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**Ingolstadt Site Communications**

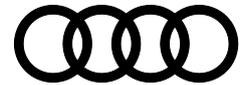
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**BASIC PRESS INFORMATION**

**Audi at the Ingolstadt site**

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## ► Insights

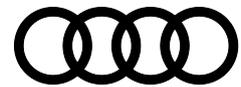
**AUDI AG builds more than half a million automobiles a year at its headquarters site in Ingolstadt; Audi produced 538,103 cars in 2017. Around 2,400 automobiles come off the production line on average every day, with a new car produced every 30 seconds. As the region's largest employer, Audi employs around 44,000 people.**

As the **headquarters, lead plant and a high-tech site**, the Ingolstadt plant plays a key role in the Audi Group. Five important sites are merged into a common idea foundry in Ingolstadt:

- Audi Headquarters with the lead plant and Technical Development
- System/Module Production Münchsmünster
- Audi Neuburg with the Audi driving experience and Competence Center Motorsport/Audi Sport
- Proving grounds in Neustadt
- Future IN Campus technology park

**Intelligent factory at the headquarters site:** The Ingolstadt plant is being turned into a fully connected digital factory. As an attractive employer, Audi is bolstering the city and region long term. Future Audi models are being designed in the new Design Center using state-of-the-art virtual 3D visualization techniques. Modern production systems and high-tech solutions provide for the ultraefficient, sustainable production of new models. Flexibilization measures lay the foundation for future models; electric mobility and key technologies will be implemented even faster in future. “Cleaner automobiles from cleaner factories” is the goal. Audi started producing automobiles at its Ingolstadt plant entirely with green electricity six years ago and inaugurated its eco-friendly topcoat paint shop in 2016. Start-up initiatives and Hackathon events generate new, innovative ideas and creative solutions for the challenges of the future.

The Ingolstadt plant has been home to production of the Audi A3 and Audi A4 bestselling models for many years. The compact SUV Audi Q2 and the new Audi A5 have proven a resounding success for the past two years. The product portfolio continues to grow, supplemented with hybrid and electric cars. For three years now, the Audi A3 Sportback e-tron and the Audi A3 Sportback g-tron have been built with the same cycle times and on the same line as the classic A3 model line. In fall 2017, the Ingolstadt plant extended its eco-friendly portfolio to include the Audi A4 Avant g-tron and the Audi A5 Sportback g-tron. At the beginning of the next decade, two electric cars are planned for Ingolstadt. A clear commitment to the headquarters site.

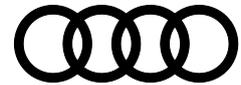


## ► Site highlights

**Flexibility is key to the future:** Audi is focusing on flexibilization at its headquarters site. In line with this philosophy, production is geared to future requirements across all disciplines. The crucial element is the total renovation and conversion of hall A3 where the Audi A4 and A5 models are assembled. The hall is currently being transformed into a state-of-the-art assembly shop with flexible production lines. The company integrates innovative production equipment, ergonomically optimized workstations and an end-to-end logistics concept. From 2019 the A and B line models will come off the production line in mixed mode – with internal combustion engines and with alternative drives. This will in turn meet the technical requirements for future model generations.

**Construction projects at headquarters:** AUDI AG continues to develop constantly and is actively implementing future projects, such as:

- **The new Design Center** in Technical Development houses digital design manufacture. Audi designs the shape of its automobiles virtually using state-of-the-art 3D visualization.
  - Completion: Fall 2017
  - Gross floor space: 37,180 m<sup>2</sup> (400,202 sq ft), external dimensions: 107 x 71 x 21 m (351.0/232.9/68.9 ft)
  - 600 employees from the areas of Design, Surfaces and Pre-Development.
- **The Areal Süd/H6 office complex** offers space for creativity and networking, in an innovative open-plan office structure.
  - Completion of the final building phase: End of 2017
  - Total area: 24,500 m<sup>2</sup> (263,716 sq ft)
  - Space for 2,540 employees from Sales and Marketing
- **Hall B** in the GVZ Logistics Center is home to a preassembly center for rear-axle and cockpit modules with the associated logistics processes.
  - Commissioning: January 2017
  - Usable floor space: 30,000 m<sup>2</sup> (322,917 sq ft), two-and-a-half floors
  - Currently 208 Audi employees per shift (three-shift operation)
- **A new body shop** for a future Audi model is being erected in the northern complex.
  - Completion of the body-in-white: Winter 2017
  - From fall 2019: Completion of the first bodies
  - Area: 157,000 m<sup>2</sup> (1,689,934 sq ft), external dimensions: 192 x 220 x 46 m (629.9/721.8/150.9 ft), three floors
- **The restructuring of B assembly functions project** includes the complete modernization and flexibilization of hall A3. Future production in mixed mode: A and B line models with internal combustion engines as well as with alternative drives on a single line



- **The planned “Ingolstadt Audi” train stop** will relieve traffic congestion and connect the Audi plant up to the public rail network.
  - Four project partners: DB Station&Service AG, Free State of Bavaria, City of Ingolstadt, AUDI AG
  - Expected passenger volume: around 1,500 people a day
  - Groundbreaking: March 19, 2018
  - Completion: End of 2019

**Expansions in the vicinity of Ingolstadt:** The Audi site in Ingolstadt has been growing steadily for years and expanding its footprint in the region.

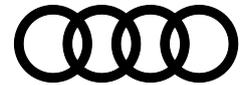
**System/Module Production Münchsmünster:** The 54-hectare site is located approximately 30 kilometers (*18.6 mi*) east of Ingolstadt. This competence center for high-tech suspension components, aluminum structural components and pressed parts is really hitting its stride:

- Just under 900 employees work in three-shift operation.
- More than 24 million vehicle components were produced in 2017.
- Digitally connected: Wheel hubs, for instance, are built in just eight seconds thanks to a combination of robots, 3D image recognition software and control system.

**Audi Neuburg:** The high-tech Audi Neuburg site is an integral element of the Neuburg an der Donau region as well as a magnet for visitors. Nearly 17,500 visitors attended around 850 events held at the site in 2017.

- **Audi driving experience:** A wide range of driver training courses has been offered here since 2014. Around 10,000 visitors from 23 countries took part in driving exercises during 2017.
- **Motorsport Competence Center/Audi Sport:** All AUDI AG’s motor racing activities are managed from Audi Neuburg. The motor racing team develops and builds racing cars, rolls out the cars and organizes all the races worldwide.
- **Audi Sport customer racing:** In spring 2015, Audi Sport GmbH’s customer sport program began supervising the company’s involvement in this rapidly growing sector from Neuburg. This includes GT3 racing, the touring car racing category TCR and the Audi R8 LMS GT4.

**IN-Campus site:** Audi set the course for the future of the site in 2015. Through a joint venture with the city of Ingolstadt, the company acquired the former site of the company Bayernoil in the east of the city. The 75 hectare industrial wasteland will be remediated and developed over the long term into a modern technology center. The IN-Campus is a key project for the future of Audi and the region, and is an answer to the future challenges facing the automotive industry.



## ► **Modern work environments – focus on employees**

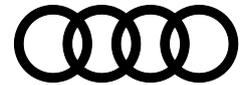
As an **attractive employer**, Audi offers its employees a modern work environment, space for innovation and diverse possibilities for individual development with a high level of job security. Audi employees are actively helping to shape future topics such as electric mobility and digitalization. A central pillar of the corporate culture are the Audi leadership principles, which are based on trust and respect. Several recent rankings, such as the surveys carried out by trendence and Universum, testify to Audi's standing as an attractive employer.

**High employment:** The Audi Group expanded its **workforce** at all sites in 2017 and now employs some 91,000 people worldwide, over 61,000 of whom work in Germany. Nearly 44,000 employees work at the Ingolstadt site, of whom roughly 1,800 are apprentices or enrolled on dual-study programs.

**Top vocational training:** Roughly **550 young people** started their vocational training or a dual-study program in Ingolstadt in 2017. The budding skilled workers will support the company on its growth path, in particular with the current model and technology initiative. In 2017, the magazine Focus Money named Audi "Germany's best training organization" in the category "Automobile."

**Lifelong learning:** The issue of training has high priority at Audi. Knowledge dissemination and transfer are more important than ever to get employees fit for the future topics such as digitalization and electric mobility. **Audi Akademie** is available to the employees of the Audi Group in all matters of competence development and practice-oriented training and education. Topics range from personnel development and leadership and collaborative culture, functional and interdisciplinary training, through to courses for developing intercultural skills.

**Time for career and family:** Audi takes account of the various life phases of its employees and helps them to balance career and family life. There are more than 200 different **working-time models**. Employees can work remotely or take a sabbatical. The company is continually expanding the "**Audi Spielraum**" childcare concept, which combines all activities relating to childcare. This includes for example reserved places in kindergartens near the plant and childcare provision for school holidays or flexible short-term childcare.



► **Key cornerstones at the site**

The AUDI AG plant in Ingolstadt covers the entire process of automobile production, from development to the finished automobile. Cornerstones at the site are Technical Development, Production, Logistics, Quality Assurance and Environment.

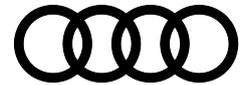
► **Vorsprung durch Technik – Technical Development**

The **Technical Development** division of AUDI AG has its headquarters in Ingolstadt. True to the brand claim “Vorsprung durch Technik,” around 9,000 employees work here on innovations for the automobiles of tomorrow. Technical Development’s tasks include everything from the development of new bodies, transmissions, engines, suspensions or vehicle concepts to design and electrical and electronics development.

**Enhancing connected collaboration:** 450 employees from Development, Model Series and Procurement are working at the SE Forum with the task of shaping the automotive future. SE stands for **simultaneous engineering** – the integrated and concurrent development of products and processes. This further shortens the development cycles of new models. The tallest building on the site is also home to a state-of-the-art test laboratory and testing equipment as well as an innovative IT center.

**Lighting the way:** The Lighting Assistance Center is located in the basement of the SE Forum. At 120 meters (*393.7 ft*), it is the **largest drive-in light tunnel** in Europe. From xenon plus headlights to Matrix LED headlights and laser lights, Audi has been putting pioneering innovations into series production for 20 years.

**Perfect testing:** The Acoustics, Performance, Mechanical Engineering, Material Strength and Corrosion departments work at the **Physics Center**. All models undergo a realistic test program that includes everything from an exterior noise test rig to a road simulator and level-track test rig. Suspension Development inaugurated the new **Tank Technical Center** in 2015. Development here focuses on the different energy sources of gasoline, diesel and natural gas, hybridizing vehicles and minimizing emissions. The new building offers numerous possibilities: Test routes worldwide are reproduced in the newly created laboratory environment. Work is also done on fuel, natural-gas and SCR systems. The Tank Technical Center also includes the following disciplines: a lab for the “HiL test rigs,” suspension electronics, movement test rigs with environmental simulation, climate, cold and acoustic chambers, various tank-filling pumps and around 500 workplaces.



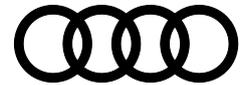
**Electronics? – Check!** The Electronics Center is outfitted with a wide range of measuring and testing equipment, such as board layouts of the entire vehicle electronics for testing complex components and a climatic roller dynamometer for simulating different weather and road surface conditions. Audio concepts are developed in an **MMI laboratory** (Multi Media Interface) and a **sound laboratory**. This is also the place for all aspects of in-car digitalization and connectivity.

**Windproof:** The plant in Ingolstadt has its own **Wind Tunnel Center** with three test units: the aero-acoustic wind tunnel, the thermal wind tunnel and a climatic wind tunnel. Optimal aerodynamics are honed at wind speeds up to 300 kilometers per hour (*186.4 mph*). The car's interior climate control and thermal management are developed here, and the engineers are always working on reducing wind noise.

**New Design Center:** Audi has developed a new, innovative design process, which combines the advantages of state-of-the-art 3D visualization with the strengths of classic modeler's handcrafted finish – the Ingolstadt site is home to digital design manufacture. Around 600 employees from the areas of Design, Surfaces and Pre-Development work in an area of 37,180 square meters (*400,202 sq ft*). They focus on networked collaboration with new technologies and integrated spatial design. The building is 107 meters (*351.0 ft*) long, 71 meters (*232.9 ft*) wide and around 21 meters (*68.9 ft*) high. The mirrored double glazing adds a striking characteristic feature.

**“Get in” a virtual Audi:** In the **Design Check** department, vehicle models can be viewed realistically and with accurate details before they are ever built. The virtual reality studios make this possible. The various materials appear tangible and life-like, giving the impression of a car the observer can get into.

**Weatherproof drive system:** In the **Engine Center**, emissions and fuel consumption measurements are carried out on roller dynamometers under climatic conditions. Driving performance with all-wheel drive is tested in a simulation chamber at altitudes up to 4,200 meters (*13,779.5 ft*). In the adjacent workshops and modern transmission test rigs, engines are set up and tested before they go into use. Established in 2010, the Development and Test Center for Electrified Drive Systems features cutting-edge test rigs for testing electrified drive concepts.



**Smart production from the outset:** The **Audi Pre-Series Center (VSC)** groups the tasks of Technical Development and Production together in a single area of responsibility. This ensures the economic production of the automobiles from the early development phase.

**A tradition of testing quality:** For over 20 years, Technical Development has been testing new developments in various driving situations at its own **proving grounds** in Neustadt an der Donau. High-speed tests are conducted on the 4.7-kilometer (*2.9 mi*), three-lane oval track with two banked corners, and performance, fuel consumption, noise, temperature and braking are also measured.

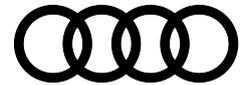
▶ **Digitalized production of the future**

At Audi, premium quality in automobiles means maximum body quality through efficient production systems and new high-tech solutions. The vision is the intelligent, digitally connected factory.

- AUDI AG has one of the most flexible and efficient production systems in the automotive industry: **The Audi Production System (APS)** is based on the fundamental principles of cycle, flow, pull and perfection. Audi systematically implements these principles in Production and throughout the company, resulting in short throughput times, low inventories and a large increase in productivity. The focus is on the “continuous improvement process” (CIP).
- Increasing digitalization is blazing the way for **the intelligent, fully connected factory**. New high-tech solutions in Production enhance the very high quality level even further, while facilitating work on the assembly lines and ensuring better ergonomics.

**Perfectly planned from A to Z: Production and Plant Planning** is responsible for the planning of all vehicle projects of the Audi brand, designing the product, the manufacturing processes and the production locations worldwide.

- In close cooperation with Technical Development, Production and Plant Planning make automobile production possible. The focus is on the customers and their requirements. Photo-realistic models help visualize, analyze and assess customer-relevant vehicle surfaces.
- The Pre-Series Center and Toolmaking are involved in all aspects of new-vehicle development during the prototype phase.
- Production and Plant Planning and its around 1,600 employees establish all the conditions for manufacturing the Audi models in maximum quality.



**Leading the way in metal 3D printing:** Audi stands for the high quality of car bodies – by means of small radii, homogeneous surfaces and exact dimensions. What is physically possible, and what can be reliably manufactured? Planners and toolmakers are doing research into 3D printing, working together closely with designers and developers. As a general contractor, **Audi Toolmaking** supplies both Audi and other brands of the Volkswagen Group with forming tools and body-manufacturing equipment.

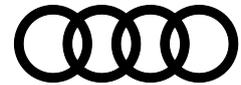
- In the Metal 3D Printing Center at Toolmaking, Audi experts produce steel and aluminum parts from metal powder using the laser melting process. This process is used in series production tools. Components for limited production vehicles could also be produced using this method in the years ahead.
- Audi's Toolmaking division currently employs more than 2,300 people at five locations in Ingolstadt, Neckarsulm, Barcelona (Spain), Győr (Hungary) and Beijing (China); approximately 1,100 of them work in Ingolstadt.
- To meet the growing challenges with respect to quality, design aspirations and economic feasibility, toolmaking and press shop collaborate very closely and are organized together as the **Competence Center Equipment and Metal Forming Technology**.

**From sheet to complex geometries:** In the Ingolstadt **press shops**, steel and aluminum sheets are formed into ultraprecise body parts – highly efficiently and with a recycling ratio of one hundred percent.

- The modern large-capacity presses lead the field internationally in productivity.
- The forming tools and tremendous press forces convert steel or aluminum rolls, called “coils,” into the complex geometries of the individual parts in as many as six process steps. Particular attention is paid to surface quality.
- Approximately 1,300 people work in the press shops in Ingolstadt. Each day, they process roughly 1,675 tons of sheet metal, including 88 tons of aluminum, into 569,000 individual body parts.

**Like magic:** The Ingolstadt **body shops** for the Audi Q2, Audi A3, Audi A4 and Audi A5 model series are cutting-edge production facilities featuring innovative manufacturing technologies and maximum flexibility. Reflecting the focus on efficiency and sustainability during their planning, they feature an automatic matrix lighting control system, photovoltaic systems for renewable power generation on the roof and energy consumption analyses.

- Direct collaboration between humans and machines is already reality here: A robot helps with the application of bonded seams in the body shop.



In this human-robot collaboration (HRC), the employee lays out the body parts and starts application of the adhesive.

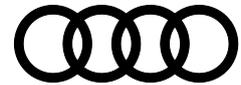
- The “Energy Productivity in Production” employee-training program, intelligent shutoff strategies and energy-efficient system components help to conserve energy.
- 3,450 employees and over 3,200 robots build bodies with maximum precision in the Ingolstadt body shop.

**The perfect finish:** At the Ingolstadt site’s **paint shop**, it takes several coordinated stages of manufacturing to make a vehicle body shine in one of 30 standard colors. Quality is always top priority, from cathodic dip coating through basecoats to clearcoats.

- Every day, the roughly 2,500 paint shop employees make sure that innovative Audi designs of the Audi Q2, Audi A3, Audi A4, and Audi A5 models gleam in all the right colors.
- The employees’ painting experience and intuition as well as a keen eye for detail are essential. Highly skilled young workers are trained on the spot in the paint shop.
- Audi inaugurated its eco-friendly topcoat paint shop at its Ingolstadt plant in 2016. This is thanks to the use of cutting-edge technologies such as air recirculation, dry scrubbing and cleaning of exhaust air.
- Modern application systems conserve resources:
  - Air recirculation conserves energy and reduces organic solvents.
  - Paint separation with stone dust rather than water conserves water.
- The ergonomically designed workplaces in the paint shop are also exemplary.

**Innovative production technologies:** In the **assembly shop**, roughly 8,000 people working in three shifts assemble more than 2,400 Audi models each day, with no two cars alike – each Audi is individual. The vision is to have the world’s most efficient and most sustainable premium assembly.

- One example in assembly is the “electronic quality tests,” which serves to ensure that the high quality requirements are fulfilled.
- The electronic vehicle job card (eWBK) is also in successful operation. It displays on monitors exactly which component the employee needs for each car.
- Human-robot collaboration (HRC) is also integrated into the assembly, a new robot colleague on the Audi A4/A5 assembly line: Employees and robots now work side by side with no protective fence. The “Adhesive application with robot assistance”, abbreviated from the German as KLARA, provides support with the installation of large CFRP roofs. Audi is using an HRC light robot for the first time in its main plant to apply adhesive in final assembly. Similar



robots are already integrated into production in body shops in Ingolstadt and Brussels as well as in engine assembly in Győr.

- Assembly processes are continually being further developed with the prime objective of minimizing complexity. The start of production of the Audi Q2 also involved some innovations. The A3/Q2 assembly line is equipped with a new module hopper. Its increased storage capacity is a reflection of the increasing number of different models and variants.
- Automated guided vehicles such as the “Paula” AGV are a core technology of the smart digital factory and revolutionize conventional production processes.

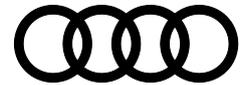
► **Punctual, flexible and efficient – logistics and the Logistics Center**

**Logistics** has become much more important in the automotive industry. The growing variety of models is increasing process complexity along the entire value chain. Logistics at Audi ensures that vehicle production and market supply are punctual and flexible, with minimal throughput times and the smallest possible inventories. Because the variety of models in the plants requires mastering complexity, the principles of the fully connected digital factory are already anchored in the logistics.

**Like at the airport:** Audi Logistics at the Ingolstadt site introduced **Truck Quick Check In**. This system directs the trucks delivering vendor parts and admits them to the plant according to priority. The truck control point functions like an airport control tower. The self-controlled delivery process is based on innovative geofencing technology.

**Smart logistics:** Another new development is **automated transport of parts and vehicles**. Since hall B came on stream in the GVZ Logistics Center in January 2017, Audi is using driverless floor conveyors to transport materials automatically as part of volume production for the first time. Moreover, Audi is one of the world’s first automobile manufacturers to combine traditional storage in a parts supermarket with automated guided vehicles (AGV). With this new way of order picking according to the goods-to-person principle, the parts are automatically retrieved and transported to a fixed picking station. Loading of vehicles has also been automated: “Ray” is a parking robot that picks up the new cars at a transfer station, sorts them by destination and marshals them for loading onto railcars.

**Just in sequence delivery to the GVZ Logistics Center:** Modern logistics is characterized by short information and transport paths as well as by environmental awareness. The location of the **Logistics Center** directly at the gate of the Audi site in Ingolstadt is the result of traffic studies

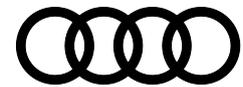


and serves to attract important logistics functions and JIS systems suppliers. The advantages of the Logistics Center for Audi are supply reliability, the ability to master complexity and the reduction of logistics costs.

**Clever material delivery:** Module suppliers fabricate their products just in sequence in **assembly centers** and are responsible for delivering them directly to the assembly lines. Materials are delivered directly to the assembly lines by electric tractors and trailers. Hall B, which covers 30,000 square meters (*322,917 sq ft*), also houses a preassembly center. Here, Audi employees manufacture cockpit and rear-axle modules, supplying them just in sequence to the production lines.

In addition, 13 external suppliers and service providers currently supply Audi via the Logistics Center. The Logistics Center includes a **Consolidation Center** housing the CKD (completely knocked down) packaging plant. With short paths between Logistics and Production, conditions are ideal.

**History and facts:** The Logistics Center, which opened in 1995, has two investors and owners: IFG Ingolstadt, a company fully owned by the city of Ingolstadt, and LGI GmbH, a joint subsidiary of IFG Ingolstadt and AUDI AG. The 122-hectare site is home to 17 halls with 506,000 square meters (*5,446,539 sq ft*). The Logistics Center strengthens Ingolstadt as a business location, creates new jobs and reduces environmental pollution by reducing truck traffic.



► **Premium quality for the digital age – Quality Assurance**

**Taking quality to new heights:** Quality is traditionally a core competence of the brand with the four rings. Audi customers and users have high expectations of their car's functionality, comfort and reliability. Robust vehicle functions, precise suspensions and perfect gap dimensions are the hallmark of the high-quality overall impression of every Audi model – as are the superb standards of materials, workmanship and feel. Audi Quality Assurance in all plants worldwide ensure this is the case with process-oriented quality management. It accompanies the brand's products from development, production, through to technical service and ongoing success in the markets.

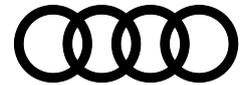
**The changing driver experience:** In the digital age, Quality Assurance is taking on extra new tasks. The aim is to validate the quality of alternative drives and to ensure automobile connectivity and connectivity with the environment. Automated driving, whose reliability is decisive to customers trusting the new technology, also take center stage. With increasingly digital methods and processes as well as individual service offerings, Quality Assurance contributes specifically to the sustainable, connected and automated premium driver experience of the future.

► **Economics and ecology in harmony – environmental protection at Audi**

Audi is committed to the sustainable use of raw materials and resources for the conservation of the environment. Audi openly communicates about its environmental protection work and involves all employees in such activities. The company can thus sustainably implement its environmental policy goals. As a party to the fifth Bavarian Environmental Pact, AUDI AG is making an important contribution to environmental protection.

**On the road to sustainable mobility:** Here it is essential that an automobile's entire lifecycle assessment is optimized before the first kilometer is driven. AUDI AG aims to reduce its specific CO<sub>2</sub> emissions by 25 percent relative to 2010 by the end of 2018.

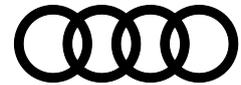
- There are plans to reduce CO<sub>2</sub> emissions associated with the supply of energy at the German sites by 40 percent per reference unit by 2020. Audi is also pursuing its vision of manufacturing all vehicles made in Ingolstadt completely CO<sub>2</sub>-neutral and with zero wastewater.
- Environmental protection also entails conserving resources. Using 2010 as the baseline, the Group is striving for a 25 percent improvement per reference unit in the key environmental metrics for energy, fresh water, waste and volatile organic compounds (VOC) by the end of 2018.



- For the period after 2018, a new target of 35% is envisaged for 2025. Using 2010 as the baseline, the aim is to further reduce the five aforementioned key metrics, attaching greater weight to global factors such as energy and CO<sub>2</sub> emissions.

**Automobile plant goes green – examples at the Ingolstadt site:**

- **Recycle:** Audi inaugurated its eco-friendly paint shop at the Ingolstadt plant in 2016. Dry separation of the paint particles, air recirculation and exhaust air treatment significantly reduce thermal energy and water consumption as well as CO<sub>2</sub> emissions compared with conventional systems. Emissions of volatile organic compounds (VOC) are reduced by over 90 percent.
- **Water recycling:** To save water, Audi has set up a membrane bioreactor in Ingolstadt. Three treatment stages turn wastewater back into hygienically safe process water. In future, up to one third of all fresh water required in Production can be saved.
- **Green electricity:** Audi started producing automobiles in Ingolstadt using just green electricity in early 2012. Audi Neuburg and Audi manufacturing in Münchsmünster are also supplied with electricity generated from entirely renewable resources.
- **Audi Logistics is a climate protection pioneer:** All rail consignments to the Audi Ingolstadt and Neckarsulm plants have been CO<sub>2</sub>-free since mid-2017. Audi is the first company in Germany to handle its logistic shipments by rail entirely carbon-neutral.
- **Emissions-free locomotives:** Two modern plug-in-hybrid locomotives are used at Ingolstadt for shunting work.
- **Photovoltaics:** Audi has installed different photovoltaic modules at its headquarters in Ingolstadt to test innovative technologies. All together, the systems at the Ingolstadt site generate roughly 1,800 MWh per year.
- **Use waste heat:** Since 2004, the Ingolstadt site has been supplied via district heating with waste heat generated at the municipal waste incineration plant and since 2012 from an adjacent refinery. In 2017, around 70,000 MWh of energy was used from waste heat.
- **Sustainable building:** Audi received the Platinum Certificate of the German Association for Sustainable Building for the sustainable construction of the customer building.
- **Biodiversity:** For its Münchsmünster site, Audi developed a comprehensive biodiversity concept. Peripheral areas and unused parts have been turned into near-natural habitats for numerous species of animals and plants.



## ► **Involvement in the region**

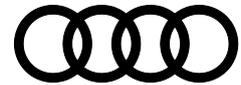
The principle of living responsibility is firmly anchored in the Audi strategy. As the largest employer in the Ingolstadt region, Audi aims to enhance the quality of life here and therefore regularly collaborates with the city, local companies, associations, and educational and social institutions.

**Working together for a good cause:** Audi bundles community service activities and supports the volunteer efforts of its employees under the motto **“Audi Volunteers.”**

- The Ingolstadt site celebrated Audi Volunteer Day again in 2017. Audi employees spent the day working in the region’s social institutions.
- As part of the two-week initiative **“Autumn: A Time to Give”** employees spend part of their leisure time in care homes.
- Audi employees can use the corporate intranet to search for suitable opportunities to volunteer above and beyond these kinds of action days.
- Audi also supports various social institutions in the region according to its funding guidelines.
- The company is also supporting multiple vocational school classes in Ingolstadt, where young adult refugees are prepared to obtain a German school-leaving certificate so they can move onto vocational training in the region.

**Focus on education and research:** Audi is working in Ingolstadt and the region to make the area even more attractive as a location for science. The company also wants to encourage young people to study in technical and scientific fields.

- **Scientific partnerships**, such as with the TH Ingolstadt (THI) and KU Eichstätt-Ingolstadt (joint research projects)
- Science in dialogue: public lecture series with professors
- Electric Mobility advanced training program for drive system developers in collaboration with TH Ingolstadt
- Entry-level qualification programs to assist young people who have not been able to secure an apprenticeship or vocational training
- Programs for school students: Jugend forscht science fair, Girls’ Day, Girls for Technology camp



**Shaping mobility:** Audi is working with the Ingolstadt public transit company (INVG) and Deutsche Bahn, among others, to reduce traffic around the site. Residents in the region benefit from the development of the bus network as well. The company is continually expanding its mobility services for employees. For example, the project to add a train stop directly at the site is now underway. This joint project of the city of Ingolstadt, the Free State of Bavaria, Deutsche Bahn, and AUDI AG is aimed at relieving traffic congestion in the Ingolstadt region and provides improved mobility for Audi employees. The train stop is due to open in late 2019.

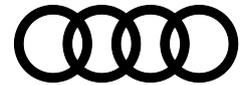
**Audi's experience in sports:**

At a regional level, Audi is active as a dependable **sports sponsor**. For more than a decade now, the brand has been a partner of the ERC Ingolstadt ice hockey club, the 2014 German champions. Audi also sponsors the Ingolstadt Dukes, who made it into the top flight of American football in Germany following the successful 2016 season. Audi also maintains a long-term partnership as main sponsor of FC Ingolstadt 04, which in the current 2017/2018 season plays in the second Bundesliga. The home games of the Bundesliga team are played at the Audi Sportpark. Audi places special emphasis here on **youth development:**

- Since the Audi Schanzer Soccer School was founded in 2009, more than 30,000 children have attended its holiday camps.
- And 22 young talented players of FC Ingolstadt 04 and ERC Ingolstadt attend the Audi Sport Academy, which is a boarding school for child athletes.

**Audi also supports the following clubs and sporting events in Ingolstadt:**

- MTV Ingolstadt (track and field/volleyball/G-Judo)
- Ingolstadt half-marathon
- Ingolstadt Triathlon
- Dukes Ingolstadt (American football)
- Reitertage Hagau (equestrian)
- Ingolstadt Ice Gala
- Ingolstadt City Skiing Championship



**Audi's experience in culture:**

Audi has been sponsoring cultural activities for more than 50 years. The Audi Philharmonic Wind Orchestra, a plant orchestra that arose from an employee initiative, was the starting point for Audi's cultural involvement. Under the name Audi Art Experience, the company brings together a **diverse cultural program** that ranges from cooperation with world-famous cultural institutions to Audi's own events in the region and valuable projects for young artists. In addition to the involvement with the Salzburg Festival, the Audi Summer Concerts in the Ingolstadt region and the Audi Young Persons' Choral Academy provide genuine experience of the arts and culture.

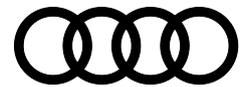
**Audi supports the following cultural events and institutions in Ingolstadt:**

- Audi Summer Concerts
- Audi Philharmonic Wind Orchestra
- Foundation for Concrete Art and Design/Museum for Concrete Art
- City Theater Ingolstadt
- Ingolstadt Georgian Chamber Orchestra
- Ingolstadt Jazz Days
- Jazz in the Audi Forum Ingolstadt
- Audi Art House Cinema
- 20 minmax short film festival

**Audi Forum Ingolstadt: the brand gateway**

The Audi Forum Ingolstadt is the Audi **experience world** at the company's largest site. Each year it offers some 400,000 visitors from the region and throughout the world a wide range of opportunities to get to know the brand with the four rings.

- Last year, over 73,620 owners picked up their new Audi from the **Customer Center** at the Audi Forum Ingolstadt – more than ever before. In 2017, one out of every four of the premium brand's automobiles sold in Germany drove across the Audi Forum piazza.
- The **Audi museum mobile** is also part of the Audi Forum Ingolstadt. With over 100 exhibits in its permanent collection and changing special exhibitions, the museum focuses on the Audi brand with its rich tradition.
- Guided tours through the plant offer visitors an insight into ultramodern automobile production at the Ingolstadt site.



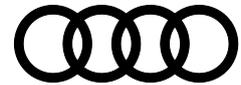
### Popular attraction and tourist highlight

- The **Audi Art House Cinema** is open daily and has won several awards for its selection of movies.
- The Audi Forum Ingolstadt is a popular meeting point thanks to the wide variety of events held there. Together with the Birdland Jazz Club Neuburg as the organizer, Audi has presented the successful concert series **Jazz at the Audi Forum Ingolstadt** with musicians from all over the world since 2001. In the **Audi.torium**, celebrities and people with unusual lives or occupations engage in discussions with the audience. And the Audi Art Space offers insights into the work of various artists.
- Children and teenagers enjoy the **Audi young and fun adventure path**.
- Visitors can purchase high-quality Audi articles from the **Audi Shop** and the **Museum Shop**.
- Companies from all over Germany appreciate the conference area with meeting rooms of various sizes.
- The **gastronomy center** includes the live-cooking market restaurant, the fine dining Restaurant AVUS, and the Bar & Lounge.

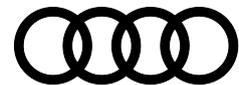
### ▶ **History of the site**

The heart of the Audi Group beats at the Ingolstadt site. The founding of Auto Union GmbH in Ingolstadt 68 years ago started a new chapter in the history of the automobile manufacturer, which was previously based in Germany's federal state of Saxony. In buildings of the former Ingolstadt Fort, the company began producing spare parts, motorcycles and DKW vehicles. Auto Union GmbH has operated under the AUDI AG name since 1985. Products and company have borne the same name ever since.

- |      |   |
|------|---|
| 1945 | On December 3, founding of Zentraldepot für Auto Union Ersatzteile Ingolstadt GmbH in Ingolstadt, Schrankenstraße 3.                                    |
| 1946 | Start of spare parts production.  |
| 1948 | In August, removal of the "old" Auto Union from commercial register in Chemnitz. In Ingolstadt, start of development of a delivery truck.               |
| 1949 | On September 3, founding of Auto Union GmbH as a production company in Ingolstadt. Start of production of DKW Schnellaster and DKW RT 125 W motorcycle. |
| 1954 | Inauguration of the new motorcycle plant in Ingolstadt.   |
| 1958 | On April 24, acquisition of majority share in Auto Union by Daimler-Benz AG; fully-owned subsidiary through end of 1964. Cornerstone laid for new       |



- automobile factory in Ingolstadt; end of motorcycle production.
- 1959 First DKW Junior from the new plant in Ingolstadt.
- 1962 In June 1962, sale of facilities in Düsseldorf to Daimler-Benz AG; vehicle production primarily in Ingolstadt.
- 1964 In December, acquisition of majority share in Auto Union by Volkswagenwerk AG; fully-owned VW subsidiary since 1964.
- 1965 The first post-war Audi built in Ingolstadt; successive discontinuation of production of DKW models.
- 1969 Merger of Auto Union GmbH and NSU Motorenwerke AG create NSU Auto Union AG with headquarters in Neckarsulm.
- 1972 The Audi 80 is launched – a bestseller made in Ingolstadt.
- 1980 Start of production of the Audi quattro in Ingolstadt.
- 1985 Company renamed AUDI AG with headquarters in Ingolstadt. Product and company have borne the same name ever since.
- 1992 Opening of the Audi Customer Center.
- 1995 Start of construction of GVZ Logistics Center in Ingolstadt.
- 2000 Inauguration of Audi Forum Ingolstadt (Customer Center, Audi museum mobile, art house cinema, gastronomy).
- 2009 Centenary of the Audi brand. 60th anniversary of the site in Ingolstadt.
- 2011 Ten-millionth automobile of the Audi 80/Audi A4 series.
- 2013 Opening of the new plant in Münchsmünster near Ingolstadt.
- 2014 Opening of Audi Neuburg: Audi driving experience and Motorsport Competence Center/Audi Sport.
- 2015 Opening of Audi Akademie in downtown Ingolstadt.  
IN-Campus: Land for future technology center in the Ingolstadt region.
- 2016 Inauguration of new paint shop and new office complex.  
Launch of Audi Q2\* SUV.
- 2017 Inauguration of a new production and logistics hall at the GVZ Logistics Ingolstadt.  
Inauguration of the new Design Center.



► **Facts and figures**

**AUDI AG**

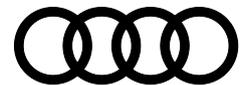
Chairman of the Board of Management:	Rupert Stadler
Chairman of the Supervisory Board:	Matthias Müller
Employees (AUDI AG):	61,172
Employees (Audi Group):	91,231
Deliveries to customers:	1,878,100 automobiles of the Audi brand
Production:	1,879,840 automobiles (including Lamborghini and CKD)

*(all data as of December 31, 2017)*

**The Audi site in Ingolstadt**

Established:	1949
Plant director:	Albert Mayer
Area:	2,737,500 m <sup>2</sup> (29,466,205 sq ft)
Employees:	44,217
Models*:	Audi Q2, Audi A3, Audi A3 Sportback, Audi A3 Sportback e-tron, Audi A3 Sportback g-tron, Audi S3, Audi S3 Sportback, Audi RS 3 Sportback, Audi A4 Sedan, Audi A4 Avant, Audi A4 Avant g-tron, Audi S4 Sedan, Audi S4 Avant, Audi A4 allroad quattro, Audi RS4 Avant, Audi A5 Sportback, Audi A5 Sportback g-tron, Audi A5 Coupé, Audi S5 Sportback, Audi S5 Coupé, Audi RS 5 Coupé
Production:	538,103 automobiles

*(all data as of December 31, 2017)*



► **Fuel consumption of the models named above\***

**Fuel consumption of the Audi Q2:**

Combined fuel consumption in l/100 km: 6.4 – 4.1 (*36.8 – 57.4 US mpg*)

Combined CO<sub>2</sub> emissions in g/km: 146 – 109 (*235.0 – 175.4 g/mi*)

**Fuel consumption of the Audi A3:**

Combined fuel consumption in l/100 km: 7.1 – 3.9 (*33.1 – 60.3 US mpg*)

Combined CO<sub>2</sub> emissions in g/km: 163 – 103 (*262.3 – 165.8 g/mi*)

**Fuel consumption of the Audi A3 Sportback:**

Combined fuel consumption in l/100 km: 8.4 – 3.9 (*28.0 – 60.3 US mpg*)

Combined CO<sub>2</sub> emissions in g/km: 192 – 103 (*309.0 – 165.8 g/mi*)

**Fuel consumption of the Audi A3 Sportback e-tron:**

Combined fuel consumption in l/100 km: 1.8 – 1.6 (*130.7 – 147.0 US mpg*)

Combined electrical consumption in kWh/100 km: 12 – 11.4

Combined CO<sub>2</sub> emissions in g/km: 40 – 36 (*64.4 – 57.9 g/mi*)

**Fuel consumption of the Audi A3 Sportback g-tron:**

CNG consumption in kg/100 km: 3.6 – 3.3

Combined fuel consumption in l/100 km: 5.5 – 5.1 (*42.8 – 46.1 US mpg*)

Combined CO<sub>2</sub> emissions in g/km (CNG): 98 – 89 (*157.7 – 143.2 g/mi*)

Combined CO<sub>2</sub> emissions in g/km (gasoline): 128 – 117 (*206.0 – 188.3 g/mi*)

**Fuel consumption of the Audi S3:**

Combined fuel consumption in l/100 km: 7.1 – 6.4 (*33.1 – 36.8 US mpg*)

Combined CO<sub>2</sub> emissions in g/km: 163 – 146 (*262.3 – 235.0 g/mi*)

**Fuel consumption of the Audi S3 Sportback:**

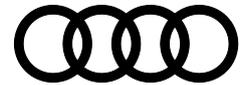
Combined fuel consumption in l/100 km: 7.1 – 6.5 (*33.1 – 36.2 US mpg*)

Combined CO<sub>2</sub> emissions in g/km: 163 – 149 (*262.3 – 239.8 g/mi*)

**Fuel consumption of the Audi RS 3 Sportback:**

Combined fuel consumption in l/100 km: 8.4 – 8.3 (*28.0 – 28.3 US mpg*)

Combined CO<sub>2</sub> emissions in g/km: 192 – 189 (*309.0 – 304.2 g/mi*)



**Fuel consumption of the Audi A4 Sedan:**

Combined fuel consumption in l/100 km: 7.8 – 3.7 (30.2 – 63.6 US mpg)

Combined CO<sub>2</sub> emissions in g/km: 174 – 95 (280.0 – 152.9 g/mi)

**Fuel consumption of the Audi A4 Avant:**

Combined fuel consumption in l/100 km: 8.8 – 3.8 (26.7 – 61.9 US mpg)

Combined CO<sub>2</sub> emissions in g/km: 200 – 99 (321.9 – 159.3 g/mi)

**Fuel consumption figures of the Audi A4 Avant g-tron:**

CNG consumption in kg/100 km: 5.3 – 3.8

Combined fuel consumption in l/100 km: 6.5 – 5.5 (36.2 – 42.8 US mpg)

Combined CO<sub>2</sub> emissions in g/km (CNG): 135 – 102 (217.3 – 164.2 g/mi)

Combined CO<sub>2</sub> emissions in g/km (gasoline): 143 – 110 (230.1 – 177.0 g/mi)

**Fuel consumption of the Audi A4 allroad quattro:**

Combined fuel consumption in l/100 km: 6.8 – 4.9 (34.6 – 48.0 US mpg)

Combined CO<sub>2</sub> emissions in g/km: 154 – 127 (247.8 – 204.4 g/mi)

**Fuel consumption of the Audi RS4 Avant:**

Combined fuel consumption in l/100 km: 8.8 (26.7 US mpg)

Combined CO<sub>2</sub> emissions in g/km: 200 – 199 (321.9 – 320.3 g/mi)

**Fuel consumption of the Audi S4 Sedan:**

Combined fuel consumption in l/100 km: 7.7 – 7.5 (30.5 – 31.4 US mpg)

Combined CO<sub>2</sub> emissions in g/km: 174 – 170 (280.0 – 273.6 g/mi)

**Fuel consumption of the Audi S4 Avant:**

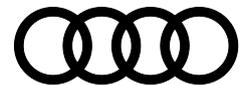
Combined fuel consumption in l/100 km: 7.9 – 7.7 (29.8 – 30.5 US mpg)

Combined CO<sub>2</sub> emissions in g/km: 179 – 175 (288.1 – 281.6 g/mi)

**Fuel consumption of the Audi A5 Sportback:**

Combined fuel consumption in l/100 km: 7.7 – 4.1 (30.5 – 57.4 US mpg)

Combined CO<sub>2</sub> emissions in g/km: 174 – 106 (280.0 – 170.6 g/mi)



**Fuel consumption of the Audi A5 Sportback g-tron:**

CNG consumption in kg/100 km: 5.9 – 3.8

Combined fuel consumption in l/100 km: 5.9 – 3.8 *(39.9 – 61.9 US mpg)*

Combined CO<sub>2</sub> emissions in g/km (CNG): 135 – 102 *(217.3 – 164.2 g/mi)*

Combined CO<sub>2</sub> emissions in g/km (gasoline): 143 – 110 *(230.1 – 177.0 g/mi)*

**Fuel consumption of the Audi A5 Coupé:**

Combined fuel consumption in l/100 km: 8.7 – 4 *(27.0 – 58.8 US mpg)*

Combined CO<sub>2</sub> emissions in g/km: 197 – 105 *(317.0 – 169.0 g/mi)*

**Fuel consumption of the Audi S5 Sportback:**

Combined fuel consumption in l/100 km: 7.7 – 7.5 *(30.5 – 31.4 US mpg)*

Combined CO<sub>2</sub> emissions in g/km: 174 – 170 *(280.0 – 273.6 g/mi)*

**Fuel consumption of the Audi S5 Coupé:**

Combined fuel consumption in l/100 km: 7.7 – 7.5 *(30.5 – 31.4 US mpg)*

Combined CO<sub>2</sub> emissions in g/km: 174 – 170 *(280.0 – 273.6 g/mi)*

**Fuel consumption of the Audi RS 5 Coupé:**

Combined fuel consumption in l/100 km: 8.7 *(27.0 US mpg)*

Combined CO<sub>2</sub> emissions in g/km: 197 *(317.0 g/mi)*

\*Fuel consumption and CO<sub>2</sub> emission figures given in ranges depending on the tires/wheels used. Further information on official fuel consumption figures and the official specific CO<sub>2</sub> emissions of new passenger cars can be found in the “Guideline on the fuel economy, CO<sub>2</sub> emissions and power consumption of all new passenger car models offered for sale on the German Market”, which is available free of charge at all sales dealerships and from DAT Deutsche Automobil Treuhand GmbH, Helmut-Hirth-Str. 1, 73760 Ostfildern-Scharnhausen, Germany ([www.dat.de](http://www.dat.de)).