Audi Group Key Figures

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2010</th>
<th>Change in %</th>
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</thead>
<tbody>
<tr>
<td>Production</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Cars</td>
<td>1,365,499</td>
<td>1,150,018</td>
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<tr>
<td>Engines</td>
<td>1,884,157</td>
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<tr>
<td>Deliveries to customers</td>
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<tr>
<td>Cars</td>
<td>1,512,014</td>
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<td>Audi brand</td>
<td>1,302,659</td>
<td>1,092,411</td>
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<tr>
<td>Germany</td>
<td>254,011</td>
<td>229,157</td>
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<td>Outside Germany</td>
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<tr>
<td>Cars</td>
<td>1,048,648</td>
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<td>Lamborghini brand</td>
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<tr>
<td>Cars</td>
<td>1,602</td>
<td>1,302</td>
<td>23.0</td>
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<tr>
<td>Other Volkswagen Group brands</td>
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<tr>
<td>Cars</td>
<td>207,753</td>
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<tr>
<td>Workforce</td>
<td></td>
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<tr>
<td>Average</td>
<td>62,806</td>
<td>59,513</td>
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<tr>
<td>Revenue EUR million</td>
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</tr>
<tr>
<td></td>
<td>44,096</td>
<td>35,441</td>
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<tr>
<td>EBITDA 1) EUR million</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>7,141</td>
<td>5,452</td>
<td>31.0</td>
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<tr>
<td>Operating profit EUR million</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5,348</td>
<td>3,340</td>
<td>60.1</td>
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<tr>
<td>Profit before tax EUR million</td>
<td></td>
<td></td>
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<td></td>
<td>6,041</td>
<td>3,634</td>
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<tr>
<td>Profit after tax EUR million</td>
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<td></td>
<td></td>
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<tr>
<td></td>
<td>4,440</td>
<td>2,630</td>
<td>68.8</td>
</tr>
<tr>
<td>Operating return on sales Percent</td>
<td>12.1</td>
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<td></td>
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<tr>
<td>Return on sales before tax Percent</td>
<td>13.7</td>
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<tr>
<td>Return on investment Percent</td>
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<tr>
<td></td>
<td>35.4</td>
<td>24.7</td>
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<tr>
<td>Total capital investments EUR million</td>
<td>2,970</td>
<td>2,146</td>
<td>38.4</td>
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<td>Capitalized development costs EUR million</td>
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<td>630</td>
<td>-5.4</td>
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<td>Depreciation and amortization EUR million</td>
<td>1,793</td>
<td>2,170</td>
<td>-17.4</td>
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<td>Cash flow from operating activities EUR million</td>
<td>6,295</td>
<td>5,797</td>
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<td>Balance sheet total (Dec. 31) EUR million</td>
<td>37,019</td>
<td>30,772</td>
<td>20.3</td>
</tr>
<tr>
<td>Equity ratio (Dec. 31) Percent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>34.9</td>
<td>36.8</td>
<td></td>
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</table>

1) EBITDA = operating profit + balance from impairment losses (reversals) on property, plant and equipment, capitalized development costs, leased assets, goodwill and long-term investments as per the Cash Flow Statement.
When was the last time that you were truly delighted? Can you remember the last time that someone fulfilled one of your wishes even before you had voiced it? When a product or service truly sent you into raptures and made your eyes sparkle with joy?

That is precisely the feeling we want to evoke in everyone who comes into contact with our brand: in our customers, our employees and our partners. Because this is ultimately a question of esteem. When you delight someone, you show that you respect them and make them feel special.

This goal is not only at the heart of our Strategy 2020, but also the central theme of this Annual Report: “Delight. The most powerful drive.” The picture sequences and exciting stories in this publication illustrate how we as a brand generate delight. We place the spotlight especially on the people behind the entire process. Those who create delightful moments while themselves sharing in that delight.

And there were truly plenty of delightful moments for Audi in 2011. In selling 1.3 million cars we actually exceeded our sales target – notwithstanding the global economy taking us all on a real roller coaster ride. We won the classic 24 Hours of Le Mans for the tenth time, and again captured the title in the German Touring Car Masters (DTM).

The most memorable moments included the International Motor Show (IAA), where we presented our connect, ultra and e-tron areas of innovation. These will continue to shape our cars in the future. Values such as responsibility and sustainability will play a special role in the years ahead. I believe that in launching projects such as Audi balanced mobility and the Audi Urban Future Initiative we have chosen the right course.

An account of everything else that defined our fortunes at Audi in 2011 can be found in this report. I hope that you find it entertaining and above all delightful to read.

Kind regards,

Rupert Stadler
Chairman of the Board of Management
The global economy continued to expand over the past fiscal year. Nevertheless, economic development was riddled with uncertainty in particular due to the high sovereign debt of a number of countries. The pace of growth thus slowed markedly in the second half. However, demand for cars worldwide continued to rise, thanks mainly to the vigor of the U.S., Chinese and Russian markets.

The Audi brand again brought numerous new models onto the markets in 2011, delighting customers with a steadily expanding product portfolio. For example, a third model in the shape of the new Q3 was added to the range of premium SUVs. The introduction of the Q5 hybrid quattro gives the brand with the four rings its first full hybrid model. And the Audi brand rejuvenated the A6 car line last year by launching new-generation Sedan and Avant versions. The Audi A6 allroad quattro will follow in early 2012, rounding off the brand’s range of full-size models in this segment.

2011 saw the Audi brand sell 210,000 more vehicles than in 2010, taking it to a new record tally of 1,302,659 Audi vehicles delivered to customers. The Audi Group also achieved a substantial improvement in revenue and operating profit. This accomplishment owes a great deal to the huge commitment of everyone who works at and for Audi. On behalf of the Supervisory Board I would like to thank everyone concerned for their excellent work over the past year.
The Board of Management gave the Supervisory Board regular, up-to-date and comprehensive accounts of its actions; decisions of fundamental importance to the Company were discussed in depth by the Board of Management and Supervisory Board. The Supervisory Board considered the economic framework and the Company’s business progress and business policy as well as its risk management and risk situation at quarterly meetings and by means of regular oral and written reports from the Board of Management, and consulted the Board of Management closely on these matters. At its meetings the Supervisory Board also discussed future mobility concepts and how they are to be realized. It expressly applauds the Audi Group’s intensive work on key areas of innovation ranging from lightweight construction to electric mobility in order to systematically extend the Company’s technological lead embodied in “Vorsprung durch Technik” further. In this connection, the Supervisory Board also approved strategic investments as a means of safeguarding development expertise and capacity long-term. Other focal topics included the debt situation of a number of countries, including its potential impact on sales and the long-term sales strategy.

In approving the human resources, financial and investment plans, the Supervisory Board confirmed the Board of Management’s strategic decisions and thus gave its backing to the goal of becoming the world’s leading premium brand. The Supervisory Board furthermore approved the content of the annual Declaration of Compliance pursuant to Section 161 of the German Stock Corporation Act (AktG).

All Supervisory Board members were present at more than half of the meetings. The members of the Presiding Committee held full consultations before each meeting. The Negotiating Committee did not need to be convened in 2011.

There were no changes in the composition of the Supervisory Board during the past fiscal year.

The Audit Committee also met once per quarter in the past fiscal year. At its meetings, the committee considered the Annual and Consolidated Financial Statements for 2010 as well as other topics such as risk management and compliance work, changes in key markets and the corresponding decisions of the Board of Management. The Audit Committee moreover scrutinized the 2011 Interim Financial Report prior to its publication and discussed its contents with the Board of Management and representatives of the auditing firm. The Audit Committee in addition advised on the independence of the auditors, the findings of additional audits commissioned and the current situation at the end of 2011.

Following examination of the audit documents received and in-depth discussions with the auditors’ representatives, and based on its own conclusions, the Audit Committee recommended to the Supervisory Board at the meeting on February 17, 2012 that the Annual and Consolidated Financial Statements each be signed off. After appropriate discussions, the Supervisory Board accepted this recommendation and signed off the Annual and Consolidated Financial Statements prepared by the Board of Management. The Annual Financial Statements are thus established.

There were no changes in the composition of the Company’s Board of Management during the past fiscal year.

The Board of Management has suitably taken account of the economic environment and future challenges when making its plans. The Board of Management intends to pursue the chosen path of growth, based on an attractive product range, efficient engines and new mobility concepts. The Supervisory Board will continue to support the Board of Management throughout this process in an advisory role.

“2011 saw the Audi brand sell 210,000 more vehicles than in 2010, taking it to a new deliveries record.”

Prof. Dr. rer. nat. Martin Winterkorn

Report of the Supervisory Board - 03

Ingolstadt, February 17, 2012

Prof. Dr. rer. nat. Martin Winterkorn
Chairman of the Supervisory Board
Victory at Le Mans

I stayed awake all night so as not to miss a second of this historic race. What an emotional roller coaster it was: first those frightening accidents, then our R18 TDI crossing the finishing line first with a lead of just 13.854 seconds. Le Mans 2011 was not only the most dramatic and exciting race I have ever witnessed. It also showed memorably that we never give up and that we demonstrate staying power and determination to win.
Kieler Woche

I never cease to be impressed by the sight of the boats setting sail at the world’s biggest sailing spectacle. International teams compete against each other and excel themselves. The Audi Team too, a mixture of professionals and amateurs for whom this is a dream come true. Together the sailors took part in the competition with great passion and team spirit; within a very short space of time they evolved into a successful team.
What an atmosphere! 132,000 fans over two days in a sell-out Allianz Arena, millions more watching on TV in 180 countries: The Audi Cup 2011 was a feast for fans. Their passion and exuberance made this an exceptional occasion – and also my Audi moment of 2011. Because it embodies everything that we strive for each and every day at Audi: delight and fascination unleashed time and again. We call it: turning customers into fans.
The A2 concept represents the full creativity and capability of our development departments. Producing this show car was no easy task. After all, we wanted to combine the strong legacy of the A2 with our trailblazing visions for design, electric mobility and connectivity into one sensational concept. Its success at the International Motor Show in 2011 showed that we did everything right – and that makes me proud of my team.
Fuel consumption and emission figures at the end of the Annual Report
My moment of 2011 lasted exactly 24 hours. During that time, 2,259 Audi employees covered a distance equivalent to almost once round the earth in the 24-hour run at the Ingolstadt plant, raising 150,000 euros for charity in the process. That makes me so proud of Audi’s workforce. The employees who help to pull off such an event are what make Audi so special. They set about everything they do with motivation, passion and a sparkle in the eye – whether at work or away from their daily workplace.
Fuel consumption and emission figures at the end of the Annual Report.
Audi Q3 Cube

In setting foot in the Q3 Cube at Munich Airport, I embarked on a fantasy journey into the future, to the year 2030. Absolute connectivity has become a reality. Cars communicate with each other and with their environment. Driving is now a very efficient affair that gives people unprecedented scope for more communication on all conceivable electronic platforms. The office on wheels permits tailormade working hour models. Jobs are independent of time and place.
Symbol of the future

The “x-ray” of the R8 e-tron symbolizes how electric mobility will revolutionize automotive manufacturing. The challenge for Purchasing is to find the right suppliers and partners for new technologies, and for us to become involved in the product creation process early on. We maintain an intensive dialog with Technical Development and Production to determine what we need to do to prepare for the arrival of these emotional products.
**EXPERIENCE**

**Experience more online**
The Audi 2011 Annual Report on the Internet and as an app for iPhone, iPad, Android smartphone and Android tablet.

**Italian temptation**
Audi driving experience: through Tuscany in the R8 GT Spyder.

**Reason to celebrate**
Top-class soccer players delight fans at the Audi Cup 2011.

**Close to the wind**
Professionals and amateurs on a racing yacht: Audi makes dreams come true at the Kieler Woche.

**The ring of rings**
Festival director Katharina Wagner visits the Audi Ring at the IAA.

**INNOVATION**

**Connected with the whole world**
Audi connect ensures that customers are out in front on the data highway too.

**Where Audi develops its technological lead**
A visit to Technical Development in Ingolstadt.

**The Audi for the slopes**
Skiing legend Hermann Maier tests the Audi Carbon Ski.

**Through the Middle Kingdom**
Traveling in the Audi Q3 through China, a land of contrasts.

**Shaping the future**
Rupert Stadler and Professor Laurence C. Smith discuss the challenges of the future.

**PASSION**

**Fueling success**
Audi celebrated its tenth victory in the 24 Hours of Le Mans in 2011. A look back.

**Big in Japan**
The world premiere of the A1 Sportback at the Tokyo Motor Show.

**Quality**
The measure of all things
On the way to becoming an Audi, the car has to pass countless quality checks.

**Red-on-white racer**
Gallardo LP 570-4 Super Trofeo Stradale – the first all-red Lamborghini.

**Downhill**
The “Herminator” Hermann Maier and the new Audi Carbon Ski.


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Exceptional athlete Magdalena Neuner and the Audi S6.


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Corporate Governance Report 2011
The Audi 2011 Annual Report is now a multimedia experience – on the iPhone, iPad, Android tablet or Android smartphone, or on the Internet. Just a click away.
The website
See how the Audi brand’s racing drivers brought home great victories last year; go on board Audi’s racing yacht at the Kieler Woche. Join festival director Katharina Wagner at the International Motor Show (IAA) and try out the new Audi Carbon Ski with skiing legend Hermann Maier. Listen to interviews and see how our spectacular photo shoots came into being. You will find all this and much more online at www.audi.com/ar2011, where the Audi 2011 Annual Report becomes a multimedia and multi-sensory experience.

Apps
The Audi Annual Report to go: Simply download our app to your iPhone, iPad, Android smartphone or Android tablet – and navigate through the exciting content with a swipe of the finger.

In addition to the Audi Annual Report, the Apple App Store also offers the Audi magazine and other entertaining apps from the Audi brand. It is well worth exploring!

The QR code
You will see a Quick Response code (QR code) at the end of every Annual Report article. If an app which can read QR codes is installed on your smartphone, then you can access all kinds of additional information, videos and photos in a matter of seconds. Simply open the app and scan the QR code (connection costs as per cell phone contract).

Internet exclusive
Experience more online
Three highlights you can only experience in multimedia form.

1
Our writer toured Tuscany in an R8 GT Spyder. Turn to page 24 to read his travelogue. Would you also like to explore this amazing part of Italy? Then download our travel guide with insider tips.

2
In an Audi production facility, our photographer spectacularly spotlighted fashion and Audi lifestyle articles. If you are eager for even more after seeing her photos (from page 116), you can access an extensive making-of feature online.

3
In 2011, Audi won not only the 24 Hours of Le Mans, but also triumphed in the German Touring Car Masters (DTM). Watch the video to see the highlights of this sensational season again. You won’t get much closer than this to the Audi team!
A sight to slow down for: houses bathed in the warm evening glow along the road to Siena.

Fuel consumption and emission figures at the end of the Annual Report
Italian temptation

The Audi driving experience can make dreams come true – take one of the world’s most beautiful cars through landscape that is every bit as beautiful. A love letter describing an unforgettable tour through Tuscany.

Text | Dirk Lehmann
Every town sign is a promise, every curve a joy – and the air cries out for open-top driving.
I need to make an apology. What for, you ask? Because after this week, our vacation plans for the coming fall will be changing. What do I mean by that? Well, I can explain. And you will need to be very brave now.

You know my passion for Tuscany. After all, we’ve enjoyed it together many times. How I love to recall our time on that estate south of Siena. How we relished the quiet behind those stone walls that were more than two hundred years old. Those walks in the garden that was more like a park. And I remember how we sat at breakfast the last day, our hearts a little heavy, the air smelling of spring, a few sparrows bathing in a puddle by the pool. You said it had been a long time since you had seen a place of such harmony.

Or lunch near Montefollonico. Though that osteria did not look too inviting from the outside, we asked for a table for two. The landlady led us through the sparsely decorated dining room and onto the terrace, which featured a few metal tables in the shade of a white awning. A wide vista opened up across the village roofs and the Crete hills with Monte Amiata in the background. And then the cuisine, surprisingly good, pappardelle with wild boar ragout, risotto with fresh porcini. And you made a little speech about the link between good food and happiness.

A year later, we took our station wagon to a few wine estates with spectacular architecture – too big and too modern for us. Later, we discovered a little enoteca near Buonconvento. The owner served us his favorite Tuscan wines; we particularly enjoyed a Rosso di Montalcino with berry tones. We lowered our noses into the glasses and held the glasses up to the sun, and you said there was no need to taste the wine – its color alone was reason enough to buy some.

So it must be all the more difficult for you to understand why I will be going to Tuscany next fall without you. You may ask whether this has anything to do with when you begged me two years ago not to “drive like a madman” when I was imitating a Mille Miglia participant on that winding road to Asciano? Could be. Or is it because last fall, you decided to fly to Manhattan?
with your best friend and not to Florence with me? Yes, that too. But even more – and I know you can see this coming – it’s to do with what happened to me when I traveled from Munich to Siena with the Audi driving experience. This was a trip that changed a lot of things for me.

It started one normal weekday. On the Internet, I stumbled upon the Audi driving experience. I was fascinated by the prospect of a one-week journey through Tuscany in an R8 Spyder. You share a car with a second driver, taking turns for each stage. Set out in the morning and meet up with the other three or four teams at the hotel in the evening. So what, do you ask, is enjoyable about doing mainly one thing for days on end: driving? “You’re always complaining about spending too much time sitting in your car!” Well, at first I had no answer to that. I’m really not much of a horsepower freak, and we have a normal vehicle. But later, I found out that there’s that yearning in my soul, too, that yearning to get behind the wheel of a car that is impressive in its way.

The trip began one fall day, with driving instructor Markus Fiechtl-Kerschner explaining the R8 GT Spyder, one of a limited edition of only 333, and one which I was allowed to take on the tour just this once. Its ten-cylinder FSI engine generates 412 kW (560 hp), accelerating the car from 0 to 100 km/h in 3.8 seconds and up to a top speed of 317 km/h. But Markus – we’re all on first-name terms – isn’t one to wow you with figures. What he cares about is handling: The car’s quattro drive is weighted toward the rear wheels, so that’s where most of the power goes when you put your foot down. So be careful with the gas. Ceramic brakes and extra-wide tires are there to bring the Spyder to a stop, so be careful with the brakes. Put the transmission into sport mode, and it will fight for every tenth of a second. Oh, so you think that’s just a lot of abstract numbers? Well for me, they held pure promise. I asked Markus how much an R8 GT Spyder will sell for. He replied that the listed price is more than 200,000 euros. And he handed me the key. My palms were damp.

I knew that the R8 has limited luggage space, so I packed light, though I did throw in a memory card with music – club sounds for highway driving, classics for country roads. I let myself slide into the driver’s seat, buckled up and started the car. The engine roared, then dropped back into a gurgling idle. A hoarse rumble, and the Spyder pushed forward, weaving into autobahn traffic playfully and going with the flow. Just a slight push on the gas, and it powered forward. A few more miles, and I knew that I would not be putting on any music in this car. What I wanted to listen to was the symphony coming from the engine compartment behind me.

Before the trip, I had gone for a few practice laps at a kart track following a friend’s recommendation. Claus Peter said that was the best way to get acquainted with the handling and especially a sports car’s direct steering. And it’s true that this was one of the key experiences I had, how precisely the Spyder entered turns, how it went through them, and what a thrill it was to accelerate out of them. But you don’t necessarily drive a supercar fast; you drive it intensively, looking for the clean line, the direct route. I hate to admit it,
Along for the ride

The road to happiness: The Audi driving experience’s Tuscan tour starts near Munich. Following a brief introduction, drivers take six days to reach the charismatic Crete Senesi landscape to the south of Siena. Participants drive Audi R8 Spyder cars to destinations programmed into their navigation systems. Evenings are for comparing notes in select hotels.

For more information on the Audi driving experience, go to www.audi.com/driving – just a click away!

but I’m glad you weren’t there. It was pure driving. Those hills and winding roads in Tuscany are the perfect terrain, and Italy is the perfect country for an outing like that; the people there are crazy about this “bella macchina.”

Oh, S., I know there is so much you would like to ask me: which hotel I stayed in, which restaurant I had lunch in, where I shopped for wine. I’m afraid my answers will come as a disappointment. Yes, I did get to see a nice hotel in Siena, but I didn’t find out much about it because I was eager to start out early. Yes, I did eat, but mostly simple dishes of pasta because I was in a hurry. Yes, I did buy some wine, a bottle of Brunello. But to be honest, I didn’t taste it because I made a point of keeping a clear head.

So what did I take home with me? A bruise on the hip from the seat belt buckle. I found out soon enough that it does take some dexterity to fit into those tight bucket seats in a low-slung sports car. And a new love for this countryside, with its roads that wind across hills like roller coasters. I kicked up dust from unpaved tracks, the strade bianche.

I felt the wind in my hair and I heard the crackling that rises with the heat from the engine after a few miles while I discussed the pros and cons of German versus Italian sports cars with a cafe owner over an espresso. It may sound strange to you, but the Spyder made me see this countryside in a new light. Oh, S., you called it a midlife crisis when you first saw me with the brochure, and I was afraid you were right. But now I know it was a journey to savor. You warned me I shouldn’t even think of buying such a “monster.” But don’t worry. I don’t think a supercar belongs in a big city. It needs to roam free. And that’s why I’m going to take the Spyder to Tuscany again as soon as I can.

And how about flying to Siena in spring – just the two of us? There’s a very nice hotel there that I’d like to try out with you.

Much love, D.
Gennaro Gattuso from AC Milan holds firmly onto Nic Philippbaar’s small right hand, and Nic bites his bottom lip just as firmly. If Nic’s excitement were written across his face, it would be in bold letters covering every inch of his skin. Together they march out through the tunnel beneath the stand and up a few steps, neon light changes to daylight and the glare of floodlights, and the surface under their feet changes from vinyl flooring to the concrete of the steps, then to turf. The red jersey adorned with four rings is fluttering as much as Nic’s nerves. Gattuso, meanwhile, maintains the steady gaze of a general. It won’t be long now; half a minute perhaps – at most – until the moment for which Nic has waited more than six months. He, the player escort, hand in hand with the professional soccer player, marching from the changing rooms onto the field. Lining up. He goes very quiet as the noise level from outside rises. Even quieter than a few hours ago, when he could barely utter a word and just answered “yes” to every question: “Yes,” this was the best thing that had ever happened to him. Listening to him, you nod as you understand just what this means to him. Gattuso lets go of his hand – Nic’s cue to run over to the corner flag. The game is about to start, but Nic doesn’t care about the score now. The jersey will be hanging over his bed for a long time to come. And that moment, his moment during the Audi Cup, will stay with him for even longer.

In all his ten years – no contest. Just like any ten-year-old would say. Maybe for the next ten years, too? “Yes.” Many sports have spectators, but soccer has fans. Like Nic. Or Christoph Fehlenberg, who has brought his son...
Player escort Nic Philippbaar hand in hand with Gennaro Gattuso (AC Milan).
André Weber

“It’s thrilling to see them really doing battle out there on the field. The games are awesome!”

Simona Ventura

“Both as a fan and a journalist, soccer is an incredibly important part of my life.”

Luis well in advance of the game. On purpose. “It all starts with the pre-game build-up, getting here, having a snack, seeing the crowd arrive, feeling the anticipation and the tension growing by the minute,” says Christoph. Luis has been infected by this enthusiasm, holding his father’s hand so as not to get separated in the crowd that is gradually gathering. Almost nine years old and beaming, he looks up at Dad feeling so grown-up that he has been brought along. And he gazes up at the gigantic Allianz Arena – proud that his first match is at an event that’s “only for superstars,” as he puts it.

By the time millions of viewers have settled down in front of the TV in time for the 8.15 pm kick-off, the fans waiting outside the stadium have become a crowd of 66,000 inside: guys with girlfriends, men with sons, women with daughters, families. Like a rising tide, the crowd swells in size as kick-off draws closer. Having arrived by car, bus, train or on foot, people stream ever faster through the metal fences, past the marshals, into the steel and concrete structure, up the narrow corridors and stairways, singing as they go. As they are swept into the stadium, the combination of letters and numbers on their ticket directs the fans through the apparent chaos. Once inside the stadium, the torrent of people changes into a wave just 15 minutes after kick-off. A Mexican wave of joy and delight, its crest formed by hands raised high in the air.

“Soccer is an incredibly important part of my life,” says Simona Ventura, looking down onto the field from the seats above the coach’s bench. The Italian journalist and sports presenter is a professional when it comes to talking soccer. But today she is here to support her team, AC Milan. She looks at her watch excitedly. Just a couple of minutes, and her team will be out there. She hurries to rejoin her friends. And to take her seat – not that she will remain seated for long. After all, whether star or school kid, tradesman or manager, apprentice or engineer, all are united in cheering on their team. And as soon as the stadium announcer’s voice reaches the crowd in the remotest corners, the pulse begins to race.

“Out the way!” call two boys from behind. There are rules governing not only what happens on the field – but also in the stands. For example, it is not allowed to cheer on the wrong team from the wrong fan block. Or stand for too long in the gangway.

People start craning their necks to see round whoever is blocking the view, round the person in front, round Bayern Munich fan André Weber. Down on the field, Bayern are currently playing AC Milan. Bayern are pressing forward toward the man between the posts. André Weber is fully concentrated on the game: ball – player – ball. What’s going to happen next? Can he sense it? 27 minutes into the game, the players on the field and the fans in the stands are pumped full of adrenalin and tension. A shot – saved. But then, less than seven minutes later, the ball is finally in the net. Now André can cheer.

At half-time the fans throng the dimly lit gangways, in the few meters of space that separate the arena’s exterior walls from its beating heart. Hungry for a snack, hungry to analyze the game and talk shop, hungry for the next 45 minutes and more unforgettable moments. Such as when they take a few steps out of the shadows into the stands, and gaze out at this huge oval of people around the field, eyes wide open and pupils small. The crowd’s energy spills over into the game itself. A cauldron of singing and chanting that is enough to give even a soccer-phobe goosebumps.

This ball game delights people worldwide. From the edge of playing fields in South America to grandstands in Europe and stadiums in Asia, soccer creates a sense of community and transcends boundaries. “It’s amazing to be at a huge, peaceful party with so
many people at once,” says Pan Yi Qun, who has flown from China to watch the Audi Cup, “and to see top soccer action.” Was that his only reason for coming? No, not quite, he explains with a grin. He also wants to drive really fast on a German autobahn.

“It’s fantastic being part of such a huge, excited crowd,” confirms Anja Buchweiz from Munich, as the Audi Cup gets under way to a ticker-tape welcome. For the teams and crowd alike, the tournament is all about the same qualities: team spirit, speed, emotion, vitality – positive sentiments that are infectious. “Here they put in 100 percent, not just the 80 percent you see in other pre-season games,” analyzes Manuel Martin from Osnabrück. “Because they love doing battle with other big names in soccer.” The delight he experienced as part of the crowd is something he will be able to take away with him. To drive him forward in everyday life.

A total of 132,000 spectators visit the two days of the Audi Cup at the sell-out Allianz Arena.

Pan Yi Qun

“It’s amazing to be at a huge, peaceful party with so many people at once.”

Audi Cup

Four rings, four teams

Top international soccer, presented by the brand with the four rings: In staging the Audi Cup, AUDI AG acts as a close partner and promoter of the sport both nationally and internationally, in an emotionally charged context. The 2011 tournament at Munich’s Allianz Arena pitted four top teams from around the world against each other: Bayern Munich (Germany), AC Milan (Italy), Barcelona (Spain) and SC Internacional de Porto Alegre (Brazil). Like Bayern Munich, the clubs from Spain and Italy are members of Audi’s international soccer family. And the Brazilian club injected the Audi Cup with some Latin American flair. Over the event’s two days, a total of 132,000 people watched the games in the sell-out Allianz Arena, and the tournament was also broadcast on TV and the Internet in 180 countries.
Close to the wind

Nine amateurs, six professionals, one racing yacht. At the Kieler Woche, the world’s largest sailing regatta, Audi makes dreams come true. And builds winning teams.

Text | Tatjana Pokorny
All for one, one for all: Amateur Holger Neu makes control lines shipshape after setting the foresail.
“It won’t be easy out there. We will sail hard and fight for every position. To do this, we need you and your unconditional commitment!”

Tim Kröger
The Audi Team in the pre-start phase: The boats approach the start line and maneuver for the best starting position. What is needed now are perfect timing, perspective and the ideal strategy.
Stronger together: Whether sailing with the gennaker on a downwind reach (top left), working the grinder (top right) or at a briefing in the racing yacht’s cockpit – the Audi Team grew as a unit during the Kieler Woche and surpassed expectations.
The wind strains mercilessly on the slender but strong mast. The rig extends just under 30 meters into the sky and defies the stormy conditions. At a brisk Beaufort six wind strength, the pressure on the nearly 100 square meter mainsail is enormous, and the wind gusts are as high as Beaufort seven. Aboard the red-white racing yacht, which glides as though riding on rails – even in this stiff breeze – the stress and strain of the crew is palpable. The yacht is sailing to the regatta course in the Stollergrund area near Kiel. Shortly before the first starting gun, each crew member is at his or her post. As skipper Tim Kröger explained in a brief wake-up call on the previous evening and again at the morning briefing: “Guys, it won’t be easy out there.” And the world circumnavigator and world champion motivates his new team members by telling them: “We will sail hard and fight for every position. And to do this we need you and your unconditional commitment.”

Kröger’s motivating talk inspires his guest sailors: For the nine ambitious amateurs selected to participate in the Audi project “A dream comes true,” their appearance at the Kieler Woche fulfills a heartfelt dream. They are taking part in the world’s largest competitive sailing event alongside six sailing professionals. Their objective is the coveted Kiel Cup Alpha. They are not there to watch from the sidelines; rather they are hard-working apprentices. They want to experience what the professionals know and learn how to tame such a high-tech sailing rocket.

“This boat is truly awesome!” marvels Jens Glath at the stern of the nearly 16 meter long TP52 yacht. “On the way to the regatta course, it is already moving at ten knots driven just by the mainsail. So what will it be like out there?” For the manager from Hamburg, the 117th Kieler Woche is a dream come true. Ever since his non-sailing brother Bernd attended a stopover of the Volvo Ocean Race many years ago, hobby captain Jens has also dreamed of racing for the large regatta cup in wind and waves. And that dream did not escape the attention of his perceptive brother. Shortly before the Kieler Woche, he gave Jens the surprise present of a crew entry ticket to the big event. Jens Glath, who himself owns and sails a boat, recalls that he got goosebumps when he realized just what he had received.

Now he is one of the chosen nine amateur recruits, who together are responsible for either victory or defeat aboard the Audi yacht at the Kieler Woche, for successful maneuvers and also the unsuccessful ones, for joy or agony in the competition.

At Tim Kröger’s side, tactician Ulrike Schümann makes sure that operations run smoothly on board and plots the quickest course to the next race mark. Kröger values the expertise of Schümann, who finished fourth in the three-person keelboat at the 2008 Olympics, and he routinely relies on her experience at international events. Another member of his six-person professional team is Eberhard Magg, who was also the driving force behind the first German America’s Cup campaign and manager of the Audi Team.

The sea spray lashes, the wind howls, and the race day has only just begun.

Match Race Germany on Lake Constance. Each of these three top yachtsmen has written exciting chapters in the history of German sailing. Their task at the Kieler Woche is to quickly bring the amateurs to the top of their game, while instilling a positive regatta attitude on the Audi Team.

The team must learn to work together in challenging sailing conditions. The sea spray lashes, the wind howls and the race day has only just begun. In its first race, the Pro/Am team has not yet found its groove. It finishes back in ninth place.

“We can do better,” says Kröger, encouraging his team as the race director gives the preparation signal for the start of the second race. The crew hardly has time to catch its breath. They take a quick drink of water, wipe the drops of sweat from their faces and zip up their sailing jackets again – and they are off. Their movements are more
precise, and in the second race the Audi Team takes eighth place. “That’s better,” the skipper praises and spurs them on to even greater efforts.

The guest sailors at the grinder positions crank on the winches as hard as their arm muscles, which are more accustomed to desk work, allow them to. They must be careful not to lose grip on the handles while turning, or they could be injured by winch cranks spinning at high speed. After every tack, the massive sails must be trimmed in tight, and quickly, on Kröger’s command. The lead professional trimmer decides when and how long the trimmers should crank – the sails must not be allowed to luff. The guests give it their all – until their lungs wheeze and their hands burn.

“Go, go, go,” is the unrelenting chant coming from the “Red-White” command center in the cockpit, “that has to be done even quicker!” And it is done quicker. The pride that comes with earning the approval of the professionals keeps everyone from giving up.

As one of the guests attempts to grasp the mainsheet during a turn, Kröger yells: “Let go of that immediately! That thing could break your arm when it crosses over!” Everything aboard this yacht is larger, more powerful and often more dangerous than on their familiar coastal cruising boats and dinghies at home. The professionals are not only performing to their full capacities, they are also constantly monitoring all of the steps and hand holds of the guest sailors. This is a double challenge, but is something that everyone really enjoys thanks to the keen amateur crew and their enthusiasm.

And that is why their coordinated teamwork continues to improve. There is a sense of urgency here, because the regatta director immediately calls for race number three after they cross the finish line. After another briefing, the Audi yacht speeds across the starting line. Once again, the team improves and finishes in sixth place.
Audi – a strong commitment to sailing

The Audi Team entered the Kieler Woche with a high-tech TP52 yacht. This boat with its carbon fiber hull was one of the fastest at the “Kiel Cup Alpha” regatta in 2011. TP52 sailboats are among the most advanced regatta yachts today with a displacement of 7.3 metric tons, of which 4.8 tons alone are in the ballast bulb on the keel.

AUDI AG has been committed to competitive sailing for over ten years. Its focus is increasingly on sailing events in individual countries, whether in boat partnerships, participation in traditional regatta festivals or national regatta series. Since summer 2010, the Company has also been supporting the German national sailing team, which goes by the name Audi Sailing Team Germany. The next generation of yachtsmen and women is also benefiting from the Company’s support. As a partner of the world’s largest regatta, the Kieler Woche, the brand offers innovative experience programs for its customers, dealers and employees. Audi is also providing exciting entertainment for numerous sailing fans in its advanced TV and Internet news reporting on sailing, for example using social media and showing live broadcasts on large viewing screens at regatta locations.

Martin Voigt, a dentist from Stralsund, will never forget this day. “A unique and wonderful experience,” he says. After the highly celebrated victory of the Audi Team in the 2010 German Championship, Voigt is on the team a second time, and he comments: “The more I know, the more I realize that I know nothing. At club regattas back home we show the others what it’s all about. Here it is we who are learning.”

Voigt can’t help but notice the uncompromising approach with which the entire racing yacht and its equipment are held accountable to the dictates of minimum racing weight. Everything aboard the Audi yacht is reduced to the most essential. The keyword here is “ultra,” and this concept could also be seen in the 260 square meter gennaker, a sail that drives the boat very effectively because it captures the wind from behind like a gigantic half balloon. Hull, mast, steering wheels – all of the boat’s structural components consist of carbon fiber, making it ultralight.

Holger Neu from Stralsund leans on the rail, dripping wet, and takes a deep breath. He is amazed at how well the team works together after a few hours: “We just got to know one another yesterday,” he says. The results list that is displayed at regatta headquarters in the evening – right next to the results of the Olympic sailors – confirms the team’s steeply rising performance curve. Entered in the fourth column of the day is a first place for the Audi Team!

A race victory tastes better than any champagne.

Audi racing skipper Kröger motivates his team to give its all in one more race: “People, you can do it!” And the team does it. The race victory at the end of one of the longest and toughest sailing days at the Kieler Woche tastes better than any champagne.

In the final tally – after a total of three days and eight races – the Audi Team and its grand prix racers earned a strong sixth place in the prestigious Kiel Cup Alpha regatta. The most important result, however, is the uplifting feeling of having grown together into a united team. Skipper Kröger praises his guest sailors at the end of the event: “Guys, on the final day we accomplished maneuvers that we would never have dared to try with this team on the first day. You earned this victory yourselves.” Such praise from one of the most experienced professional sailors in the world – what else could one wish for? Everyone beams with delight.

Waves, wind and competition: Audi at the world’s biggest competitive sailing event.
The entrance to the Audi Ring at the IAA 2011 – the futuristic contours symbolize dynamism, innovation and sophistication.

Audi presented itself at the International Motor Show (IAA) in Frankfurt using a visionary themed world. A tour in three acts with Katharina Wagner, director of the Bayreuth Festival.

Text | Fred Sellin
Would have liked to take a spin right away: Festival director Katharina Wagner takes a seat in the R8 GT Spyder.

Fuel consumption and emission figures at the end of the Annual Report
Prologue

Katharina Wagner, opera director and director of the Bayreuth Festival, is a little nervous, just like before a premiere. In fact, her visit to the Audi Ring at the International Motor Show (IAA) in Frankfurt in September 2011 was a premiere. Except that she was already familiar with the terrain and fond of it. After all, the great-granddaughter of Richard Wagner developed a liking for automobiles at a very early age: “As far as I know, my first words were not mama or papa, but car and light.”

Her destination cannot be overlooked. A futuristic complex rises up like a huge UFO in the middle of the Agora, the central “marketplace” of the Frankfurt exhibition grounds. A curved facade, gleaming in silver, and featuring the words “Audi – Vorsprung durch Technik.”

A world premiere! For the first time, AUDI AG has its own exhibition hall, the Audi Ring, at the show. The word “ring” immediately takes us back to our celebrity guest, whose curiosity is piqued as she makes her way to the building.

Act One

Six steps, then through a glass door – Katharina Wagner now enters a well-lit hall that resembles a huge stage. The main actors are recognizable at a glance: They are the new Audi models, such as the S7 Sportback in Misano Red positioned directly at the entrance, behind it an R8 GT Spyder in Sphere Blue and to the right an Ice Silver Q3. Clad in a mottled gray pant suit, the opera director makes her way forward across the exhibition stand, along the path which is set up as a short journey through time: from the present into the future – from technologies like Audi connect and Audi ultra that are synonymous with digital networking and lightweight automobile construction, all the way to the Audi e-tron, the future models for electric mobility. And the A2 concept, a study that combines these innovative technologies to provide a glimpse of the mobility of tomorrow.

The artist is familiar with visions, and is especially well versed with big productions: “Showcasing cars, particularly in ways such as this, is in keeping with the times. When I look around, I’m impressed!” She is referring to the light
show, the cars on the revolving stage. Wagner is even more delighted by the large LED wall in the hallway: “Three-dimensionality on such a huge scale! Although it actually isn’t 3D at all. I know from my experience in the theater how hard it is to create something like this.”

**Act Two**

A brief dialog:

**Ms. Wagner, when it comes to cars are you an epicurean or a rationalist?**

“Both. A car naturally has to have aesthetic appeal for me. When I do buy a car, however, I also purchase the best safety package available. Audi offers terrific features here, such as the lane assist function.”

**And what about fuel consumption?**

“I drive a diesel because I spend a lot of time on the road.”

**What equipment is most important to you – the sound system?**

“Yes, that is very important to me. But I need a Bluetooth connection to my smartphone as well.”

**Because you have saved all your favorite operas on it?**

“I prefer audio books when driving. Music is often highly emotional. You want to let yourself get caught up in it, but that distracts me too much from what’s happening on the road.”

Speaking of driving – the test drive in the Audi Ring awaits.

**Act Three**

The director is still standing in the hall, watching the various Audi models drive in circles, almost like satellites. The track forms the artery of the Audi Ring, so to speak. It extends across two levels and is 400 meters long in total. Nine vehicles lap the circuit in a meticulously choreographed plan. The walls have several elongated openings both inside and out, offering frequent glimpses of the cars as they speed past. Not only is the sight impressive, it makes viewers want to get behind the wheel themselves. The festival director passes through a white door and heads to the starting line. Above the track, a clock is counting down the seconds. The next question therefore has to be asked quickly: When is a production perfect in your eyes? “When it triggers something inside people. When they don’t simply consume what they are being offered and then immediately return to life as usual.”

Ten seconds, nine, eight … then she races off smiling in an R8 e-tron in Suzuka Gray.

**Epilogue**

The car disappears with Wagner into the dark tunnel, the tail lights turning into red dots in the distance – it would be a perfect closing scene. But it is not the end. The highlight is still to come. The R8 e-tron with Katharina Wagner drives right onto the stage. She has a delighted look on her face as she looks out of the electric sports car at the exhibition audience. “An unforgettable experience. The visitor becomes a part of the production here.” As an expert in the field, she is now interested in taking a look behind the scenes. In this case, that is the area between the outer skin and the interior, where all the equipment needed for making a show like this run smoothly is concealed. “It looks just like our backstage area,” says the festival director. For her, the Audi Ring at the IAA is a successful premiere.
Fuel consumption and emission figures at the end of the Annual Report
Be it Internet access via WLAN hotspot, 360-degree images from Google Street View or online news, Audi connect ensures that customers are out in front on the data highway. Mr. and Mrs. Schertling experienced this firsthand when they took delivery of their new vehicle at the Audi Forum Neckarsulm.
Audi connect integrates all applications which connect an Audi to its owner, the Internet, the infrastructure and other vehicles. The system supplies online traffic information, navigation currently via Google Earth images and Google Street View, WLAN hotspot and a voice-activated search for points of interest. And things will get better still: Audi successfully tested Long Term Evolution (LTE) – the new mobile communications standard with data rates up to six times faster – in conjunction with Deutsche Telekom.

At the Consumer Electronics Show (CES) 2012, Audi presented still more innovations. These include the modular infotainment platform (MIB) with which, thanks to processors from NVIDIA, the brand can display three-dimensional graphics of the vehicle inside the car – the first manufacturer to do so. The MIB, which will be used for the first time in the new A3, offers numerous infotainment functions. It is operated by voice control and using the MMI terminal. The central component of the MMI terminal is a touch-wheel, which combines the functions of a touchpad and a rotary pushbutton.

The head-up display with gesture control, on which digital travel guides, news and video calls can be projected, was also presented. The full video function is available to the front passenger, whereas for safety reasons the driver is only shown static images and simple animations.
Thomas Schertling was excited when he first saw photos of the Audi A7 Sportback – and he soon visited a dealership. “Everything just clicked,” he says. And soon after this he ordered his dream car – with virtually every available option. The S line exterior package for a sporty touch, luxurious comfort seats and a head-up display for safety – there is no doubt that Thomas Schertling knows exactly what he wants. He made some comparisons, did his research, and ultimately chose an Audi A7 Sportback 3.0 TDI quattro in Daytona Gray, pearl effect.

Helga, his wife, accompanies him to the Audi Forum Neckarsulm to pick up their new car. They are both visibly impressed by the beautiful silhouette of their new vehicle. They first admire the exterior, and then the interior. The Schertlings are joined by Audi employee Benjamin Schäfer, who explains the functions of their new car to them.

Mr. Schertling’s fascination is evident as soon as Mr. Schäfer prompts an eight-inch TFT monitor to emerge elegantly from the cockpit and the A7 Sportback connects to the Internet. After all, he finds Audi connect services especially exciting. It is as fast as my office connection.

Audi connect makes possible. By means of online checks every thirty minutes, this system monitors traffic flows and adjusts the route accordingly. But that is not all that distinguishes Audi online traffi c information from conventional navigation technologies. It not only includes freeways and primary roadways, but also monitors traffi c flows on secondary roads and city streets, too – it even detects roadwork sites. The fastest route is therefore always displayed. “Wonderful! That will save me a lot of time,” says frequent driver Mr. Schertling with delight.

He is also thrilled while operating the MMI – especially the touchpad in the center console. With his finger, he enters some letters one by one via touchpad – with the system quietly announcing each letter. “It’s amazing how it recognizes my handwriting. I can enter letters far faster than when I had to use a controller. It’s so intuitive that I could even write without looking,” he adds.

“But you don’t have to!” comments his wife, who has learned from Benjamin Schäfer how to operate the voice-activated online search for points of interest. She wants to try it out right away. Mrs. Schertling states that her next destination is a hotel in Elmau, Germany. The results of the Google-based search amaze both her and her husband. Photos of the hotel, its address, and guests’ rankings are complemented by a weather forecast. And if they wish, they can tell the computer to call the hotel’s phone number.

One word is all it takes. Just two more words – “Calculate route” – suffi ce for Audi connect to guide the driver to their destination. Upon request, the system will also search for certain points of interest – such as attractions at the destination. “It’s a personal, on-board travel guide,” says a pleased Mr. Schertling.

Audi connect also enhances safety. Thanks to networked driver assistance systems such as adaptive light, an automatic speed limit display and adaptive cruise control, the Schertlings can now be more at ease on the road. At the same time, they will always be up to date thanks to the latest online news – something Mr. Schertling appreciates. “News at the touch of a button, fantastic!” He is also fond of the WLAN hotspot. It is easy to set up wireless connectivity for his smartphone and his iPad; Mr. Schertling beams with joy as he surfs the Web. “This is as fast as my office connection.”

Thomas Schertling is not merely convinced by the benefits of Audi connect, he is delighted: “This system isn’t just nice to have; it makes it easier and faster to do just about anything. And it’s fun! Going online in a car – who’d have thought it?”

Now at the very latest, everything has double clicked for him – without a PC or mouse. Connected with the whole world – and Audi makes it happen. If it were not for the “Vorsprung durch Technik” that Audi offers, Mr. Schertling might have opted for a different brand. “Granted, Audi connect is only one detail and not the sole purchasing criterion. But now that I have experienced it personally, I can’t really imagine owning a vehicle without an electronic gateway to the world,” says this marathoner who enjoys crossing the finish line fi rst. He starts up the engine and rolls out of the Audi Forum Neckarsulm. On the way home. But this time they will traverse two routes simulta-

neously: the A 81 autobahn and the digital data highway.

“A unique experience: on-board Internet. It’s exciting and fun.” Helga (45) and Thomas (49) Schertling

Fully networked: from news services to travel information and WLAN hotspot. Experience these and other possibilities of Audi connect in the video.

Fuel consumption and emission figures at the end of the Annual Report
Talking shop: Michael Dick, Member of the Board of Management for Technical Development at AUDI AG (center), talks with leading developers while standing beside the R8 e-tron in the Audi Pre-Series Center in Ingolstadt.

Fuel consumption and emission figures at the end of the Annual Report
How do you develop the future? There is no secret formula for this at AUDI AG, either. The “Vorsprung durch Technik” that the brand has represented for more than 40 years must be worked for day after day.

Text | Thomas Ammann
When Michael Dick, Member of the Board of Management for Technical Development at AUDI AG, meets with his closest colleagues, the subject is almost always the cars of tomorrow. After all, the job of the developers is to focus firmly on the next model generations while never losing sight of great visions. “I have been in the automotive industry for more than 30 years,” says Michael Dick, “and it has never been as exciting, never as challenging as it is right now.”

What will we be driving in 2015 and beyond? What will the automobile of the future look like? These are the questions considered by the group gathered around AUDI AG Board Member Michael Dick in Ingolstadt: Peter Fromm, Head of Superstructure Development; Dr. Horst Glaser, Head of Chassis Development; Josef Habla, Head of the Pre-Series Center; Heinz Hollerweger, Head of Total Vehicle Development; Ricky Hudi, Head of Electrics/Electronics Development; Franciscus van Meel, Head of Electric Mobility Strategy at Audi; and Markus Auerbach, Concept Vehicle Exterior Design.

What will we be driving in 2015 and beyond? What will the car of the future look like?

At the meeting that is beginning in the presentation hall of the Audi Pre-Series Center (VSC), the Audi developers will be discussing new ideas of mobility to address the major challenges of rising energy prices, finite resources and the need to reduce fuel consumption and emissions. Added to this are global megatrends such as urbanization – the creation of increasingly large metropolises – and the breakneck pace of the digitalization of society. Michael Dick and the leading developers have defined specific task areas in order to keep the promise of “Vorsprung durch Technik” in the future. Besides the typical Audi design, these include lightweight construction, networking and the electrification of the drivetrain. These technologies – ultra, connect and e-tron – for which the Company is known today will continue to be among the brand’s core competences in the future. “Development processes are becoming more complex,” explains Michael Dick. “We have to prepare today for the issues of tomorrow.”
Technical Development in Ingolstadt is hard at work on the next generations of vehicles. The VSC, for example, supports the entire development process of a new model, from design to construction of the prototype and the pre-series phase to the start of series production. This support applies not just to the product itself, but also to the materials and technologies used as well as the work processes that are required later for series production of the vehicles.

“The shortened communications paths enable the optimal networking of all departments involved in vehicle construction,” explains Josef Habla. Roughly 850 employees work in the high-tech Ingolstadt facility, which was opened in 2008. They are all highly motivated, because they have the opportunity to be involved in all the latest developments and to take a peek into the future.

The VSC helps the Audi engineers to break new ground in many cases. Even complex development processes can be managed more effectively. For instance, the experience gleaned from the A1 e-tron fleet trial launched in 2011 can flow directly into further development. “Such parallel developments would no longer even be possible with a classic test workshop,” says Heinz Hollerweger.

In the future, the technologies will be even more intermeshed than is the case today.

It is becoming increasingly important to fine-tune the individual vehicle components to one another at the start of the development process. That’s because the technologies will be more intermeshed in the future than is the case today. Electrification of the drivetrain, for example, presents new challenges for the body structure that must be considered in the design and the selection of materials. The Audi brand has long had a core competence in this regard that plays a decisive role for the car of the future: lightweight construction. Since 1994, the Company has produced around 700,000 vehicles with the Audi Space Frame (ASF) – both all-aluminum and hybrid aluminum structures – and demonstrated its expertise in large-scale lightweight construction in the process. In the current model lineup, the A8 luxury sedan and the R8 high-performance sports car represent the ASF principle in its purest form. The body of the TT compact sports car is a hybrid aluminum and steel construction, and the bodies of the A7 Sportback and the new A6 include a large proportion of aluminum in addition to steel. The Audi engineers are convinced that the new Audi Space Frame of multimaterial construction, in which components of aluminum, steel and carbon fiber-reinforced polymers are joined together, is the right approach for the future of volume vehicle production. At Audi, lightweight construction does not mean concentrating on one material, but rather working intelligently and flexibly with a variety of materials.

“The aim is to use the smallest amount of material possible in the ideal place to achieve the best performance,” explains Peter Fromm, “in a way that is suitable for volume production.”

Audi pools the know-how required to do this under the term “ultra.” The intent is to make the vehicles more agile while reducing fuel consumption and, in the case of electric mobility, offsetting the weight disadvantage...
due to the relatively heavy batteries. This requires the development and testing of new materials, new joining technologies and new production methods for series production. “That is the prerequisite for generating efficiency and dynamics in the same vehicle,” says Heinz Hollerweger. “The innovations should help us to continue reversing the weight spiral.”

Many Audi model families already offer Internet connectivity as an option.

This is a challenging goal – and work on “Vorsprung durch Technik” continues in other areas, too. The brand’s technologies for connecting its cars with the owner, the Internet, the infrastructure and other vehicles go by the name Audi connect. Smartphones and tablet computers have made the digital world a constant companion of today’s customers. The car must not be the weak link in the chain of communication. “The last decade was characterized by networking the various systems in the car,” says Ricky Hudi. “This decade, the car will be networked seamlessly with its surroundings and the environment.”

Many Audi model families, beginning with the compact A1, already offer Internet connectivity as an option. Passengers in the rear seats can go online with their smartphones and other mobile devices using an integrated WLAN hotspot. The fast data connection also delivers specially prepared news and information for the driver to the vehicle. The key requirement here is that this information should make driving more economical and convenient, relieving the driver of additional burdens. Behind all of these innovations is the vision of tomorrow’s driving. The Audi developers are convinced that electric mobility will be one of its pillars. The first all-electric Audi,
“With our unmistakable design, ultra, connect and e-tron, we have strong fields for the future that will shape our brand.”

Michael Dick
Member of the Board of Management for Technical Development at AUDI AG

A peek at the future (left): testing a prototype of the Audi connect system at the Pre-Series Center in Ingolstadt.

The responsible developers at Audi are certain that the future of mobility will be diverse. It will be characterized for many years by a blend of different technologies and energy sources. Audi customers will be able to choose from a wide range of drive technologies. High-efficiency combustion engines and hybrid drives will also have a great future in the broad-based concept. The development spectrum at Audi reflects the full extent of the new technologies. As Heinz Hollerweger explains, “What it ultimately comes down to is offering the best solution for each market and for each customer.” The Audi developers’ objective is to reduce total emissions over the entire lifecycle of the vehicle, including production, use and recycling.

With their ideas and innovations, the Audi engineers of today are establishing the foundation for the mobility of tomorrow. Michael Dick closed the meeting by telling the leading developers, “With our unmistakable design, ultra, connect and e-tron, we have strong fields for the future that will shape our brand and enable us to create an emotional and impressive product: the Audi of the future.” And to further reinforce the brand’s “Vorsprung durch Technik.”

The future of mobility will also be an emotional and impressive product.

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“The carbon makes the skis stiffer and gives them more spring. This lets you ski a tighter radius.”

Hermann Maier
When the creator of quattro drive designs a ski, the standards are high: It should perform at a highly competitive level and yet be safe. Skiing legend Hermann Maier tested the new Audi Carbon Ski.
black helmet, black ski suit and black skis – the “Herminator” is ready for his first downhill run. Austria’s skiing star Hermann Maier was given this honorary nickname after his spectacular crash in the Olympic downhill in 1998 in Nagano, Japan. At a speed of over 100 kilometers per hour, he flew off a bump and hurtled horizontally through the air for 40 meters, hitting the safety netting at full force. The sight made spectators gasp. When Maier returned just three days later to win two Olympic gold medals in the Super-G and Giant Slalom, he became a skiing legend.

Now he is standing at the top of a steep slope in the midst of the glacier region of Sölden in Austria. I am eager to know: What will the exceptional skier say about the mysterious black skis mounted to his boots? This ski is what is known in the automotive industry as a test mule: the production version of the first ski designed by Audi being tested in secrecy.

The idea was born at a Christmas party in 2008. Blasius Gerg, whose company builds products that include the carbon fiber monocoques for Audi race cars, Max-Herbert Wagner, who is responsible for CFRP tooling and tool concepts at Audi, and Wolfgang Egger, Head of Design for the Audi Group, discussed a passion they shared: skiing. “We are sponsors of the FIS Ski World Cup, we created quattro, and in our advertising an Audi A6 drives up to the top of a ski jump,” reflected Wolfgang Egger, “but we don’t have a ski!” And he added: “If we design a ski, then it must be exceptional – in terms of looks, carbon processing and of course the high performance properties.”

The first prototype was indeed special: a full carbon ski made of super stiff T800 carbon fiber, a material that is also molded into Audi motorsport monocoques. Thanks to Audi’s competence in lightweight construction, it weighed just 960 grams, which is around half the weight of normal production skis. “Because of the ski’s tremendous stiffness, you barely notice vibrations in the ski tips that are usual in other skis,” reports Wolfgang Egger about initial tests on snow. “It felt as though I was simply skiing on ski boots and gliding over the ski slope – which is a fantastic feeling.”

The prototype that was originally designed for ski racing became a technology platform. “It was not considered feasible for production, because its performance properties were too radical, and its manufacturing costs were too high,” is how Mark Shipard, the lead designer, summed it up. However, a production model was then developed on the basis of this prototype in collaboration with the ski manufacturer Head. This time it was based on a highly modified yet conventional wooden ski core, around which a full carbon shell was heat-cured. This shell consisted of somewhat more flexible T700 carbon fibers. The resulting ski was still an impressive 200 grams lighter than a comparable production ski,
yet it had much greater torsional strength. In early 2011, at the famous Hahnenkamm downhill race in Kitzbühel, Austria, this model was introduced to its new target group: serious recreational skiers. “The response was overwhelming,” recalls Torsten Slawinski, project manager for the Audi Carbon Ski. “Everyone was after our 30 prototypes.”

But what will the “Herminator” say about the production ski? As though skiing on rails, Hermann Maier – skiing on a pair of short 170 centimeter race carvers – cuts fast, long curves on the slope, then a series of short arcs with radically tight turns. All of the turns are cut cleanly in the snow with the edges, without even a hint of side slip. It was impressive to see how extremely Hermann Maier leans into each turn – so deep that his ski glove on the inside of the curve brushes the snow while turning. He grimaces – in an expression of maximum concentration and power. Maier always gives 100 percent; he cannot do otherwise.

But even for someone like Maier, this extreme lean on turns will only succeed if the ski can hold its edge at the crucial moment and not slip sideways, even under strong pressure. “Especially when you ski with power, it is better if the ski is stiffer and does not twist much,” Hermann Maier explains to me as we share a lift ride together. “And that is very apparent,” continues the former top ski racer, “because the carbon shell gives the ski added spring.” “Is it the right ski for normal skiers?” I want to know. “Absolutely,” replies the skiing star. “On a groomed slope, it’s really easy to ski with.” As a final check before the next descent, Maier examines the ski bottoms and edges, and strokes the fine finish of the ski surface approvingly.

It was actually the ski’s visual appearance that took the most time in the final project phase. “First, we tried normal paint,” says carbon fiber specialist Max-Herbert Wagner, “but it was completely scratched after just a few ski runs.” Then, a special paint was developed which protects the valuable carbon and resists scratching, yet lets the fiber structure of the material shimmer through. When the ski is turned in the light, the carbon fibers inside the ski are exceptionally vivid in appearance – almost 3D. At the tip, where Audi rings made of aluminum are precisely inserted as inlays, the ski has a sophisticated carbon look in combination with the lightweight metal. This successful detail too reveals that design chief Wolfgang Egger is already contemplating many more projects for Audi Design: The Audi Carbon Ski is just the beginning.

“Did all the effort of the designers pay off?” That is what I wanted to know after my day of skiing with the former overall World Cup champion and ski world champion. “The ski’s running characteristics are impressive. The skier really notices the high torsional rigidity produced by the carbon,” describes Hermann Maier. “It makes the skis livelier, more agile and gives them better tracking stability. They are really fantastic on well-groomed slopes because the skis are very forgiving.” And then a broad grin fills his face: “You feel like a world champion on them.”

Full power: Join Hermann Maier – the “Herminator” – on his test run with the new Audi Carbon Ski.
Driving through picturesque landscapes: The Q3 eases its way along a track through rice terraces.

Through the Middle Kingdom

Whether on dirt roads and gravel tracks or the world’s longest sea bridge – the Audi Q3 Trans China Tour 2011 took international journalists on a journey through China, a land of contrasts.

Text | Bernhard Bartsch
CHINA

With a population of 1.34 billion, China is home to more people than any other country on Earth. Over 90 percent of these live in the eastern half of the country. The Audi Q3 Trans China Tour 2011 began in the capital, Beijing, and made its way some 5,700 kilometers southward. The final destination was the city of Shenzhen, near Hong Kong. In China, Audi manufactures its vehicles in Changchun in the northeast, and will also begin production operations in Foshan, which is located in the south of the country, in 2013.
The lion dances. It shakes its body to the beat of the drums, rises up on its hind legs and jumps nimbly over a line-up of tall posts. Then, opening its mouth, it stares wide-eyed into the crowd. Whoever catches its gaze can consider themselves lucky, because in China the lion is a traditional symbol of power and dignity.

On this day, the lion gazes at everyone. That’s because the young acrobats beneath the colorful costume are curious to know who they have in front of them. This morning, 20 SUVs in Samoa Orange are parked in front of the Wong Fei Hung school of kung fu, where the acrobats are learning China’s oldest martial art. The Audi Q3 Trans China Tour 2011 is making a stop in the southern Chinese city of Foshan.

It is the 12th day of a tour that knows no equal. The Q3 fleet is traveling some 5,700 kilometers through China. On board are car journalists from all over the world. Together, they will explore the intricacies of the country that for years has been the most important growth market in the automotive industry. The breathtaking statistics are well-known, but “seeing one time is better than hearing a hundred times,” as one Chinese proverb goes. And what better way to do so than actually getting behind the wheel? After all, experience is only gained by driving.

For the drivers, it is not only the country that is an experience, but also the traffic.

The tour – organized as four one-week stages with four legs each and a visit to the Audi plant in Changchun in northeastern China – is a journey through a country full of dynamism and contrasts. The tour officially began on October 16, 2011, in the capital, Beijing. From there, the first stage covered over 2,078 kilometers to Shanghai, through the port city of Qingdao, in which remnants of its German colonial heritage can still be seen today, and the former capital, Nanjing. From the economic metropolis of Shanghai, the second stage covered 1,925 kilometers to Shenzhen, near Hong Kong. On the way, tour participants passed through Hangzhou, called “Heaven on Earth” by the Chinese, and Xiamen, which looks and feels like a city on the Mediterranean. The third stage began in the former British Crown colony 835 kilometers away, passed through the industrial region of the Pearl River Delta, and continued on to China’s famous natural wonder, the karst mountains of Guilin. From there, the fourth stage took participants past the future production site of Foshan back to Shenzhen.

For the drivers, it is not only the country that is an experience, but also the traffic. Of course, there are traffic regulations in force in China, but not everyone pays attention to them. At night, many cars drive with their headlights on, as if they were in a doughnut shop.
no headlights, pedestrians can be seen crossing the highway and trucks are notorious for driving along the emergency lane on the wrong side of the road. “It really is very different from Europe,” says racing driver Rinaldo Capello, three-time winner of Le Mans, Audi factory driver and participant in the third stage of the Audi Q3 Trans China Tour 2011. “It’s not as orderly as on the road in Germany; it’s more like Naples in my native Italy, or the racetrack in Le Mans, where cars are driving all over the place and trying to pass each other.” The Q3 must be able to handle any type of road surface, as the tour follows field tracks, gravel roads and interurban roads full of potholes, but also state-of-the-art highways – and the world’s longest sea bridge, the 42.5-kilometer Qingdao-Haiwan bridge, which opened just weeks before the tour began.

Without a doubt, the tour is a journey through centuries of transportation history. On the interurban roads, you come across farmers bringing fresh hay home on wooden carts. Water buffaloes can be seen pulling plows across the rice fields. Traders make their way to the village market on donkey-drawn wagons. Bicycles are everywhere to be seen, mostly old pedal bikes in the country, but more and more modern electric bikes and mopeds in the cities. Many things can be transported on two wheels: Families of four crowd onto a single seat, stowing shopping carts, chicken cages and even pork sides on the luggage rack. Although it’s cheap, it’s not comfortable or safe. Thus it is the dream of many Chinese people to own a car. Shortly after the People’s Republic was founded in 1949, Mao Zedong built factories with Soviet help, primarily to make cars, and also trucks. Even today, outdated commercial trucks are a common sight on China’s interurban roads, but the trend is clearly heading toward modernization. In this respect, private Chinese customers have long since arrived and are now ahead of the curve, rather than trailing behind. For years, Audi has been the undisputed market leader in the Chinese premium segment.

“The Audi brand owes its standing largely to the fact that we have been closely studying the way our customers think and what they want for many years,” explains Intakhab Khan. The Indian native is a development engineer at the Audi Infotainment Tec Center (ITC) in China and is responsible for adapting and improving the Audi Multi Media Interface (MMI) for the Chinese market. It is therefore now possible to connect a number of different Chinese cell phones to the vehicle power supply, in addition to televisions that support the Chinese standard for mobile video transmission. “China is now setting its own standards, and is thus on a level with Europe, North America and Japan,” says Khan.

“In terms of technology, the People’s Republic is developing at a rapid pace; for us, this means we must develop along with it, in order to give our customers all the options they want to have.”

Without all these new developments, the Q3 drivers would almost certainly encounter some difficulties along their...
For over two decades, the Audi brand has been the market leader in the Chinese premium segment. In 2011, a total of 313,036 vehicles with the four rings were sold in China (including Hong Kong), an increase of 37.3 percent over the previous year. Most of the vehicles sold in China leave the assembly line in Changchun, in the northeast of the country, where the A6L, A4 L and Q5 are all built. The Q3 is also scheduled to be produced there in the future. Starting in 2013, a second production facility will be added in the southern Chinese city of Foshan. The Audi dealer network covers over one hundred Chinese cities. It’s no wonder that the People’s Republic has become the largest single market for the Ingolstadt-based carmaker.
journey across China. The Audi navigation system guides them with a precision that would amaze European and American eyes. The traffic recognition on the Chinese maps is so precise that you can not only follow the twists and turns of the road as you are driving along, but you can also see exactly which lane you are in. Before a turn-off, the system tells the driver early on which lane to move into, allowing him to reach his destination straight away even in the most confusing tangle of roads in an unfamiliar city. “The system also speaks Chinese, of course,” says Khan. It recognizes 29,000 Chinese characters, which can be entered on a touchpad.

This development also benefits other Asian markets, such as the Japanese or Korean market, where the touchpad now recognizes the respective writing system. At the same time, Audi is always seeking to understand which trends of the future will spread from China to the rest of the world. After all, with regard to design in particular Audi is interested in developments in other cultures and countries. As one of the world’s most dynamic societies, China provides important stimuli in this respect, which will affect product and design philosophy all over the world.

Racing driver Capello gained his very own impressions during the tour: “The Chinese are fascinated by cars, and a car like the Q3 makes driving fun under any conditions you might find in China,” says the Italian native. It’s already dark this evening as he arrives in the southern Chinese metropolis of Guangzhou. During rush hour, he sees the brake lights of the other Q3 cars ahead of him, distinctive red triangles. “Whoever designed these LED lights was a genius,” says Capello. “They make every Audi immediately recognizable in night-time traffic. And they’re just a beautiful sight.” The driver in front brakes again, and the red triangle lights up. You could almost think it’s a lion, gazing at you.

Mr. Berkenhagen, is Asia gaining importance as an area to do business in? Yes, and this development follows the logic of our growth. China has now become our largest sales market, and demand from Asian customers shows no sign of abating. The automotive industry in Asia is becoming ever more important. Special technologies and branches of industry have purposefully established themselves in this area, forming the basis for building an extensive supplier structure. In order to meet the supply needs linked to the increase in local automobile production, we are going to need more capable suppliers locally.

And that will definitely not happen overnight...

Just as we cater to the wishes of our Asian customers with our products, we must also adapt to the Asian business culture when dealing with suppliers. Building a fruitful partnership with Chinese suppliers requires trust and mutual understanding, as well as common objectives.

Is price the most important criterion for awarding a contract? Our Audi quality standard is the most important prerequisite. Adherence to turnaround times and a high level of development expertise come next on the list. Of course, all of this must be possible at a competitive price.
Rupert Stadler, Chairman of the Board of Management of AUDI AG, talks to American researcher and writer Professor Laurence C. Smith about challenges in the future.

Editor | Dr. Hajo Schumacher

**Rupert Stadler:** I sometimes need to make predictions about the future, but jumping ahead two whole generations and describing “The World in 2050” sounds really exciting to me.

**Prof. Laurence C. Smith:** Writing this book was the most exciting time of my life. As a climatologist, I am constantly asking myself how global warming will affect mankind and the ecosystem. I took almost two full years to travel around the world, because I wanted to see with my own eyes how scientists, politicians, businessmen and citizens view the future. Following this research journey, a lot of things have become clearer to me regarding the future of our planet. What I’d like to know myself is: How does it feel to be running a company in an industry that is going through a process of change?

“**Our engineers are working relentlessly on innovations enabling more sustainability.”** Rupert Stadler

**Stadler:** First and foremost, I feel personally responsible for just under 64,000 staff. I was born in the area. Audi has always been a part of my life, and it has always deeply fascinated me. I take pride in contributing my share every day.

**Prof. Smith:** We’ve just reached the figure of seven billion people on Earth. For a major carmaker, strong population growth is a two-edged sword: plenty of customers on the one hand, increasing problems with resources, the environment and congestion on the other.

**Stadler:** In the short term, what matters is raising powertrain efficiency. In the medium term, it will be securing individual mobility with a broad spectrum of propulsion options, and long-term, we will need to do without crude oil as a source of energy. Customer needs, too, will become much more diverse in the future. This is why we are evolving from a carmaker into a supplier of mobility. This includes new mobility services and the question of whether some customers will soon be looking for concepts that are no longer tied to buying a car.

**Prof. Smith:** What might these concepts look like?

**Stadler:** Perhaps one day the customer will be able to book different vehicles for different needs for a flat fee. We will leave well-trodden paths behind.

**Prof. Smith:** Do you see any country in the world that is making strong headway in developing its transportation system?

**Stadler:** There are a number of emerging-market countries that are much faster than we are in executing infrastructure projects. This creates an advantage for them in global competition. In these countries, mobility is seen as something thoroughly positive, because people...
realize it is what their prosperity and innovation capability depend on, enabling them to become more independent. This is a healthy hunger for progress, which I would like to see more of in Germany, as there was in the past.

**Prof. Smith:** In researching my book, I found that the future holds enormous opportunity for carmakers. Demand is about to rise significantly. However, this could also create serious damage. How does Audi propose to navigate between these two poles?

**Stadler:** Technology is the key. Our engineers are working relentlessly on innovations enabling more sustainability. We aspire to be the best partner for tomorrow’s society. The last word, of course, will be the customer’s. By the way, may I ask what kind of car you drive?

**Prof. Smith:** My all-time favorite was an Audi TT built in the year 2000. We now drive an SUV because we have a weekend home in the woods. But I promise you: my next car will be electric.

**Stadler:** Purely so?

**Prof. Smith:** Yes. I don’t find a hybrid convincing – two half cars don’t necessarily make one good new one.

**Stadler:** Electric propulsion will bring on the next quantum leap, especially in battery technology. A range of 150 kilometers is simply not enough. We are aiming to double battery performance by the year 2020. Between now and then, we will be using hybrids as an interim solution.

**Prof. Smith:** For my daily commute to the University of California, the kind
of battery range available today would be enough. But I think tomorrow’s cars will need to have much greater capabilities: The Internet is going to bring massive change to our mobility and our transportation systems.

Prof. Smith: For Audi, I have issued the slogan “Always on.” Connectivity in the car means that you will be telling your car where to go via speech recognition, with your car then figuring out the best route and estimated trip time, optimized thanks to satellite navigation and online traffic information. At the same time, all cars will be communicating with each other, easing traffic flow and improving safety.

Prof. Smith: That would be a dream come true for me. When I was young, I always wanted to take the wheel myself. But what a waste of time and nerves this constant stop-and-go is! Today, I would rather rely on an autopilot.

Stadler: That is the kind of future scenario that we are developing as part of the Audi Urban Future Initiative, drawing in architects, urban planners and transportation experts. Anyone who is on the road in Beijing, Mumbai or Rio will realize the same thing every day: standing in traffic means standing still, and standing still is the opposite of progress. We have the knowledge, the resources and the responsibility to participate in shaping the future.

Prof. Smith: In the USA, just as elsewhere, the Audi brand stands for sophisticated, urban, technology-driven. When do you think we will see the first self-steering vehicle?

“[In the USA, the Audi brand stands for sophisticated, urban, technology-driven.]” Rupert Stadler

Stadler: We presented our concept of a driverless TT at the Geneva Motor Show in 2011. But it’s going to take a while for people to get used to the idea that sensors in a car can steer it better and faster than a human being can.

Prof. Smith: Acceptance is a huge cultural challenge. Many visions have taken too long to come into their own.

Stadler: Our customers are curious, technology-friendly types. They want to know: How does an electric car accelerate, how does it handle? The younger generation, in particular, is very open. Smartphones have boosted acceptance of IT incredibly. If you watch science fiction movies from the 1980s, they show things that were unimaginable at the time, like tablet PCs or navigation systems – things that we think are absolutely normal today.

Prof. Smith: There are dangers in the future, too. Our problem would be less the growth of the population and more increasing prosperity. If all seven billion citizens of the Earth aspired to live at U.S. standards, we would soon be needing resources amounting to the equivalent of about 72 billion people.

Stadler: Resource efficiency is the order of the day. If we can achieve that, we can raise prosperity and at the same time contain resource consumption. Growth will only be sustainable if we don’t just subscribe to commercial success, but also to society and the environment. This is a field in which we will be investing 13 billion euros over the next five years alone, especially in new propulsion technology and lightweight materials.

“Resource efficiency is the order of the day.” Rupert Stadler

Prof. Smith: More cars, better mileage, higher speeds, fewer emissions – this may sound contradictory, but it isn’t. At the same time, the car industry is experiencing a countertrend in big cities: Young people in particular often don’t want to own a car anymore. Perhaps they think it’s too expensive, perhaps it’s because of lack of parking space, or they may be having doubts in principle.

Stadler: Though a car may no longer top the wish list of many young people, they still have a desire for individual mobility. If you want to drive, but don’t want a car in your garage, you can opt for temporary offers – a sedan with a driver, or a quattro for a holiday trip.

Prof. Smith: Your company is going to need to evolve constantly. What does this uncertainty mean for management?

Stadler: It creates an optimistic tension. We know the old is no longer fit for the times, but we don’t know the new very well yet. This opens unexpected opportunities for new thinking. Who is to provide sustainable solutions, if not a technology driver such as Audi? The crucial question is: Will government and society prove...
Rupert Stadler and Professor Laurence C. Smith (right) met in Ingolstadt to discuss ideas for the future.

“We know the old is no longer fit for the times, but we don’t know the new very well yet. This opens unexpected opportunity for new thinking.” Rupert Stadler

agile enough? Sometimes it takes moments of shock to speed up innovations, like a dramatic increase in oil prices. What is important is for us to be well prepared so we will be able to react quickly even to unexpected developments.

Prof. Smith: We all know that we need to change course and head toward renewable energy sources. But they are not commercially viable yet. Doesn’t that make it very difficult for a company to plan investments?

Stadler: We will always invest in powerful, emotionally appealing cars, whatever “power” will mean in the future. The important thing is that the customer loves the design, the technology, the functionality ...

Prof. Smith: ... and I’d like a cordless recharging option.

Stadler: We’re working on that, too. The key question remains: how do we add value? People want time for themselves, they want to lead ecologically responsible lives, they want to communicate. And they want a car that enriches their lives. I don’t give names to my cars, but I love their power, their precision.

Prof. Smith: I’m convinced there can’t be a better fuel for a carmaker than passion. There’s one more thing, though, that I’d like to see in my car soon: an espresso maker.

Stadler: You may not believe this, but when we presented the “Roadjet” in Detroit some years ago, it actually came with an espresso maker.

Prof. Smith: I should have guessed: “Vorsprung durch Technik.”

Visions: What will mobility look like in tomorrow’s world?

Standing in front of Audi corporate headquarters in Ingolstadt, Rupert Stadler and Professor Laurence C. Smith discussed the opportunities that electrically powered cars will offer – right beside an A1 e-tron, which the two of them topped up at the “electric filling station” for a test drive.
There is hardly a motorsport competition where technical development dovetails so impressively with Audi’s efficiency objectives as at Le Mans.
The Audi brand celebrated its tenth victory in the 24 Hours of Le Mans in 2011. A look back: three biographies, one race and one fuel – enthusiasm.

Text | Alexander von Wegner
After 24 hours, the winners are Marcel Fässler, André Lotterer and Benoît Tréluyer in the Audi R18 TDI bearing the number 2.

The 24 Hours of Le Mans has been held since 1923. The current rules reward the most efficient design. The new V6 TDI of the Audi R18 symbolizes downsizing in racing.

Dr. Wolfgang Ullrich (left), Head of Audi Motorsport since 1993, directs the Audi R18 TDI to its debut victory at Le Mans. It is Audi’s tenth
victory on the Sarthe – thanks among other things to the perfect coordination of the Audi team during the diesel sports car’s pit stop (right).
Erwin Fischer’s enthusiasm was first sparked 46 years ago when he joined NSU Motorenwerke AG in 1966. He began on rotary-piston engines, worked his way up the ladder in Neckarsulm and joined Audi Sport in 1990. Audi has been competing at the 24 Hours of Le Mans since 1999. The race enjoys the reputation of being the world’s biggest racing event. Even after 88 years, the Grande Dame of motorsport is considered a source of inspiration, fascination and motivation. A driving force for the biggest brands, their drivers and their employees. And for amazing fans: 249,500 people poured into the department of Sarthe in June 2011. They experienced a fascinating battle that Audi won by a margin of just 13.854 seconds.

It is the last page in Fischer’s professional storybook – one which is so typical for his generation. Precision mechanical engineering in Baden-Wuerttemberg, from scratch. A lifetime for the company, nearly half a century of automotive history. People like the 60-year-old master mechanic are the pillars of stability in a fast-paced world. “Vorsprung durch Technik,” innovative ideas, brilliantly conceived by engineers. But it is only through the meticulousness of Fischer and his colleagues that they become reality. One mistake during assembly and the ambitions of a global company would go up in smoke before the eyes of millions of television viewers.

Audi factory driver André Lotterer took the checkered flag at 3 p.m. on June 12, 2011, with a mixture of exhaustion.
and satisfaction. Fischer enjoyed a glass of champagne in celebration of the tenth victory. And the start of his retirement. “An unforgettable moment,” he recalls. It was his last race, but just the third for technician Daniel Mack. Mack really wanted to become a chef. However, at the advice of his father, who also works at Audi, he became an automobile mechanic in 2001, trading his whisk for a vise.

Mack’s enthusiasm was initially tempered by plenty of frustration. Some trainees are allowed to move to Audi Sport after 18 months. “I’d have loved to have been one of them,” he says. And his wish finally came true in October 2005. “Working at Audi Sport is the ultimate,” raves Mack, who is now a development specialist for racing and specialty engines. An engine is an engine. And yet, this one was designed almost from scratch due to radical changes in the technical rules for 2011. The new V6 TDI is significantly smaller, but its specific output is much higher. And that for the ultimate challenge – Le Mans: a good 4,838 kilometers, roughly the distance from Oslo to Rome and back.

Ingolstadt, December 10, 2010: world premiere of the R18 TDI at the Audi Sport finale. The guests are still celebrating as Mack and his colleagues roll away the prototype. “Into the truck at 1 a.m. and off for testing,” recalls the 25-year-old. Tests, tests and more tests – until Le Mans.

He pitches in during the pit stops. When the car is on the track, he monitors vehicle data such as pressures, temperatures and the fuel level on his laptop. The 24 Hours are the greatest. Even his calendar is based around the race. “Le Mans is like our New Year’s Eve – the new year starts after the race.”

Axel Löffl’s work is already done when the race starts. “Otherwise I’ve done something wrong,” he says. He still keeps an eye on things for the 24 hours. Löffl and his team are responsible for the design of the complete chassis. He monitors their creation at the track. “Our development times are extremely short, from six to nine months.” Nevertheless, everything – aerodynamics, efficiency, safety – must be perfect. He experiences many emotional moments. Allan McNish and Mike Rockenfeller are involved in serious accidents while performing passing maneuvers. But the Audi ultra lightweight technology saves lives. Both drivers free themselves from the wreckage of their race cars. “McNish thanked me for the sturdy cockpit. That was very moving,” recalls Löffl. Another 16 hours of adrenaline follow. The last remaining Audi keeps the 13.854 seconds lead: a spectacular win by the Audi R18 TDI at Le Mans.

“Le Mans is like New Year’s Eve for us – the new year begins after the race.” Daniel Mack
Mizuho Sakaguchi and Azusa Iwashimizu (at rear) don’t just team up to play soccer, they also joined hands to present the new A1 Sportback.

Fuel consumption and emission figures at the end of the Annual Report
Big in Japan

A big stage for a small car: At the Tokyo Motor Show, Mizuho Sakaguchi and Azusa Iwashimizu presented the new A1 Sportback. And they were joined on stage by a real samurai.
So let’s ask the question: What do Azusa Iwashimizu and Mizuho Sakaguchi have in common with the zippy little compact they just unveiled on stage?

Sure, both the soccer ladies and the car were given a rock star’s welcome on this November day in Tokyo. The A1 Sportback was a sensation at the Motor Show for its Samoa Orange body color alone. Iwashimizu and Sakaguchi, defender and midfielder, have risen to stardom in the Land of the Rising Sun following their sensational triumph in Germany in the summer of 2011. They were received by the emperor and the prime minister. Everything they say makes the headlines in the newspapers.

More young girls than ever before are joining Japan’s soccer clubs. And the champions’ distinctive hairdos are all the rage for an entire generation. Precision, fighting spirit and technical skill took the ladies all the way to the finals, where they beat the U.S. team in an unforgettable penalty shootout. The soccer ladies have proved that size does not matter: At an average height of 1.63 meters, Japan’s 21 kickers were the tournament’s shortest by far. (Germany’s national team measured an average of 1.73 meters). However, and this is what they have in common with Audi’s zippy city runabout, size sometimes takes a back seat. What really counts is the combination of technical ability, motivation and teamwork. This is exactly what designing
the Audi A1 Sportback was about – a small car with a big personality.

Soccer ladies Azusa Iwashimizu and Mizuho Sakaguchi are convinced that the car will win the hearts of urban trendsetters, just as they won the hearts of soccer fans the world over just under a year ago. “The Audi A1 Sportback is a perfect car for cities like Tokyo,” says Sakaguchi as she stands at the edge of the stage. “It’s great that this sporty-looking compact car now comes with five doors, too. This is really going to make it a big hit especially in Japan with all the megacities we have here.” As with the A1, customers can order the A1 Sportback in one of many equipment packages and thus customize it to suit their exact preferences. Sakaguchi’s favorite is Samoa Orange with a color contrast roof in Daytona Gray.

Since last year, Audi has been a supporting company for Japan’s National Football Team, providing each Nadeshiko (Women’s Team) player with an A1. “Most of my team colleagues including myself have never sat in a European premium car before,” says Azusa Iwashimizu. “Now, we commute to training every day in our A1. We love it because of its great looks, its comfort and because it’s such fun to drive. And it’s a real headturner, too.”

For Audi, working with the world champions has been a great benefit. Japan is widely regarded as a defining market. Customers here value technology and design more than in practically any other country. At the same time, Audi’s involvement as a supporter of Japan’s National Football Team is a commitment to a country that is only slowly recovering from last year’s earthquake and tsunami disaster. A commitment that was expressed at the Tokyo Motor Show with a specially designed model.

The “Audi A1 SAMURAI BLUE” unveiled by Sakaguchi and Iwashimizu is one of a kind. It was designed to commemorate the partnership between Audi and Japan’s National Football Team. From the color of its paint, center console and air vents it is obvious at a glance that the car is related to Japan and its National Football Team. Blue and white are the dominant colors, accompanied by the red of the rising sun in the country’s national flag.

As powerful and sporty as any real samurai – how’s that for size?
Are the gaps even? Do the actual values match the target values? Deviations can be measured to a tenth of a millimeter in the Audi master jig.
The third Audi brand value besides sportiness and progressiveness is sophistication. It therefore comes as no surprise that from the initial idea to the finished product, every Audi vehicle has to pass countless quality checks. Like the new Audi RS4, for instance.

Text | Leonie Thim
In a bright hall on the grounds of the Ingolstadt plant, the new Audi RS 4 rests on a stand of solid steel, accessible from all sides. The Ibis White paint of the RS 4 is covered with colorful numbers, lines and stickers: Gap, concept, 0.3, 0.2 and 0.1 are written on the engine hood. Every detail of the vehicle is checked here on the master jig. Measurements are taken to make sure, for example, that the Singleframe is flush with the engine hood and the gaps are even. Deviations are precisely measured to a tenth of a millimeter.

The measurements on the master jig are just one of the checks that an Audi has to undergo. Each has a long quality history. From the first design sketch to the finished product and beyond, all specialist areas place great emphasis on quality. Vehicle reliability and durability are just as important here as precision and visual appeal.

The understanding of quality goes far beyond the reliability so appreciated by the customer. “Quality encompasses everything that a customer can experience in our cars. Quality is what you can see, hear, sense and feel,” says Werner Zimmermann, Head of Audi Quality Assurance. “The incomparable Audi experience – high reliability together with comfort and sportiness, precision and sophistication – would not be possible without it.”

An Audi comprises some 12,000 parts. With the numerous equipment versions of the individual models, there are millions of possible ways to put them together. Work in the master jig therefore begins long before the start of production. The aim is to fine-tune the fit, the visual appeal and the haptics for both the interior and exterior – and this applies to each and every model.

Individual parts are grouped into assemblies or complete vehicles and assessed. “Despite modern digital modeling methods, this tangible master jig is indispensable for us,” says Zimmermann.

That’s because the master jig enables not just the fine-tuning of strictly objective criteria, but also the subjective consideration of the whole. The gaps around the fuel tank cap of the RS 4, for example, are intentionally different.
at the top and bottom because this is the only way that a person looking at the car perceives them to be even.

Once the individual parts have been adjusted, the next step is an inspection of the complete car. In addition to the quality of its visual appeal, the functions of an Audi model are now also fine-tuned by testing pre-production models on public roads. The yardstick here is always the customer. Tests covering millions of miles performed under real conditions, in various climate zones and in market-specific traffic situations are conducted to ensure that the quality of every Audi vehicle always meets expectations, whether in the stop-and-go traffic of megacities, while driving on the German autobahn or in the rugged terrain of the Chinese mountains.

Because structures, components or combinations of materials in a vehicle can make unwanted noise on certain road surfaces or above certain speeds or temperatures, the acoustics are also studied during road testing. Moving components in particular, such as seats, seat belts, seals, the glove compartment or doors, can cause intrusive noise. “The shakedown drive is one of our most important tools,” explains Zimmermann. “It enables us to experience our cars under real conditions and check their function, road behavior and acoustics, among other aspects.”

A new Audi model can only go into production after all materials have passed the tests, all components have been fine-tuned to one another and the acoustics and driving characteristics fulfill all specifications.

The work is still not completed at that point, however. “Quality does not come automatically – it must be achieved anew every day,” emphasizes Zimmermann.

This is why every Audi that rolls off the assembly line undergoes one final inspection. In addition, individual vehicles chosen at random undergo special tests related to visual appeal and function. All this is done to maintain the standard of quality during series production. The result is the unmistakable Audi quality, which can also be found in the new Audi RS 4.

Quality is not a top priority: Every component is checked and adjusted until it satisfies the Audi brand’s stringent requirements. “Quality is passion and the striving for perfection,” says Werner Zimmermann, Head of Audi Quality Assurance.
For the first time, Italian sports car maker Lamborghini is adorning a special series with the color Rosso Mars. But the car is awe-inspiring not just for its outfit, but also for its performance. Especially on snow.

Text | Jürgen Lewandowski
Better than flying: The Super Trofeo Stradale turns every mile in the snow-covered Carpathian Mountains into pure driving pleasure.

“Dancing red-on-white takes a little practice.”
Ferruccio Lamborghini loved many things: the industrial empire he built from the ground up after the war; the wines he made at his own winery and the high-horsepower sports cars he was able to afford beginning in the mid-1950s. At the time, Lamborghini could not have imagined that this particular passion would end up making him famous. It seems the engineer, annoyed by the poor quality of many of his cars, did what he had to do: In 1963 he began building his own sports cars, and the world had a bright new star – Automobili Lamborghini, headquartered in Sant’Agata Bolognese.

Of course, the engineer and perfectionist in Ferruccio Lamborghini also shone through in the design of his automobiles – even the very first model had a 12-cylinder engine with four overhead camshafts; the 5-speed transmission was designed and built in-house according to Lamborghini’s own quality standards, and independent suspension on all four wheels was also still unknown in this form. And when the first Miura with a transversely mounted V12 engine made its appearance at the Geneva Motor Show in March 1966, the mid-engined coupe styled by Carrozzeria Bertone attracted crowds of people, and Ferruccio Lamborghini had finally cemented his reputation as a manufacturer of Italian sports cars. A reputation that would be carried on by Countach, Diablo and Murciélago, and that culminated in the Gallardo and Aventador models being built today.

While the 515 kW (700 hp) Aventador is causing a sensation in the world of supercars, the Gallardo, exuding agility, nimbleness and tailor-made sportiness, is set – for the first time in the long history of Lamborghini – to put its sporty capabilities to the test on the racetracks in the Lamborghini Blancpain Super Trofeo. It’s not surprising that customers began asking Lamborghini for a roadgoing version of the LP 570-4 Super Trofeo. A request they couldn’t refuse, nor did they want to. The result is the Gallardo LP 570-4 Super Trofeo Stradale, whose very name boldly draws attention to its 419 kW (570 hp) of output and all-wheel drive. 570 powerful cavalli, which the 5,204 cc ten-cylinder deploys at 8,000 revolutions per minute, and which propel the 1,340 kg coupe with relative ease: It reaches 100 km/h in just 3.4 seconds, 200 km/h in 10.4 seconds, and it’s not until 320 km/h that acceleration, rolling resistance and aerodynamic drag achieve parity. And thanks to the standard all-wheel drive, this race car domesticated for the road offers, even on snowy mountain passes, the perfect, sporty handling that has long become the hallmark of these masterpieces on wheels from Sant’Agata.

The Lamborghini Gallardo handles snow-covered switchbacks with ease.
What is more pleasurable: a Lamborghini Gallardo on the racetrack or on a snowy mountain pass? A question the owner of the LP 570-4 Super Trofeo Stradale no longer asks – he has a car that masters both challenges successfully.

As impressive as the acceleration may be – for Super Trofeo drivers, it’s the complete package that makes the difference: performance, transmission, stiffness, handling, braking, downforce. And it is the art of the engineers to transform the extreme demands required here into a coherent, reliable, attractive car that can live up to this high standard 365 days a year.

On the outside, this is most evident by the large rear spoiler. The manually adjustable rear wing is an exact replica of the race car and provides, depending on the setting, one to three times as much downforce as the Gallardo LP 560-4. Another element taken directly from the race car is the removable engine hood with quick-assembly system, which, like the rear spoiler, is made of carbon-fiber composite material. Everywhere you look, you see this very light, yet highly durable material. The side sills, outside mirrors and the bold rear diffuser are made of it.

Of course, the Super Trofeo Stradale also sports a new color, developed exclusively for this coupe: Rosso Mars – a tone that is Italy’s traditional racing color and emphasizes the innate Italian character of Lamborghini. But if you should opt for the colors Grigio Telesto or Bianco Monocerus instead, you can also have the roof painted in resplendent black. In commemoration of the 150th anniversary of the founding of the Italian Republic last year, the number of Super Trofeo Stradale units to be built was limited to precisely 150 – after this, there will be no more. Black and red are the dominant colors in the purist interior. At Lamborghini, supercar and everyday suitability are not a contradiction in terms, and this is one of the long-recognized strengths of the brand from Sant’Agata. Thus the fascinating pictures of the red Super Trofeo Stradale on snowy Romanian mountain passes demonstrate just what cutting-edge technology can do: perfect mastery of a 419 kW (570 hp) coupe in almost all road and weather conditions. This spectacular dance of a red Lamborghini against a white background takes a little practice, there’s no question about that. But the select few who have had the privilege of piloting this dream in Rosso Mars declare unanimously that the car handles easily and without complication. A declaration that will have to be accepted at face value, because it takes a skilled hand indeed to master 570 cavalli on the first few miles, regardless of the surface beneath. ●
The year 2030 in one of the world’s major metropolitan centers: What will it be like to live there? How will we get from one place to another? An open dialog with experts in Frankfurt.
AUDI
URBAN FUTURE INITIATIVE

Illustration | Scriberia  Text | Christina Mänz

50% of journeys in Copenhagen are made by bikes.

How do we balance systems & empathy?

Can we use new technologies to be more sustainable?

SUN GIVES OFF MORE ENERGY

ZEROCO2

RELAX!

WE WILL HAVE
Audi Urban Future Initiative

Four pillars for the future

What will the overall vision of urban mobility look like in the future? How can AUDI AG, as a provider of premium automobiles, contribute responsibly to realizing such visions? The Audi Urban Future Initiative deals with these complex core questions. Rethinking, interacting, cooperating and networking knowledge – the initiative comprises four pillars:

Award
The Audi architecture award – which carries 100,000 euros in prize money – was presented for the first time in 2010 in Venice. Five international architecture firms presented their visions for sustainable cities of the future. Winner: Jürgen Mayer H. with the “Pokeville” project.

Summit
The international, interdisciplinary conference had its premiere in 2011 in Frankfurt: presentations by renowned researchers and themed workshops with Audi experts and external specialists. The open dialog from the architecture competition was continued here.

Insight Team
A group of Audi employees from various divisions focus on mobility and urban development. They are sources of inspiration, and they develop new perspectives. This actively introduces the dialog about the future within the Company.

Research
This pillar of the initiative ensures the formation of a scientific network. Audi supports such efforts as the research project “Urbanizing Technology: The Mobility Complex.” Saskia Sassen, a sociologist and economist, heads the project at Columbia University in New York.

www.audi-urban-future-initiative.com

The distinguished panel of the “Energies of Data” themed workshop (from left): Stefan Sielaff (Head of Group Interior Design, Volkswagen Group), Dr. Steffen P. Walt (Senior Research Fellow at RMIT University, Melbourne), Chris Andersen (Editor-in-Chief of Wired magazine), Carlo Ratti (architect) and Ricky Hudi (Head of Electrics/Electronics Development, AUDI AG).

Take a group of people with different professions, backgrounds and opinions – architects, designers, sociologists, economists and trend researchers. Give them a challenging issue, room for their theories and an audience for their thoughts. The result: inspiring ideas, imaginative visions and innovative approaches.

This perfectly describes the Audi Urban Future Summit that was held for the first time in Frankfurt on September 12, 2011. Audi had invited more than 300 international experts for an interdisciplinary exchange of ideas at the kickoff event for the International Motor Show (IAA). The subject: urban mobility in the future.

The goal: an open dialog on socially responsible, new approaches. A real challenge. By the year 2030, about 70 percent of the world’s population will live in cities. The number of megacities with over 20 million inhabitants will increase to more than 30, and these will primarily be located in Asia, Africa and Latin America.

So what will these cities of the future look like? How will people live in these megacities? How will they get from one place to another?

“Cities need reliable systems. People need social relationships. With the right combination, these things make a city exciting and livable,” according to one of the theories – proposed by trend researcher, author and consultant Charles Leadbeater. The best example, according to the native Briton, is the city of Barcelona. “It flows, it’s dynamic, open. It makes you happy,” Barcelona has “sympathy” – the right mixture of system and empathy: “Good public transport, a good road network and good infrastructure. There are many large squares and a center. The city is very social, networked and multifaceted. It has the right mixture of pedestrians and other road users.”

Megacities will continue to find their own way in the future in order to function. “But the price is high,” says the trend researcher. “The quality of life is low and functionality comes at the expense of the environment. Cities can quickly become inhuman.” There will be no single solution for these megacities – Charles Leadbeater and other experts at the Audi Urban Future Summit all agree on that. The answers will also come from the cities themselves. “In successful cities, the responsible people will pick up on what the city requires.”

Sociologist Saskia Sassen adds: “Cities are complex systems that can bring even the most capable technologies to their knees.” Consider a traffic jam: “A busy city center can reduce a car to a crawl – it upsets an engineer’s logic. The city puts up resistance.
The question is how to urbanize the car,” explains the professor, who teaches at Columbia University in New York. “To understand what the city is telling us, we have to think like a city ourselves.”

And indeed – where does the data network for the interactive, digitized world of the megacity actually leave people? The conflict between private and public is a big one. “We exchange information for better solutions and in the process lose what we still define as our privacy,” says Leadbeater.

People increasingly share their ideas, their knowledge and their data. So perhaps in the future they will share cars as well? “Individuality will change,” according to the expert on innovation and creativity. “A car will no longer necessarily be associated with status, freedom and mobility. It will take on a different relevance worldwide.” Leadbeater believes that industry must work on the “systempho-car” – a car for a system with empathy. “The car of the future must be extremely efficient in ecological and economic terms, and it must be affordable. It should not stand for a long time in a parking lot, but should usually be in motion and have a social component.”

Leadbeater also considers economic models such as “car sharing.” “In the future you might be able to buy not only cars from Audi, but also miles; drive a subcompact today, drive a sedan tomorrow.”

Leadbeater speaks of a “car cloud” that Audi could offer in places like London. “You would have access to an Audi whenever you need it. The future lies in using existing resources better and more flexibly.”

The native Briton believes that Audi is on the right track with the Urban Future Summit. “I’m impressed that the critical issues are discussed openly. The question now is: Will the Company be capable of being open to new ideas from the outside and redesigning the relationship between car and man? The potential is great.”

With the Audi Urban Future Initiative, we have dared to leave our comfort zone. For a long time, the automotive industry has been living in an ivory tower. We at Audi know: To actively help shape the future, we must consistently network and have greater social impact. I believe strongly in the concept of “shared value,” where the goal is to create both entrepreneurial and social value at the same time. We’ve committed ourselves to safeguarding natural resources and to mobility within urban centers that is pleasant and efficient – i.e. uncongested. And we rely on innovative technologies and business models: variations of “pool leasing” or the “car cloud” are among our considerations. The initiative we launched prepared the way for well-defined teamwork on designing our future living space. Together with an expanded group of stakeholders, we will join in concrete planning efforts with the goal of safeguarding the highest possible quality of life for all. In doing so, we are gradually shifting the boundaries of our present business model – in the areas of energy supply, urban infrastructure, communication and urban design.
In harmony with the environment

Many different methods are being used to achieve energy efficiency, CO₂ reduction and sustainability at Audi. The common denominator and name for these efforts: Audi balanced mobility.

Text | Kay Dohnke
When sustainable mobility is discussed within the Audi Group, it’s about more than just technologies that reduce a car’s fuel consumption and therefore also reduce emissions – sustainable mobility is viewed in a much more comprehensive sense. “The Company takes its social responsibility seriously on many levels,” commented Rupert Stadler, Chairman of the Board of Management of AUDI AG, describing the Company’s philosophy. “In the interest of preserving a livable future for coming generations. In addition to international competitiveness and a forward-looking human resources policy, environmental protection and preservation of resources form the cornerstones for sustainable management of the Company.”

With this in mind, the Company is active in many fields that go beyond the actual product of the automobile. The commitment begins as early as the product development process. “The production area in particular offers ample potential that we are developing systematically,” said Frank Dreves, Member of the Board of Management for Production at AUDI AG. A vehicle’s environmental footprint, after all, also depends on how it is built, with particular attention being paid to energy. By 2020 Audi wants to reduce site- and Company-specific CO₂ emissions by 30 percent from the level in 1990. The goal: carbon-neutral car production. For this, the energy required in the direct production process will be reduced.

Audi has made an area measuring some 23,000 square meters available for photovoltaic modules at its Ingolstadt plant. The car manufacturer is thus supporting the use of various technologies for harnessing solar energy and in this way is making a major contribution toward further optimizing solar technology.

The use of hot-shaped steels in body manufacturing makes it possible to combine low weight with high strength. The CO₂ balance is already positive during production: The energy demand for hot-shaping high-strength steel produces 20 percent less CO₂ than when using conventional steel.
It is geared toward conserving resources, with significant energy savings made possible by innovative technologies such as more efficient robots, new electric motor-driven welding tongs and especially light CFRP tools for body manufacturing. Sometimes even simple measures can make a crucial contribution toward achieving a positive balance: Reprogramming made it possible for electric hoisting devices to recuperate as they were lowered and therefore to feed energy back into the power grid. And while engines are running on test stands, they produce electricity through generators for the plant power grid.

The process chain during automotive production is energy-efficient as well: lightweight construction materials such as aluminum and carbon fiber-reinforced polymer (CFRP) as well as the use of hot-shaped steels reduce a car’s weight and therefore its consumption throughout its entire lifecycle.

The Audi balanced mobility concept, which is designed for energy efficiency and environmental conservation, is increasingly being integrated into the workforce, according to Dreves: “The number of suggestions in our internal improvement system for avoiding emissions and protecting the environment has increased significantly – for improving ambient air, for instance, or preparing rechargeable batteries for screwdrivers.” Audi balanced mobility has a consistent focus on people, which is why the Company is particularly committed to improving ergonomic conditions at the workstations.

Clever minds can continuously find potential for savings where it may not immediately be obvious – such as in logistics, where a software program calculates the optimal use of space in packaging and containers. By helping to avoid energy-consuming transport, this increases the potential for saving energy to up to 20 percent. Great potential for saving energy has also been developed in the area of distribution logistics: Audi models shipped overseas from Emden arrive at the port the carbon-neutral way in the “Eco Plus” commercial transport trains of DB Schenker Rail – accounting for a total of 150,000 cars per year. The additional costs for the green electricity that is used are borne by AUDI AG. Up to 70 percent of all cars produced are transported to their destinations by rail.

Numerous measures are bringing the Audi Group closer to the goal of climate-neutral car production. “Emissions will never be reduced to zero, however,” Dreves explained. “The unavoidable emission of CO₂ is therefore increasingly being offset.”

Regarding the car itself as a product: Along with making continuous improvements to the efficiency of conventional...
drive systems, Audi is also currently field-testing innovative drive systems and fuels under realistic conditions in three test series. These could help lower emissions during driving. The prototype Audi Q5 HFC draws its energy from a fuel cell and tanks up on hydrogen. The batteries for Audi A1 e-tron cars with an electric drive system, which are currently being driven in fleet trials in Munich, can be conveniently charged from the electricity grid. And the Audi A3 TCNG, which will begin rolling off the assembly lines in late 2013, can fill up at any natural gas fueling station.

Still, the Audi Group believes that it is not enough merely to develop innovative automotive drive systems to the point where they are ready to use and then introduce them to the market. As a carmaker that thinks systematically, Audi also has to keep an eye on having an appropriate energy supply. This is why Audi balanced mobility also includes the e-gas project, in which excess wind power is used to produce hydrogen and synthetic methane. This should make climate-neutral mobility possible.

"At this moment we are realizing a system that should make climate-neutral driving possible for owners of Audi models that run on electricity, hydrogen or natural gas," explained project manager Reiner Mangold. The goal: cars that drive with wind or solar power. Efforts to implement this concept are based on familiar technologies. With the aid of electricity, water is split into oxygen and hydrogen in an electrolyzer. And by adding carbon dioxide, hydrogen can be converted into methane, which has the same properties as natural gas. Thus, it can be liquefied, transported through pipelines, stored in caverns or tanks, converted into electricity or used for heating. It can also be used as a fuel for cars. "So thanks to this technology, there are three energy sources of the future available simultaneously,\" Mangold emphasized: electricity, hydrogen and synthetic natural gas – known at Audi as e-gas. Plus, there is another special advantage: if you begin the methanization process with electricity produced from renewable resources and add, for instance, CO₂ from a biogas plant – which would otherwise reach the atmosphere directly as emissions – the synthetic methane produced in this way is climate-neutral when used as a fuel for cars.

Together with the company SolarFuel GmbH, AUDI AG decided in May 2011 to establish the world’s first industrial-scale experimental plant. The plant, being developed in the town of Werlte in Lower Saxony, is planned to produce about 1,000 tons of e-gas annually in the next few years – which will enable 1,500 A3 TCNG cars to travel 15,000 kilometers each per year. Another 150 tons of e-gas can also be used in the public power grid for other purposes, such as for the production of electricity during low-wind periods. The plant in Werlte is one link in a comprehensive chain of energy production: It will acquire the renewable electricity from Audi wind turbines in the North Sea offshore wind farm. Electricity for operating the Audi e-tron can then be obtained directly from the power grid. The hydrogen that is produced through electrolysis is converted into e-gas and fed into the existing natural gas grid. Mangold sees an "enormous inherent advantage" here over hydrogen: "The natural gas distribution network already exists. This makes energy-consuming transport and intensive investment unnecessary."

Mangold highlights yet another major strength of the e-gas project: "There's no need to place our hopes on tomorrow; the infrastructure already exists." As soon as the plant in Werlte begins operation, owners of an A3 TCNG will be offered the option to acquire e-gas. The volume of natural gas they use to tank up their cars will be compensated for by feeding the corresponding amount of e-gas into the grid. Its use as a fuel will then be allocated through a balancing group method. This will make climate-neutral driving a reality. ●

"We have to continuously think outside the box."

Frank Dreves
Production

Sustained success is not only defined by positive growth in the key financial figures – it is also defined above all by environmental responsibility. We’ve been setting an example in this area for a long time – not because we have to, but because we feel an obligation to do so. We do not wait for external pressure – the best ideas at Audi come from internal sources. This is the pioneering spirit that has made our company what it is today – and it is what continues to drive us. It is also behind our commitment to the environment. One of my goals is to neutralize CO₂ emissions at our corporate sites. We are achieving this by forging new paths, researching new technologies and continuously thinking outside the box. We need energy to produce cars. But we can ensure that we acquire this energy in an environmentally compatible way. We have already realized numerous projects at the Ingolstadt site alone. Efficient solutions such as using waste heat, heat recovery systems and trigeneration plants have proved effective for many years now. We are continuing down this path with determination – with ideas that, like Audi itself, might be considered a bit “different.”
The power within

What do the new Audi cylinder management system and biathlete Magdalena Neuner have in common? Far more than you would think.

Text | Alexander von Wegner

Magdalena Neuner and the Audi S6 are two model athletes with special qualities.

Fuel consumption and emission figures at the end of the Annual Report
The transition phase is the greatest challenge. It is difficult, but also particularly intriguing. And you have to find a very good compromise so that everything fits together,” says Magdalena Neuner. And Jürgen Königstedt agrees.

The biathlete and the Head of V8/V10 Gasoline Engine Development at AUDI AG are of one mind, but with reference to two different worlds – with astonishing parallels. The professional athlete is describing the transition between cross-country skiing and shooting. The Audi engineer is talking about Audi cylinder on demand, a fascinatingly efficient solution where an eight-cylinder engine temporarily acts as a four-cylinder unit.

Magdalena Neuner doesn’t need a lot of muscle to shoot. And the new Audi S6 doesn’t need eight cylinders to drive steadily at a moderate speed. Magdalena Neuner always has her muscles “on board.” Just like the Audi S6 with the eight cylinders of its 4.0 TFSI engine. They are definitely needed, but are not used all the time.

What sounds like a conflict of aims is cleared up when it comes to making clever use of potential. Rationing energy: muscle in the case of humans, fuel in the car. Cross-country skiing is all about time; shooting is about precision. When the Audi S6 performs an impressive sprint with eight cylinders, it saves time. With four cylinders, it saves fuel.

The solution is very sophisticated. “I have been training since I was a child,” reveals Magdalena Neuner. “The most important thing is to prepare the body and the mind for it.” Mind and body. Brain and heart. Electronics and engine. Software and hardware.

The transition in the human: a flow of data between the brain and the heart muscle. Magdalena Neuner’s pulse at the end of a skiing leg is 180 beats per minute. “But I reduce my pace 100 to 150 meters before the firing range,” she says. “That’s also when the concentration phase begins.”

The transition in a car: a flow of data between the electronics and the V8 engine. The ignition and fuel injection for cylinders 5-8-3-2 are deactivated. A zero-lift cam on the cam shafts is activated and holds the respective intake and exhaust valves closed. The V8 becomes a V4.

**Human parameters:** Neuner’s pulse is still 170 at the first shot, 150 at the last one. A tight range at a high level.

**Engine parameters:** engine speed between 960 and 3,500 rpm; in third gear or above; coolant temperature at least 30° Celsius. No major movements of the gas pedal, but rather a steady load.

Why these parameters?

“Shooting would become much more difficult at a lower pulse,” says the biathlete. It sounds like a paradox. Shallow breathing and a relatively high pulse make it easier for biathletes to aim, while also helping them to get started on the next skiing leg. Harmony in athletics. The time for the previous leg is compromised, but only by a few seconds. In the interest of the overall result.

“If we were to shut off the four cylinders for just a very brief time, fuel consumption would in fact be slightly higher,” explains the development engineer. It sounds like a paradox.
It is not easy to save fuel – the driver’s intentions must be foreseeable. Audi has developed a prediction module for exactly that. It detects the driving situation, steering and gas pedal movements electronically. It can recognize whether the driver is driving constantly at a given pace or is just briefly cruising through a roundabout. This makes it possible to tell when the transition to four cylinders is worthwhile. In the interest of the overall result.

The path to achieving the goal: This is where human and machine differ more clearly. For Magdalena Neuner, this means mental training, physical fitness and years of practice. The Audi uses a sensitive system of sensors, innovative acoustic systems and active engine bearings. The active noise control system uses microphones to detect hum frequencies in the cabin during four-cylinder operation. And generates a cancellation sound. The active engine bearings work in a very similar way to generate cancellation impulses for engine vibrations. The driver barely notices whether four or eight cylinders are active.

The greatest compliment in short: Magdalena Neuner’s method saves time. Otherwise the elite athlete would not have won multiple world championships and gold medals. And despite all successes, she has kept her authentic, likeable character.

The Audi S6 with cylinder on demand technology saves fuel – a total of around 25 percent compared with the previous model. Yet despite all its economy, the new Audi S6 maintains its authentic V8 character.

A double dose of impressive athleticism in its purest form.
Dr. Eckart John von Freyend, President of the Cologne Institute for Economic Research, and Axel Strotbek, Member of the Board of Management for Finance and Organization at AUDI AG, discuss the Olympic idea in a globalized business world, the future of the mobile society and the Audi brand’s technological responses.

Editor | Michael Kneissler
Axel Strotbek: I’m very pleased to be meeting up here in London, the host city of the 2012 Olympic Games. On the one hand that’s highly fitting for Audi: We are a very sporty brand, with sporty products, sporty ambitions and sporty corporate growth. On the other hand the Olympic motto “Faster, Higher, Stronger” has always been echoed by the business world. But when you think about it, you do wonder whether this can be sustained in the future.

Dr. Eckart John von Freyend: The motto “Faster, Higher, Stronger” encapsulates the essence of competition. Sport is competition. And so is business. Interestingly, that principle is widely accepted in sport – yet in business we have to keep fighting our corner. Remember that competition creates innovation. Competition helps to cut costs. And ultimately, competition improves quality of life. That is why, in business, we have to keep fighting for new competitive structures. But you are in the happy position that your products unite business with sport, so you are able to keep emphasizing the parallels between competition in these two spheres.

Strotbek: At Audi, we have set ourselves clear goals. Sportiness is part of our brand’s essence. But we are not just seeking to grow quantitatively, we are especially eager for qualitative growth. As CFO, I believe it is particularly important for us to focus not just on the sporting challenge of achieving good short-term results, quarter by quarter. We always keep our long-term corporate strategy in focus, too. We’ve set ourselves four key goals in order to become the world leader in the premium segment: First, we aim to become image leader among the premium manufacturers – worldwide. We are not quite there yet, but we are working with great focus toward this goal and are making significant progress.

Second, we want to bolster our volume growth and improve our competitive position. To achieve that, we are increasing our production capacity

Famous “Gherkin”

Strictly speaking, the name of this office block in London is the same as its address: 30 St Mary Axe. But Londoners have dubbed the giant glazed building “The Gherkin.” The 41-story tower owes its appearance to the star architects from Foster + Partners, led by Lord Norman Foster. The skeleton consists of interlocking helixes, with the offices arranged in rings around this core. It contains atriums up to six floors high, and natural ventilation is used.
worldwide and also have plans to build cars in North America in the future. Third, in keeping with our value-oriented approach to corporate management, we regard healthy, superior financial strength as the measure of all things. And fourth, everything depends on having a motivated, well-qualified workforce. That means we want to be an attractive employer at our locations.

Dr. John von Freyend: I believe the topic of training, human resources and expertise is extraordinarily important. Outstanding, motivated employees are vital for success.

Strotbek: We have a clear picture of our growth pathway. Even throughout the crisis of 2008 and 2009 we kept recruiting, mainly engineers and specialists. We took on about 1,300 experts in 2011 and will be hiring a similar number in 2012. We keep stepping up the pace in an effort to recruit the best on the market for our core areas. Our new employees can look forward to exciting tasks in line with our ambitious growth targets.

Dr. John von Freyend: The topic of growth is now the subject of some criticism in Western industrial nations. But economic growth is not simply about constantly generating “more of the same.” Rather, growth is about change. Take, for instance, Germany’s plans for a radical change in its energy supply. Obviously that will only work if new, intelligent, energy-saving technologies are developed. But at the same time, old technologies will cease to be used. I believe that when the concept of growth is defined properly, there is no longer an inherent contradiction between quality and volume.

Strotbek: Though there isn’t much evidence of growth in Europe at present, only Germany is faring relatively well.

Dr. John von Freyend: That’s right. America and Asia are still delivering decent growth rates. But there are problems in the eurozone. We at the Cologne Institute for Economic Research don’t expect to see that region grow at all this year. Fortunately, Germany is the exception; today it is the powerhouse of growth in Europe, having achieved about three percent in 2011, and according to our estimates it will still manage around one percent in 2012. Particularly here in London, one of the causes is clearly in evidence. Britain has become a service economy, whereas Germany has remained largely an industrial economy. German industry contributes around one-quarter of gross national product and gross added value, and that proportion barely fell even during the economic crisis. That strong industrial base, first-class products and high manufactured quality coupled with the hunger for prosperity of emerging economies have enabled us to increase our exports year after year. I believe that is the very essence of the German economy’s strength, and we should let nobody try to persuade us to turn our backs on intelligent industry and industry-oriented services.

Strotbek: I share your view. And for us as carmakers, there are two key aspects: Because there is a strong correlation between demand on car markets and the performance of a national economy, we need a stable economic environment. The second aspect is that we need to shore up our export success long-term. Particularly for us in the car industry, it is hugely important to be technologically at the forefront. That is why we want the Audi brand to take on a pioneering role – true to our brand essence “Vorsprung durch Technik.”

Dr. John von Freyend: On the subject of technology ... I get the impression that the automotive industry is facing one of the biggest upheavals in its history.

Strotbek: Yes, these are extremely exciting times as we strive to determine the future shape of mobility. We are facing the challenge of not just refining existing technologies, an area in which Audi is very strong and has set many benchmarks, but also promoting the electrification and hybridization of the car. The Audi brand intends to have the widest range of hybrid models in the premium segment with the Q5 hybrid quattro, as well as the A6 hybrid and A8 hybrid, which will be appearing on the market this year. At the end of 2012 we will also be unveiling the small-series R8 e-tron, an electric vehicle in the supercar segment. The next product generations will then build on the plug-in hybrid idea; these cars can travel electrically but still have a combustion engine so as to draw on the advantages of both technologies. As matters stand, we are planning to have an electric vehicle in every major car line by the end of the decade.

Dr. John von Freyend: About half the world’s population now lives in cities. The proportion will grow to two-thirds over the next few decades. When we drove into London from the airport
just now, we spent two hours in a traffic jam. That shows just how big the challenges facing the automotive industry are in the field of mobility systems too.

**Strotbek:** We are already working on products and services for the megacities of the future. The Audi Urban Future Initiative which we launched has already given us vital inspiration. Through this interdisciplinary dialog with scientists, urban planners, sociologists and trend researchers, we discuss socially responsible ways of developing future mobility. We demonstrated how this mobility might look at last year’s International Motor Show (IAA) in Frankfurt in showcasing the study of the A2 concept: an electric car specifically built for city driving, with a range of 150 to 200 kilometers. In addition, we are planning to offer a range of mobility services such as car sharing, as part of a venture that is still in the project and trial phase.

**Dr. John von Freyend:** I wish you the very best of success.

**Strotbek:** There’s one last thing I’d like to ask you: If you had the chance to create a car, what would it have that your current vehicle doesn’t?

**Dr. John von Freyend:** I have been an Audi driver for many years. I have just switched to the Q7 – and to be perfectly honest, it leaves very little to be desired. I could imagine, though, that cars will soon feature some sort of autopilot so that the driver will only need to intervene in certain situations and can otherwise relax and enjoy the journey.

**Strotbek:** We’ve already come an extremely long way in introducing various driver assistance systems. While we don’t yet have an autopilot, we have made a fair amount of progress in that direction by progressively networking and refining technologies such as adaptive cruise control with stop&go function, active lane assist and side assist.

**“These are extremely exciting times as we strive to determine the future shape of mobility.”**

Axel Strotbek
With support from the Audi brand, Sweden’s Johan Ernst Nilson embarked on an expedition from the North to the South Pole, relying only on the power of nature and his own strength. A unique adventure and a dangerous undertaking.

Text | Stephan Seiler
On January 18, Johan Ernst Nilson reached the South Pole.

On day 32 the adventure almost came to an abrupt end. It was a clear morning in May 2011 on the south-western edge of the Arctic. Johan Ernst Nilson had already covered around 1,000 kilometers on his route southward from the North Pole. A few days remained to traverse the Arctic ice and he would reach terra firma: Canada. At six o’clock that morning he and his partner Harald Kippenes planned the trek for the day, and then set out, pulling their sleds behind them. Nilson had an uneasy feeling. With each movement of his skis the ice creaked beneath him.

Later the Swedish adventurer commented that he saw disaster coming. “Suddenly everything collapsed around me. The ice seemed to dissolve beneath me. I was gazing into a dark gaping mouth. The next moment it had swallowed me up.”

Nilson crashed through the ice into the sea. The Swede was hardly able to keep his head above water. He flayed around with his arms. “I had to decide there and then,” he later recounts. He could have unbuckled his skis in order to swim quickly to the safety of the ice. Which would have meant the end of his adventure, as “without skis I would have had to give up. I didn’t want that to happen.” So he left his skis on and swam forward inch by inch, while his jacket gradually filled with water. But he made it. His companion pulled him out. It took three days until Nilson’s clothes had dried – at temperatures of -40°C.

Nilson tells the tale of the day that might easily have been his last quite calmly.

It’s the end of September and the Swede is sitting on the beach at Acapulco in Mexico. The parts of his face that are not covered by his bristly beard are dark red. Nilson nevertheless remains sitting in the blazing sun despite it being 35°C. He had sworn to himself in the Arctic that he would never again complain about heat.

It’s about half-time on the Audi pole2pole expedition, which will take around one year in total. A trip from one end of the world to the other in a way that no one has previously dared. Nilson started out from the North Pole on April 4, 2011. A day of historical significance, as almost exactly 102 years earlier Robert Edwin Peary had been the first man to reach the North Pole. Although Peary’s destination is Nilson’s starting point, as his destination is the South Pole. Which he intends to reach on foot, on skis, by bike, pulled by a kite, and by sailing boat. He will be powered only by his own strength or by the wind. On land he will be accompanied by an Audi support vehicle, which will transport part of his equipment for him.

Johan Ernst Nilson, who originally studied journalism, has been a professional adventurer for 18 years now. He has undertaken expeditions to more than 100 countries. Nilson has climbed the world’s highest mountains, crossed the Atlantic on a jet ski, and flown by propeller boat from his home town of Stockholm to Africa. It is not easy for an adventurer such as him to find new challenges. After all, there are hardly any adventures left that someone has not already experienced. By contrast, the Audi pole2pole expedition, which will see...
In Mexico, Nilson had to endure temperatures of up to 50°C.

"After 125 kilometers in the saddle, I reached the golden beaches of Oregon on July 28, 2011."

Johan Ernst Nilson

Stopping for lunch at a small store in Mexico.
Nilson trek almost 30,000 kilometers, is unique and one of the last great adventures still possible on Earth. Nilson and Audi share this pioneering spirit. The carmaker wants to be a trailblazer – with its systematic Audi ultra lightweight construction, its quattro permanent all-wheel drive, its TDI diesel engine and in future with its e-tron electric cars. Audi is supporting Nilson by providing him with modern technology, materials and logistics. Before departing for the Arctic, Nilson tested his survival equipment, such as his tent and sleeping bag, in the cold chamber in Ingolstadt.

But what help is even the best equipment if one of the hottest summers in Arctic history causes the ice to melt? “I had wanted to cross the ice as far as Greenland, but it melted away across a band of 200 kilometers. So we had to find a different way of getting to Canada,” Nilson says. After a few days, however, he and his partner found themselves drifting on an ice floe. Their provisions ran out. “We eventually had to call a rescue helicopter and take a ride to firm ice.” This resulted in a change of route. Instead of heading south down America’s east coast as planned, the route now followed the west coast.

So Nilson’s trip got off to an adventurous start. And things stayed that way. He describes how after more than 50 days he reached a Canadian military base, spent an hour under a hot shower and then ate for hours. “The Arctic cost me 17 kilos in body weight.” He reports how he cycled through Canadian forests, only to be pursued by black bears and moose. How the U.S. Highway Patrol did not believe his story and held him in custody for two hours. How he pedaled through the Baja California desert in Mexico although his water rations were too low. “The only gas station was closed,” Nilson recalls. After 80 kilometers with virtually no water, he ended up in hospital with heat exhaustion. Yet Nilson also has many beautiful stories to tell. About Canada’s virgin countryside, about the endless beaches in Mexico, about the many people along the way who cheered him on while he covered an average of 100 kilometers a day. Who brought him juice when he stopped for a break. Or offered him a bed for the night in their sparse homes.

The expedition route also took Nilson past many Audi centers. “I stopped off at countless Audi dealerships along the way,” Nilson reports – for example in Los Angeles, in Guadalajara, Mexico, and later in Panama. Audi employees and customers were all eager to meet Nilson. “They wanted to hear what I’d gone through, why I was doing the trip,” Nilson says. “Their support means a lot to me.” He primarily visited social institutions en route. The Red Cross in Costa Rica, for example, or a children’s clinic run by “Operation Smile” in Mexico. And Nilson emphasized eco-awareness when visiting Audi dealers. One of his primary concerns is the fight against global warming, the effects of which he has felt several times – and not only in the Arctic. A few weeks after his stop in Acapulco, Central America experienced the worst storms in 60 years. It rained for 60 days, from Guatemala via Costa Rica to Colombia. In the rain of October, Nilson crashed when unable to avoid one of the many potholes. A few days later in Honduras a mountain road was washed away before his very eyes, with trees crashing onto the road.

In November Nilson again had to depart from his chosen route. He took a flight from Ecuador direct to the Antarctic. “An iceberg the size of Berlin was just breaking away, which I would have had to sail around. I would no longer have reached my planned starting point for the South Pole stage on time because of the greater distance. Because of the weather conditions prevailing in this season, the South Pole is only accessible for me until mid-February at the latest,” says Nilson.

For 49 days, he kited and skied across the Antarctic ice. On some days, he managed more than 30 kilometers. On January 18, 2012, Nilson called in via satellite telephone: “I’ve done it. After so many months of rain, snow and ice. I can’t feel my toes, and I broke two ribs, but I’m happy.”

Nilson was taken to a hospital in Cape Town for treatment. His next plan is to return to Ecuador as quickly as possible to begin the rest of the trip to Tierra del Fuego, and sail from there to the Antarctic, where he intends to circumnavigate the floating ice block. “It’s the only way I can cover the distance from pole to pole within one year,” Nilson explains.
“Design is always emotional to start with.” Stefan Sielaff explains how to create a car interior that delights customers.
If Audi designers want to make the Board of Management fans of a new interior concept, they host a trial sitting – in the model interior.

For our interview on the Audi A2 e-file study Stefan Sielaff, Head of Audi Design at the time, now responsible for Group Interior Design in the Volkswagen Group, got into the “seating box” himself.

Interview | Dorothea Sundergeld
It looks like a simple wooden box from the outside:
What’s behind the Audi e-files?
We are forever asking ourselves what the interiors of our vehicles could look like in the future. A few years ago we compiled relevant studies for the A, Q and R families. Because of course they were top secret, we called them x-files. In a second phase we then focused on our e-tron vehicles, hence the name e-files. The objective is to create an image of the future. To redefine the interior in an Audi world, taking the electric drive system into account. The designs we devised on paper and on the PC were then translated into a model so we designers – and the Board members who ultimately take the final product decision – can grasp them in both senses of the word.

How far into the future do you go with these models?
Not too far. The idea is not to create sci-fi. When we launch a project for a volume-produced car, we have five years’ lead time until the start of production. In other words, the files are about seven to eight years ahead of reality.

What is new about the interior in the e-files?
Since electric cars no longer have a combustion engine under the hood, the structure of the vehicle can be different. Electric motors are smaller and the batteries do not necessarily have to be located in the space formerly occupied by the engine. So I can place those elements that are currently directly behind the dashboard there instead. Our guiding philosophy for the interior is to create a sense of lightness and introduce the new feeling associated with electric driving. In addition, a new idea also has to benefit the customer. I perceive the entire interior as being airy and spacious. There’s almost as much space as in a London cab. And the center console can be lowered so that I can get out quickly on the passenger side if someone has parked too close to me in the city center. That’s the advantage of no longer having a center tunnel, as electric cars do not need a transmission. Another plus is that I save a lot of weight, namely the 300 kilos that such a transmission weighs.

Does the fact that driving an electric car feels different affect the design of the interior?
For us designers, the fact that you hardly hear an electric motor almost amounts to a philosophical issue. After all, the act of starting the motor and driving off is a bit like turning on your coffee machine. Relatively unemotional. With a gasoline or diesel-powered car, you turn the key or press the start-stop button and ignite a combustion engine. And you can feel it, the pistons move; and you of course hear it, as there are countless explosions in the combustion chambers. There’s none of that in an electric car. You turn it on and ask yourself: Is it on? Or not? We’ve solved this by placing the user controls horizontally on the dashboard. As soon as I press the start-stop button the user console pops up and a strip of light softly illuminates the cockpit area. This LED strip runs from the driver’s door over the dashboard to the door on the passenger’s side. This brings the interior to life and indicates to the driver that the system has been activated. Like that little red light on the coffee machine.

What are the ingredients for an interior that car buyers will rave about?
It is the sum of many details. The key factors are the package, the ergonomics and the user concept. Not only the visuals are very important, the acoustics are too. How protected do I feel inside my car? Many customers find it pleasant if the acoustics are dampened inside the car. Feedback from the control elements is also very important. If a dial sounds like the lock on a safe, psychologically it fills you with much more confidence than if it sounds like a plastic toy. And then there’s the whole olfactory side to things. What do you smell when you get into the car? At Audi there’s a special nose team that deals exclusively with this aspect.
What goes through your mind when you’re in a seating box?
You need to be careful. You need a great sense of abstraction to grasp the feeling such an interior offers. Here you first get a feel for the proportions, that’s crucial. The seating box is only an illusion of a finished product. What you see here is modeling clay coated with wall paint. Even the leather seam isn’t real, but simply molded from clay. There’s no real material feel. This study was developed specially for an urban context. After all, in 2030 some 70 percent of people will live in cities. And vehicles will then need an interior that is minimalist in character. The more complex the environment, the better it is if the interior does not distract you, but provides concentrated information. Less is more!

And when you present a study like this to the Board?
Well, you feel a bit like a chef presenting a new dish. You’ve tested it out a few times in the kitchen, changed the seasoning, worked on the details and nuances. Then comes the moment of truth when you have to serve the dish to your guests, when everything just has to click. And you know immediately whether that’s happened.

Do you judge a design proposal intuitively or rationally?
Design is always emotional to start with, that’s what we designers should always strive for. I often say: The design must still feel like an Audi even if you take away the four rings. At the end of the day, the important thing is to create a product that delights and convinces the customer. Ideally, this delight begins with love at first sight and is followed up by long-lasting delight, which results one day in marriage.

Close-up: Experience the Audi brand’s unmistakable interior design in this video featuring the new Audi Q3 premium SUV.
The SWR3 New Pop Festival in Baden-Baden is more than just a stage for well-known artists – it is a springboard for up-and-coming young stars. Audi helped sponsor the three-day event for the first time in 2011.
Inspiration

She isn’t just smiling, she radiates joy. Clare Maguire from Birmingham is standing on the stage of the picturesque 19th century theater. She senses the audience’s elation and knows: This is the moment she has spent years waiting for. And it is happening on her 24th birthday. The SWR3 New Pop Festival in Baden-Baden is the chance for her big breakthrough. She seizes the opportunity with a performance nearly unparalleled in fervor and passion.

It is the highlight of the first day. But just one of many – in a very special series of events. This is not a carnival-like festival for the masses. Instead, it is a three-day event in a small, intimate setting for which approximately 19,000 admission tickets are offered. The event has an almost missionary-like goal: showcasing young, intelligent pop music once a year. In venues with perfect acoustics and optimum visibility, performed by ambitious young artists who have released their first albums and for whom Baden-Baden often serves as a springboard to an international career.

“The SWR3 New Pop Festival has always demonstrated an exceptional feel for trends in the scene, making it our ideal partner,” says cultural officer Jürgen Bachmann from AUDI AG. The Company appeared for the first time in 2011 as main partner and co-sponsor of the festival, which is organized by SWR3 – the Südwestrundfunk broadcasting company’s pop radio station. “This enables us to promote new talents and further strengthen the Audi brand image among a young, cosmopolitan audience,” continues Bachmann. Performing at the fall festival has been a popular goal for outstanding new artists and pop groups since 1994. International stars such as Alanis Morissette, Anastacia and the Fugees took their first steps on the big stage here.

Enter Jessica Ellen Cornish from Essex – better known by her stage name Jessie J. At 23, she reached number two on the British album charts with her debut album “Who You Are.” With her powerful soul voice, she gives a magnificent performance in the sophisticated

New sound in an old hall:
Tim Bendzko performs on the picturesque round stage of the Baden-Baden Theater, built in 1862.
Belle Époque-style Kurhaus. No less impressive: the Hawaiian multi-instrumentalist Bruno Mars, who performs a classical soul review – with a fantastic band and a repertoire full of catchy tunes: Just the Way You Are, Grenade, The Lazy Song, The Other Side and lots more. The hall is bubbling with life – people are waving lighters, singing along and giving standing ovations. The overflowing enthusiasm is such a surprise to some of the artists that they forget their inhibitions, leave the safety zone of their hotel room and stroll openly through town: across the squares dotted with fountains, past the cafés and restaurants, down the small alleyways lined with exclusive boutiques and through the parks on the banks of the Oos River. Baden-Baden has a Mediterranean flair, especially when bathed in gleaming sunlight.

This is likely part of the reason that Rumer, the vocal powerhouse from Britain, is happy to mingle with the crowd on the second day of the festival, inviting Zaz, the shooting star from France, to a spontaneous acoustic gig on Konrad-Adenauer-Platz. Brooke Fraser, New Zealand’s most successful pop export with her hit Something in the Water, is in fact contemplating a longer stay in the Baden area: “The town is incredibly beautiful and inspiring to me. I could well imagine writing my next album here. Simply because I enjoy the architecture and the people are so nice.” Indeed, it is the people who are another special feature of the SWR3 New Pop Festival: This is not an audience interested in wild partying. The members of the public here are attentive, enthusiastic and receptive to new ideas. They are fully focused on enjoying the music and the performances, and swear by the variety of the program here, the quality of the artists and the relaxed atmosphere. There is a good reason that the festival in Baden-Baden has so many repeat visitors. It is a genuine musical tradition. The SWR3 New Pop Festival 2011 draws to a melodious close in a festival special on the third and final day of the event with Rea Garvey, Natalia Kills, Gypsy & The Cat and Melanie C rocking the stage. As soon as the last note fades, Baden-Baden begins waiting for the next SWR3 New Pop Festival with new talents, world-class music and unreserved enthusiasm.

“I could well imagine writing my next album here.” Brooke Fraser

Powerful voice: Songwriter Brooke Fraser from New Zealand flooded the Kurhaus with her emotional folk songs.
Sound from another planet: Bruno Mars delighted the audience with his hits.

The Festspielhaus in Baden-Baden: a grand setting for the SWR3 New Pop Festival.

Jessie J (above) and Clare Maguire (right) sang their way into the audience’s hearts in Baden-Baden.

“The SWR3 New Pop Festival has provided young artists with a platform for presenting themselves to a broader public since 1994. The radio station uses the festival to promote talented young people and some artists are even able to break through to the top. Celebrities like Xavier Naidoo, Laith Al-Deen and Amy Macdonald are all prime examples of this.

Attracting the right talents and promoting their development is a key theme for Audi as well. This is the only way to ensure the supply of skilled employees that Audi needs to stay on its course of global growth. It is thus only fitting that Audi plays the role of sponsor for the SWR3 New Pop Festival. Firstly, we meet talented young people among the fans who we would like to win over for Audi. Secondly, we encounter the target group for our sporty models there. Audi would also like to give something back to the people in the region. In addition to the SWR3 New Pop Festival, the Company is therefore expanding its cultural commitment with summer concerts and its own rock and pop festivals in Ingolstadt and Neckarsulm. What’s more, Audi is sparking the enthusiasm of children and youth in technology with events such as “Lernfest,” “Girls Day,” “Technik Camp” and a variety of vacation activity programs.

“Attracting the right talents and promoting their development is one of the key themes for Audi.”

Thomas Sigi
Human Resources

“...the right talents and promoting their development...”

Audi_GB11_E_115_SWR3NewP_115_16.02.12_17:14
Lightweight automotive construction interpreted as jewelry.
Spiral bracelets made from lightweight spring steel.
The lifestyle articles from the Audi collection make it possible to experience the Audi brand not just through vehicles, but via fashion as well. An extraordinary presentation in the Audi body shop.

Text | Marcus Luft
Vorsprung durch Technik
down to the finest detail.
Audi chronograph with interchangeable wrist band.
Audi design language

for the weekend.

Weekend bag made from coarse-grained black cowhide nappa leather.
Sunglasses made from spring steel, flat folding.
The clock at the body shop in Ingolstadt is showing 10.30 a.m. when a young woman in an evening dress approaches the body shell of a vehicle. She tilts her head back and touches a curved fender that is destined to become part of a new Audi TT. Behind the dark-haired woman, Audi employees dressed in gray are going about their business. Machines are in motion. Neon lights flood the hall with cold light. The smell of oil is in the air. Suddenly there is a flash. Then another and another, faster and faster. Click, click, click.

The situation is surreal. In the middle of the technical world of the TT body shop, amongst robots and information displays, a woman in an evening dress is leaning backward and forward. In front of her: a photographer with a camera, lamps, assistants holding brushes and powder puffs. Behind the model, unpainted doors are being mounted onto vehicles. The hall is the site of a very special photo shoot featuring elegant fashion and lifestyle articles from the Audi collection.

For over 25 years now, the brand with the four rings has been transferring Audi design into objects for customers’ everyday use (http://collection.audi.de). No matter whether watches, sunglasses, key rings or cuff links: Even when it comes to lifestyle articles, Audi’s simple formula is that form should follow function – in the most elegant and sporty way possible. The designers’ goal is to ensure that customers recognize the typical Audi look at a glance, even when it comes to lifestyle articles. The cigar punch should be just as uniquely Audi as the sedan.

Audi collection lifestyle articles are made from the same materials used in vehicle construction, including carbon, aluminum and cowhide nappa leather. The latter is especially soft and smooth and is finished in Germany by hand. Handcraft plays an important role throughout the entire production process, with leather items being stamped and carefully hand-stitched one by one. The cases in the R8 line, for example, are made from the same leather used to produce seats for the cars. Even the same contrasting stitching is used.

In terms of jewelry as well, the high technological quality of the Audi collection sets standards: An ultralight spring steel bracelet, for example, is an interpretation of Audi’s lightweight construction technology. It is precisely this connection between fashion and technology that Andra the photographer seeks to capture during the photo shoot in the Ingolstadt factory halls and convey through her pictures. “I showcased the lifestyle articles in the production landscape, although in theory this doesn’t fit,” says the resident of Hamburg. “The cool, technical surroundings contrast sharply with the elegant lifestyle articles and beautiful model. That is exactly what I was looking for.”

The clock strikes 12. Time for a brief lunch break for Andra behind the camera, the young woman in the evening dress in front of the camera and all the helpers who are frantically moving lamps or carrying in new dresses.

In contrast, the gray-clad workers in the background continue to go about their business, bolting on doors and fenders and programming robots. Soon the fashionable guests will be gone and they will once again be the stars of the hall.
Special equipment for everyday products.

Aviator sunglasses with quattro logo, Heritage collection;
Exclusive Audi notepad made from seat leather in chestnut brown and powder beige.
Chrome-plated fountain pen.
Cooperation
AUDI AG and Voith GmbH form development partnership
In February 2011, AUDI AG and Voith GmbH signed a letter of intent regarding a development partnership. The goal of the partnership between the two companies is to promote industrialization of the manufacture of carbon fiber-reinforced materials for high-volume automotive production, particularly by developing a highly automated process chain. The intention is to make use of the high potential of these innovative materials to benefit lightweight construction and efficiency.

Employer study
Most attractive company in Hungary
AUDI HUNGARIA MOTOR Kft. was named Hungary’s "Most attractive company" once again. This is the result of a survey of 33,000 participants conducted by the business consultants Aon Hewitt and the student organization AIESEC (www.autoevolution.com/news/audi-the-most-attractive-company-in-hungary-32615.html). The study assesses more than 230 Hungarian companies.

Awards
Multiple successes for Audi
The jury and readers of the British magazine What Car? named the A1 their "Car of the Year" and top "Supermini." The Audi TT was voted "Coupe of the Year" for the fifth time in a row (www.whatcar.com/car-news/audi-a1-named-car-of-the-year/254884). In the reader poll "The Best Cars of 2011" conducted by auto motor und sport, Audi won four different categories: with the A1, the A4 and A5 models (in the midsize category), the R8 Spyder and the Q5 (issue 4/2011, page 104 ff.). Readers of Automobilwoche voted Audi the "Brand of the Decade" (issue 3/2011, page 3 ff.).
Double celebration
Production milestones at Győr and Brussels
The 20 millionth engine left the production line at the plant in Győr, Hungary, in April. This power unit is a 2.0-liter TDI engine with four cylinders and an output of 125 kW (170 hp); it was installed in a white Audi TT Coupé. Two months later, the 100,000th Audi A1 rolled off the assembly line at the Brussels plant to great applause—in the presence of King Albert II of Belgium.

Double world premiere
In April, the Company unveiled its compact premium SUV as the Audi Q3 made its debut in Shanghai. A short time later, the new Audi A6 Avant was given its first public showing in Berlin (right). Now in its seventh generation, this lightweight trendsetter in the business class is set to continue the brand’s success story.

Attractive company
Top employer among graduates
Another double triumph for AUDI AG: Engineering and economics graduates in Germany again voted the Company the most attractive employer. This was the outcome of the employer rankings compiled by the consultants trendence (“trendence Graduate Barometer 2011 – Business and Engineering Edition,” April 15, 2011) and Universum (“The Universum German Student Survey 2011,” May 16, 2011).

Campaign
Award for “Magical Moments”
In May, AUDI AG received two Employer Branding Awards from the trendence institute (“trendence Employer Branding Awards 2011,” May 24, 2011). The Company won the “Best Careers Website” and “Best Careers Advertisement” categories. In explaining its decision, the jury praised the “credible and personal” character of the “Magical Moments” campaign, in which Audi employees ranging from apprentices to managers described unique moments they have experienced at the Company.

Classic car rally
Audi at the Mille Miglia
Audi Tradition, the heritage department of AUDI AG, became involved as one of the principal sponsors of the Mille Miglia. The classic car rally started in Brescia (Italy) with 375 participants. Audi Tradition also supported the Donau Classic in Ingolstadt by entering ten historic cars. And Audi was represented by two Auto Union Silver Arrows at Goodwood (UK), the ultimate meeting place for automotive legends.
**Sponsorship**

**Basketball players drive an Audi**

Bayern Munich’s basketball team has now joined the soccer players in flying the flag for the Audi brand. In September, the team received 20 Audi A4 cars. AUDI AG has been supporting the team since the start of 2011 with the aim of bolstering basketball’s steadily growing popularity in Germany. The partnership now also has a clearly identified base, with the renaming of the Rudi Sedlmayer Hall as the Audi Dome.

**Culture**

**Audi hosts classical music concerts**

Classics to savor: In July, AUDI AG presented an open-air weekend in Ingolstadt’s Klenzepark as part of the Summer Concerts. The performers included the Royal Philharmonic Orchestra from London, the Georgian Chamber Orchestra from Ingolstadt, and the Audi Wind Ensemble. Entry to the open-air concerts was free.

**Mobile future**

**World premieres at the IAA**

Audi gave a number of models their world premiere at the 64th International Motor Show (IAA) in Frankfurt, with highlights including the S6, S7 Sportback and S8 models. The sporty versions of the main car lines deliver high power coupled with impressive efficiency thanks to innovative Audi cylinder on demand technology. With the A2 concept, an all-electric-drive study, the Audi brand provided another glimpse of the future shape of electric mobility. The Audi urban concept was also unveiled, an ultra-lightweight study vehicle for urban driving.

**Audi’s young faces**

**706 new apprentices**

The number of apprentices at Audi remains high. In the fall, the Company welcomed 458 new recruits to pursue training in 22 vocations in Ingolstadt, and 248 young people training in 11 vocations in Neckarsulm.

**Festival of soccer**

**Barcelona win the 2011 Audi Cup**

Barcelona were the winners of the second Audi Cup in Munich. The Spaniards presented a real festival of soccer in the final against Bayern Munich in front of a crowd of 66,000 people at a sell-out Allianz Arena. Midfielder Thiago Alcântara was the scorer of both goals in Barcelona’s 2-0 victory.
Production milestone
Ten millionth Audi A4 and Audi 80
At the start of October, the ten millionth midsize model of the Audi brand left the Ingolstadt production line. The completion of this Audi S4 in Misano Red, with black and alabaster white interior trim, represented a major landmark in the history of the Company. From 1972, the model first passed through four generations as the Audi 80; the Audi A4 took its place in 1994 and has now in turn reached its fourth generation.

Increased capacity
New plant in China
In December, Audi announced plans to increase its presence in China substantially. From 2013 on, vehicles of the brand with the four rings are to be built at a second plant in the southern Chinese city of Foshan. To that end, the German-Chinese joint venture FAW-Volkswagen Automotive Company, Ltd. is to construct a production plant comprising press shop, body shop, paint shop and assembly line on a site covering 100 hectares. Around 4,000 people will be employed at the site.

Motorsport
Clean sweep for Audi at DTM
In the German Touring Car Masters (DTM), the Audi brand won every title available. Martin Tomczyk sealed the Drivers’ Championship with one race to spare, and Mattias Ekström took the runner-up slot in the last event of the season at Hockenheim. By then, Edoardo Mortara had already been confirmed as “Rookie of the Year.” The team trophy, too, went to Audi.

Success
Audi wins more awards
The Audi brand won several awards in the fall: In Berlin, the A6 was awarded the “Golden Steering Wheel” (left) sponsored by BILD am SONNTAG and the European AUTO BILD Group (AUTO BILD, issue 45/2011, page 57 ff.). The Audi RS 3 Sportback took the design award “Autonis 2011” in the reader poll held by the magazine auto motor und sport (issue 23/2011, page 136 ff.). According to the ADAC brand index “AutoMarxX 2011” (ADAC Motorwelt, issue 12/2011, page 75 ff.), Audi ranks as Germany’s strongest car brand. Then, just a few weeks after the A6, the Q3 also achieved the top score of five stars in the Euro NCAP crash test (www.euroncap.com/results/audi.aspx).

Concert tour
Audi Youth Choir Academy delights Pope
In October, the Audi Youth Choir Academy performed at the Vatican in front of Pope Benedict XVI and an audience of several thousand. The concert with the Bavarian State Orchestra in the Aula Paolo VI marked the high point in the choir’s short history. The Pope thanked the 93 singers for their “marvelous gift to everyone here.”

The 93 members of the Audi Youth Choir Academy visited the Vatican in October – and sang for Pope Benedict XVI.
Snow is not only their friend, but time and again their co-worker, too. Photographer Stefan Schütz, 46, and lifestyle author Rainer Thide, 55, roam the ski slopes of Europe and North America in the cold season in search of the latest tales from the world of winter. “I love the spontaneity of working outdoors. A rain shower or a snow storm can change everything,” enthuses Thide. He appears in the photo above, along with Schütz and skiing legend Hermann Maier. Page 56

The faces behind the stories
Authors and team

Andra
Photographer, Hamburg
“I love uniting contrasting worlds in my photographs,” says Andra, 32. For five years now, the photographer has been creating fashion shoots for advertising campaigns and fashion magazines. And she especially likes unusual locations. “They enable me to tell a story through my photos.” Page 116

Dirk Lehmann
Journalist, Hamburg
As a correspondent for the magazine GEO SAISON, frequent travel is all in a day’s work for Dirk Lehmann, 44. Whether trekking through Greenland, paddling a boat in the Swedish archipelago region or hiking in Australia’s Simpson Desert: This journalist loves to be out of the office. Page 24

Stefan Schütz
Photographer, Munich

Rainer Thide
Journalist, Hamburg

Fuel consumption and emission figures at the end of the Annual Report
Richard Walch
Photographer, Augsburg

He specializes in extreme assignments: Richard Walch, 41, is a consummate action-sports photographer. Being surrounded by water or snow makes him feel at home. In addition to Audi, his customers include a great many major brand manufacturers. His work entails climbing 15 meters up a ship’s mast – or leaping from a helicopter onto a pristine ski slope. “My job is perfect the way it is,” adds Walch. Page 34

Dorothea Sundergeld
Journalist, Hamburg

Dorothea Sundergeld, 43, has loved good design more or less since her birth. “I was born in a part of Germany where there are so few stylish things that you grow up either completely disregarding design – or obsessing over it,” she says. Sundergeld particularly enjoys writing pieces which explore the overlapping of design, the arts and science for renowned design magazines and her blogs. Page 108

Dr. Hajo Schumacher
Author, Berlin

One man, many talents: Dr. Hajo Schumacher, 47, has not only worked as an editor-in-chief and Berlin correspondent, but has also written a book about the current German Chancellor. Nowadays, he is known primarily for publishing as well as hosting television programs and appearing as a sidekick on a late-night show. Under the pseudonym Achim Achilles, he also writes about running. He demonstrates genuine passion in this role – just as he does in all others. His next project: the triathlon, one day on Hawaii. Page 66

Alexander von Wegner
Author, Hamburg

Alexander von Wegner, 41, caught the motorsport bug at the age of 13 when he watched his first rally race. Since 1996, he has worked either as a motorsport journalist or press agent; he is at racetracks more than 20 weekends every year. He has also witnessed many Audi triumphs live at Le Mans. It is there that von Wegner, who studied political science, works with the Audi Motorsport Communications team. Page 70

Dirk Lehmann
touring Tuscany in an R8 GT Spyder.
In this past year, the Audi Group significantly increased the total investment volume by 38.4 percent to EUR 2.97 billion. The main focus was on the development of new products and technologies for the future. In addition, the Company approved the biggest investment program in its history for the period from 2012 to 2016.

The Audi Group once again proved its high profitability in the 2011 fiscal year. The return on investment rose to 35.4 percent, significantly exceeding the previous year’s level.

The Audi brand delivered more cars in 2011 than in any previous fiscal year. 1,302,659 new cars in total were handed over to customers. This equates to an increase of more than 19 percent or 210,000 vehicles on the previous year.

Thanks to strong growth in deliveries and further improvements to the mix of models and countries, the Audi Group increased its revenue by 24.4 percent to a new record level of EUR 44.1 billion.

The number of employees within the Audi Group reached a new record high in 2011. An average of 62,806 people worldwide worked for the Company. Some 1,200 more experts are to be recruited in 2012, mainly in the areas of electric mobility and lightweight construction.

Fuel consumption and emission figures at the end of the Annual Report
The strategy for sustainable and profitable growth paid off once again in the 2011 fiscal year. The Audi Group improved its operating profit by more than EUR 2.0 billion to EUR 5.3 billion. This equates to an increase of around 60 percent.

Record year 2011

Audi on course to become the leading premium brand worldwide

The Audi Group increased its all-time record of EUR 44.1 billion. The Audi Group increased its operating profit by an even steeper rate. At EUR 5.3 billion, this improved on the previous year’s record total by around 60 percent. The operating return on sales climbed to 12.1 percent and was therefore higher than the long-term target corridor of 8 to 10 percent.

2011 thus saw the Audi Group move a big step closer to realizing its vision of “Audi: the number one premium brand.” The Audi brand aims to be the world leader in the premium segment by 2020.

To achieve that goal, the Company has set its sights on becoming the
global image leader and achieving continuous growth in deliveries, alongside superior financial strength and worldwide attractiveness as an employer.

That is why Audi has already stepped up its activities on international car markets in recent years, and has steadily expanded the worldwide dealer and service network. The focus has been on the United States and, in particular, on key growth markets such as China and India. These efforts are now paying dividends: Deliveries in the United States reached 117,561, meaning that more customers than ever before chose an Audi. In China, too (including Hong Kong), the brand achieved a new record total of 313,036 cars delivered, extending its position as brand leader of the Chinese premium segment. For the first time ever, China has replaced Germany as the biggest national market for Audi vehicles.

As part of the long-term product initiative, a large number of new products were again launched in 2011. The new-generation A6 business sedan celebrated its world premiere in the early part of the year. The new A6 Avant followed in the fall. An attractive new version joined the popular Q family in the guise of the Audi Q3. Other highlights were the Audi RS3 Sportback, Audi R8 GT Coupé and Audi R8 GT Spyder, combining emotional design above all with sportiness and driving fun.

Audi also brought a full-hybrid model onto the market in 2011 – the Q5 hybrid quattro. It will be joined by the A6 hybrid and A8 hybrid in 2012, along with the small-series Audi R8 e-tron, an all-electric sports car. This range of modern hybrid and electric vehicles is the brand’s response to customer interest in innovative drive concepts. Meanwhile, the Company continues to work on further improving the efficiency of combustion-engined vehicles. At the International Motor Show (IAA) in 2011, Audi took the wraps off the new S6, S6 Avant, S7 Sportback and S8 models. These feature a 4.0 TFSI high-performance engine that delivers even more dynamic road performance than the predecessor unit, while being up to 25 percent more fuel-efficient. Alongside these sporty new models, other versions providing fresh demand impetus in 2012 will include the A1 Sportback, the A6 allroad quattro and the new generation of the Audi A3.

The Audi Group is further expanding its worldwide production capacity to accommodate the planned growth in deliveries. At the Spanish plant in Martorell, a total of around 1,000

Fuel consumption and emission figures at the end of the Annual Report

EUR 250 million has been invested in the production of the new Audi Q3. Production capacity at the Chinese plant in Changchun has also been increased, work on extending the Győr plant in Hungary has begun, and the decision to erect a new factory in the southern Chinese city of Foshan has been taken. Furthermore, the Company intends to have its own production facilities in North America from 2015 on.

In total, the Audi Group is planning to invest EUR 13 billion by 2016. This marks the biggest investment program in the Company’s more than 100-year history. Over two billion euros are to be spent annually on new products and technologies alone. The investment measures center on important core competences such as electric driving (Audi e-tron), lightweight construction (Audi ultra) and networked mobility (Audi connect).

To realize these ambitious growth plans, the Audi Group will also need outstanding employees in future. Having recruited over 1,300 experts in Germany alone in 2011, it now plans to hire around 1,200 more in the current fiscal year. This will safeguard the car manufacturer’s “Vorsprung durch Technik” for future years, and help it become the world’s leading premium brand.
2012 Financial Calendar

Quarterly Report, 1st quarter
May 2, 2012

Annual General Meeting
May 10, 2012
Audi Forum Ingolstadt

Interim Financial Report
July 31, 2012

Quarterly Report, 3rd quarter
October 29, 2012