentary group. Since 2014, he has been Vice Chairman of the CDU. He holds a Law degree from University of Heidelberg.

- Official state government site of Baden-Wuerttemberg (in English): <https://www.baden-wuerttemberg.de/en/home/>
- Official website of Baden-Wuerttemberg's Ministry for Interior, Digitalisation and Migration (in German): <https://im.baden-wuerttemberg.de/de/startseite/>
- Overview of Strobl's CV (in German): <https://im.baden-wuerttemberg.de/de/ministerium/innenminister-thomas-strobl/>
- Summary of the state government's strategy "digital@BW" (in German): <https://www.baden-wuerttemberg.de/de/service/presse/pressemitteilung/pid/landesregierung-bringt-digitalisierungsstrategie-digitalbw-auf-den-weg/>

J

In the 2016 Baden-Wuerttemberg elections, **Dr. Hans-Ulrich Rülke** was the front-runner for the liberal, market-oriented Free Democratic Party (FDP). The FDP won 8.3 percent of the vote, but was unable to form a coalition with the conservative CDU (27 percent). The CDU instead went into government with the Green Party (30.3%), marking the first-ever Green Party-led state government in Germany and leaving the FDP in opposition. Since 2009, Rülke has been a Chairman of FDP's state parliamentary group having been first elected in 2006, and is also the group's economic policy spokesman. He studied German philology, history, political science and sociology at University of Konstanz.

Fellow party member Jochen Haußmann is Vice-Chairman of the FDP state parliamentary group and transport policy spokesman. Prof. Dr. Erik Schweickert is Chairman of the legislature's economic committee and has been a member of the state parliament since 2009. He studied oenology and beverage technology and has been Professor of International Oenology at the Hochschule Geisenheim University since 2008.

- Official website of FDP's state branch in Baden-Wuerttemberg (in German): <https://www.fdp-bw.de/>
- Dr. Hans-Ulrich Rülke's official website (in German): <http://www.hans-ulrich-ruelke.de/>
- Jochen Haußmann's official website (in German): <http://www.jochen-haussmann-fdp.de/>
- Short CV of Prof. Dr. Erik Schweickert (in German): <https://www.fdp-bw.de/person.php?num=112> <http://www.getrag.com/en/company/Company.html>

K

Magna Powertrain/GETRAG is a supplier of transmission systems for passenger cars and light-duty utility vehicles, based in Untergruppenbach - 45km north of Stuttgart. Magna Powertrain/GETRAG has around 14,200 employees in 20 sites around the world and sold 3.9 million transmissions in 2015. As of January 2016, GETRAG has been part of automotive supplier Magna.

Magna Powertrain/GETRAG's core competence lies in developing and producing efficient transmissions and transmission components that (also) help decrease fuel consumption and emissions. Its traditional expertise is in manual, automated and newest dual-clutch transmissions, but Magna Powertrain/GETRAG has also developed transmissions for alternative drivetrains in hybrid or fully electric cars for 20 years. While the big car manufacturers face great challenges adjusting to electric mobility, it may be even harder for conventional drivetrain component makers like Magna Powertrain/GETRAG. These suppliers are often highly specialised in very few and very specific components. But Magna Powertrain/GETRAG has vowed to offer transmission system solutions for any future drivetrain design and combination of combustion and electric motors. The question remains as to how it will find new market segments to generate sufficient revenues as electric mobility threatens to render its traditional core competencies obsolete.

- GETRAG's official website (in English):
<http://www.getrag.com/de/home/index.html>
- GETRAG's press releases (in English):
<http://www.getrag.com/de/home/index.html>

Organisational details

Who can take part?

The media workshop is open to European journalists with a professional background in transport, environmental or climate policy journalism.

What are the costs?

Participation in the media workshop is free of charge. All expenses during the workshop, including food, accommodation and transport, will be covered by the organisers.

Please note participants must cover their own expenses for travel to and from Stuttgart (where the workshop will begin and end).

In specific cases and upon individual application we can provide funding support for travel of up to 300 euros per person.

What languages will be spoken?

Presentations during the workshop will be either in English or in German. English-German simultaneous translations will be provided where necessary.

What about travel arrangements?

Local transport *during the workshop* will be organised by the Clean Energy Wire. Participants are kindly asked to organise their own travel to and from Stuttgart.

For more information, please contact:

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www.cleanenergywire.org

About the organisers

Clean Energy Wire

Germany's Energiewende – the energy transition – is a project of global relevance. It is a reference point in a world that has embarked on a path to end the use of fossil fuels, laid out by the Paris Agreement on Climate Change. As the share of renewables in the power sector

is growing rapidly, there is an increasing focus on how the world's second biggest export nation and leading manufacturer of cars and trucks is tackling decarbonisation of the transport sector.

The Clean Energy Wire provides well-researched, fact-based and unbiased information as well as support for international journalists reporting on decarbonisation and the energy transition in Germany. We believe that quality journalism plays a key role in productive domestic and international debates, which are essential for the successful transition to a low-carbon economy.

The Clean Energy Wire is committed to the highest standards in journalism. Our [charter](#) sets out the guiding principles of our work, including independence from commercial, political or other special interests.

As an independent non-profit and non-partisan organisation, the Clean Energy Wire can offer its services free of charge thanks to its funders, Stiftung Mercator (stiftung-mercator.de) and the European Climate Foundation (europeanclimate.org). It has a staff of seven and it is located in Berlin.

www.cleanenergywire.org

Suggested readings

- [The energy transition and Germany's transport sector](#): A background dossier by the Clean Energy Wire
- [The Energiewende and German carmakers](#): A background dossier by the Clean Energy Wire