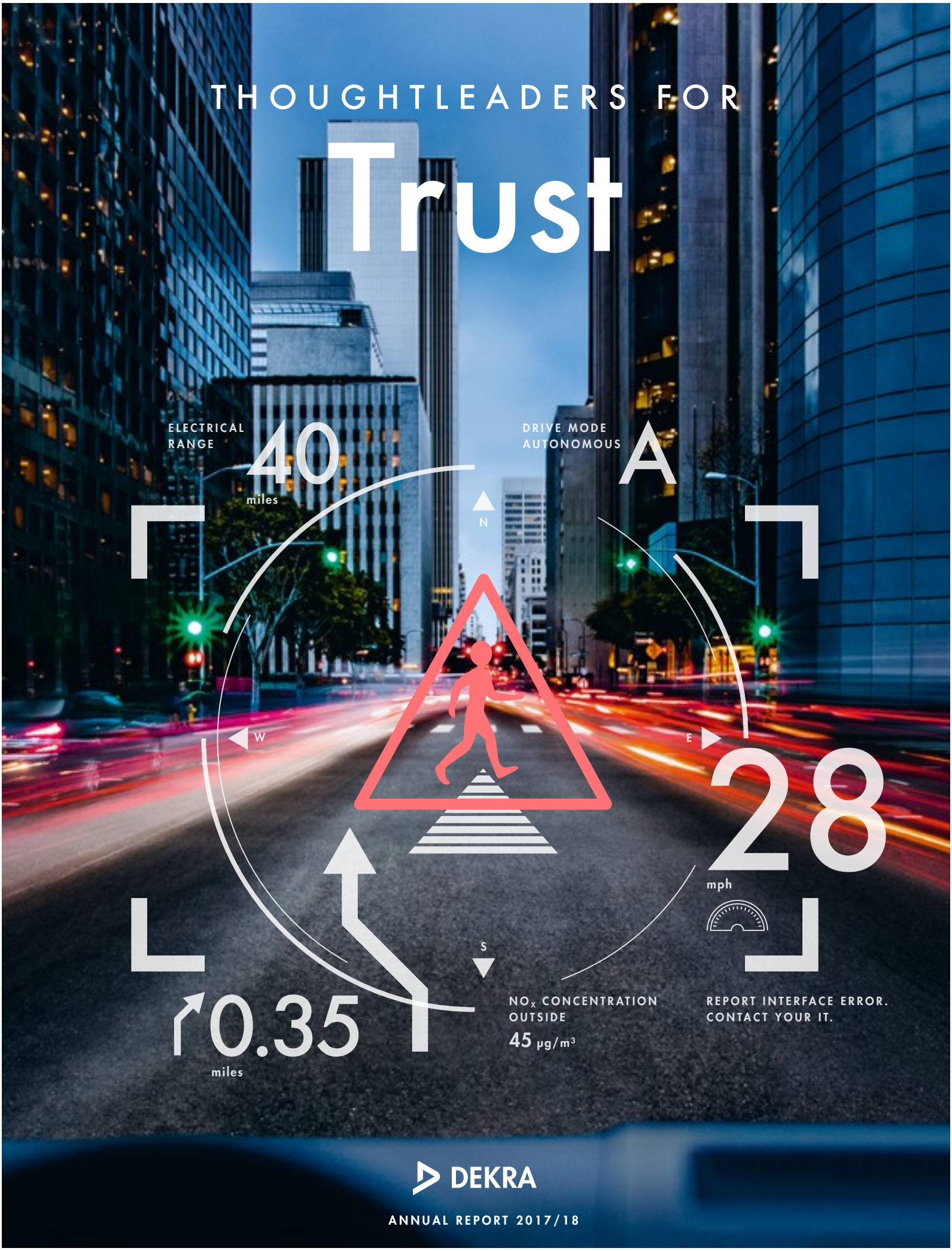

THOUGHTLEADERS FOR
Trust
ELECTRICAL RANGE
40
miles
DRIVE MODE
AUTONOMOUS
A
N
W
E
S
28
mph
0.35
miles
NOx CONCENTRATION OUTSIDE
45 µg/m3
REPORT INTERFACE ERROR.
CONTACT YOUR IT.
DEKRA
ANNUAL REPORT 2017/18

DEKRA at a glance

REVENUE GROWTH
OVER THE PAST 3 YEARS

+25

percent, in absolute terms:
+625 million euros

ACQUISITIONS
OVER THE PAST
3 YEARS

27

EMPLOYEES
WORLDWIDE

44,057

as at December 31, 2017

ORGANIC GROWTH
IN EXCESS OF

90

percent

WORKFORCE GROWTH
OVER THE PAST 3 YEARS

+9,036

equivalent to
+26 percent

VEHICLE INSPECTIONS

26

million

MORE THAN

50

countries

CONTINENTS

5

Thoughtleaders for trust

How does trust develop?
What gives us a sense of orientation in a complex world that is becoming increasingly interconnected?
What are the major technologies that shape, change and enrich our lives today and in the future?
What gives us the reassurance that the things that surround us are truly safe?
How is safety provided?

DEKRA has been providing safety since its foundation over 90 years ago.
With passion and expertise.
With 44,000 employees worldwide today.
With our network of extensive expertise and diverse services in the Automotive, Industrial and Personnel areas.
With a view to the future and to the major challenges that await us:

We think ahead for safety.
On the road, at work and at home.
And especially with regard to digitalization.

STEFAN KÖLBL

ROLAND GERDON

CLEMENS KLINKE

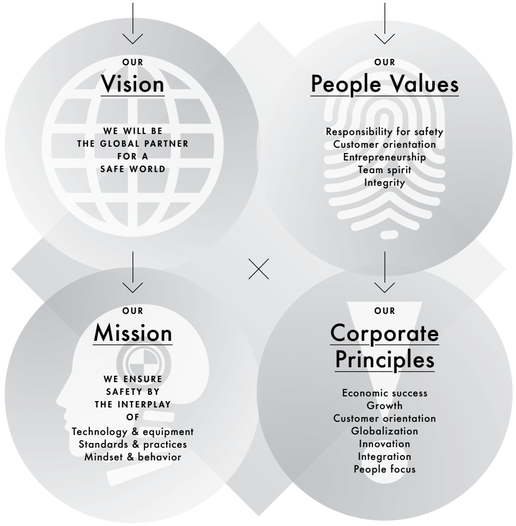
IVO RAUH

DEKRA in figures

KEY DATA OF DEKRA SE		2015	2016	2017
Revenue and Income				
Revenue	in million euros	2,720.3	2,903.6	3,134.8
of which Automotive	in million euros	1,419.6	1,501.3	1,557.5
of which Industrial	in million euros	806.0	851.4	896.4
of which Personnel	in million euros	467.1	520.9	650.1
of which Other	in million euros	27.6	30.0	30.8
Adjusted earnings before taxes (EBT)	in million euros	178.1	200.9	228.9
Adjusted earnings before interest and taxes (EBIT)	in million euros	201.1	220.6	236.1
Adjusted EBIT margin	in %	7.4	7.6	7.5
Investments and cash flow				
Investments	in million euros	81.6	81.2	89.2
Cash flow from operating activities	in million euros	173.3	209.3	104.3
Balance sheet				
Total assets	in million euros	1,977.4	2,091.3	2,090.2
Non-current assets	in million euros	1,198.5	1,226.2	1,239.4
Current assets	in million euros	778.9	865.1	850.7
Equity	in million euros	503.4	543.5	635.5
Equity ratio	in %	25.5	26.0	30.4
Employees				
Number as of 31/12.		36,673	39,357	44,057
Personnel expenses	in million euros	1,712.0	1,832.4	2,021.6
AUTOMOTIVE	in million euros	1,419.6[1]	1,501.3[1]	1,557.5[1]
Vehicle Inspection	in million euros	870.1	916.6	955.2
Expertise	in million euros	280.7	302.1	318.1
Automotive Solutions	in million euros	166.6	178.0	188.8
Homologation & Type Approval	in million euros	25.6	30.4	29.7
Claims Services	in million euros	39.4	39.0	36.4
Other Income	in million euros	37.2	35.2	29.3
INDUSTRIAL	in million euros	806.0[2]	851.4[2]	896.4[2]
Industrial & Construction Inspection	in million euros	359.1	378.0	405.8
Material Testing & Inspection	in million euros	157.8	155.1	160.4
Product Testing & Certification	in million euros	139.0	164.2	177.0
Business Assurance	in million euros	70.9	76.5	82.2
Insight	in million euros	76.1	74.9	71.0
Other Income	in million euros	3.1	2.7	0.0
PERSONNEL	in million euros	467.1	520.9	650.1
Training & Education	in million euros	158.5	185.5	197.3
Temporary Work	in million euros	308.6	335.4	452.8
OTHER	in million euros	27.6	30.0	30.8

1 – Total revenue does not include revenue of around 169 million euros (2016: 150 million euros, 2015: 133 million euros) from industrial services provided by DEKRA Automobil GmbH for regional German projects.
2 – Total revenue includes revenue of around 169 million euros (2016: 150 million euros, 2015: 133 million euros) from industrial services provided by DEKRA Automobil GmbH for regional German projects.

DEKRA Vision 2025



In 2015, DEKRA subjected the founding fathers' mission to ensure safety to a critical inspection and aligned it towards the future in the Vision 2025. Since then, our self-image has been characterized by the goal of becoming the global partner for a safe world by 2025 – our 100th anniversary. To this end, the company is consistently following a path of healthy and profitable growths based on defined values and guidelines.

Thoughtleaders for trust

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On the road, at work and at home.
And especially with regard to digitalization.

STEFAN KÖLBL

ROLAND GERDON

CLEMENS KLINKE

IVO RAUH

Contents

05 Safety on the road
06 Safety at work
07 Safety at home
08 DEKRA worldwide
10 Interview with Stefan Kölbl
12 Interview with Roland Gerdon

14
Mobility of the future

We think ahead for safety to ensure trust.

48
Air pollution control

14 Mobility of the future

17 The automobile of tomorrow
22 Interview with Clemens Klinke and Ivo Rauh
26 Approval tests
27 Electric power for the city
29 Testing innovations
30 Strategic cooperations

32 Occupational safety

35 Robots humanize the world of work
40 Organizational safety
42 Innovation partnership
43 Secure firewall for products
45 Visual inspections
46 Power station inspection business

48 Air pollution control

51 Clean air for the world's major cities
56 Monitoring emissions
58 Measurement and analysis
59 Combating particulate matter
62 A paradigm for better air in cities

65 Company report

66 Committees
67 Management Board
68 Report by the Chairman of the Supervisory Board
70 Management Team

32
Occupational safety

73 Services portfolio

74 Services
80 Opportunities

81 Social responsibility

82 Sustainability
84 Commitment

86 Imprint
87 DEKRA Highlights

On the road, at work, at home

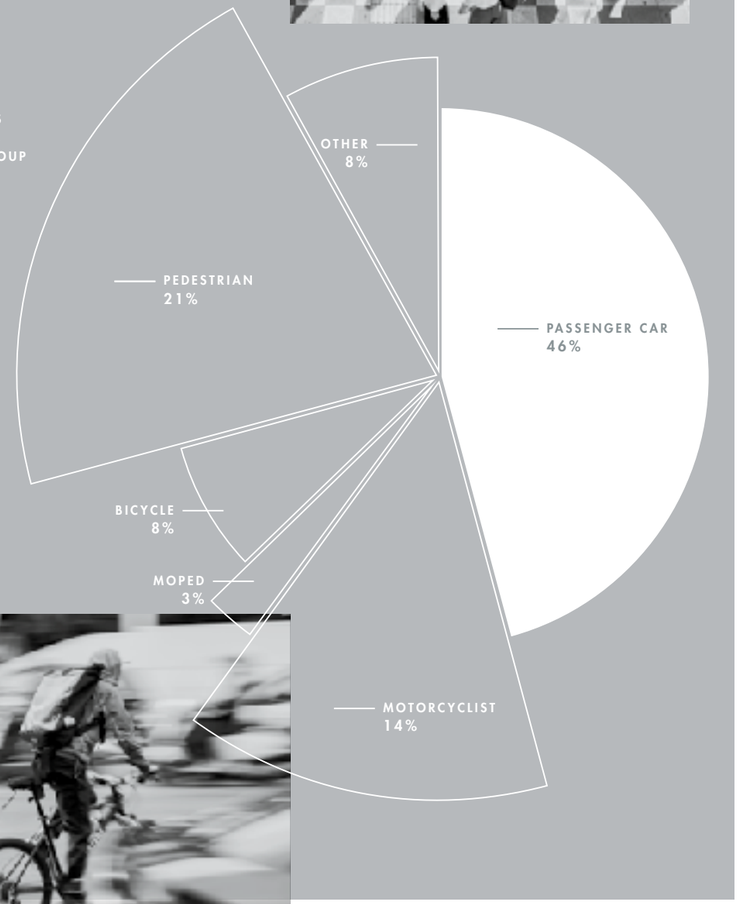
Safety for many areas of life

Since its foundation in 1925, DEKRA has been committed to ensuring road safety. In the meantime, however, the company has also become a pioneer and specialist for greater safety in the equally important areas of life at work and at home.

Safety on the road

Despite major successes in recent years, approximately 1.2 million people per year die in road accidents worldwide. A total of 25,500 traffic fatalities were recorded throughout the EU in 2016.

TRAFFIC FATALITIES IN 2016 IN THE EU BY ROAD USER GROUP



55

percent of all car drivers who own a cellphone use it at the wheel at least every now and then.

7

years in succession without a single traffic fatality is the record set by the Spanish city of Torrejón de Ardoz near Madrid. The achievement was recognized in 2017 by the DEKRA Vision Zero Award.

Safety at work

Estimates published by the International Labor Organization ILO indicate some 2.3 million workplace fatalities worldwide each year due to accidents and illnesses; 860,000 people are involved in accidents daily.

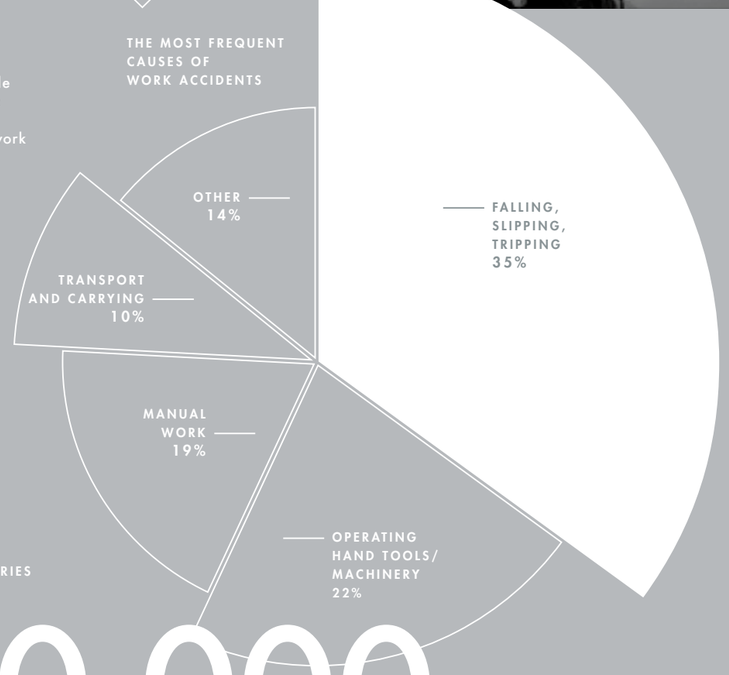
317

million accidents worldwide occur on the job annually; many of these result in extended absences from work

4

percent of global GDP lost every year because of work accidents.

THE MOST FREQUENT CAUSES OF WORK ACCIDENTS



WORK ACCIDENTS WITH CONSEQUENCES OF INJURIES WORLDWIDE – DAILY!

860,000

Safety at home

A whole range of hazards lurk within one's own four walls and during leisure time. This leads to accidents and product recalls.

10,000

almost 10,000 fatal accidents occur in German homes annually, almost three times the number of traffic fatalities.

REASONS FOR PRODUCT RECALLS IN EUROPE
The most common hazards

3.15

million household accidents each year in Germany

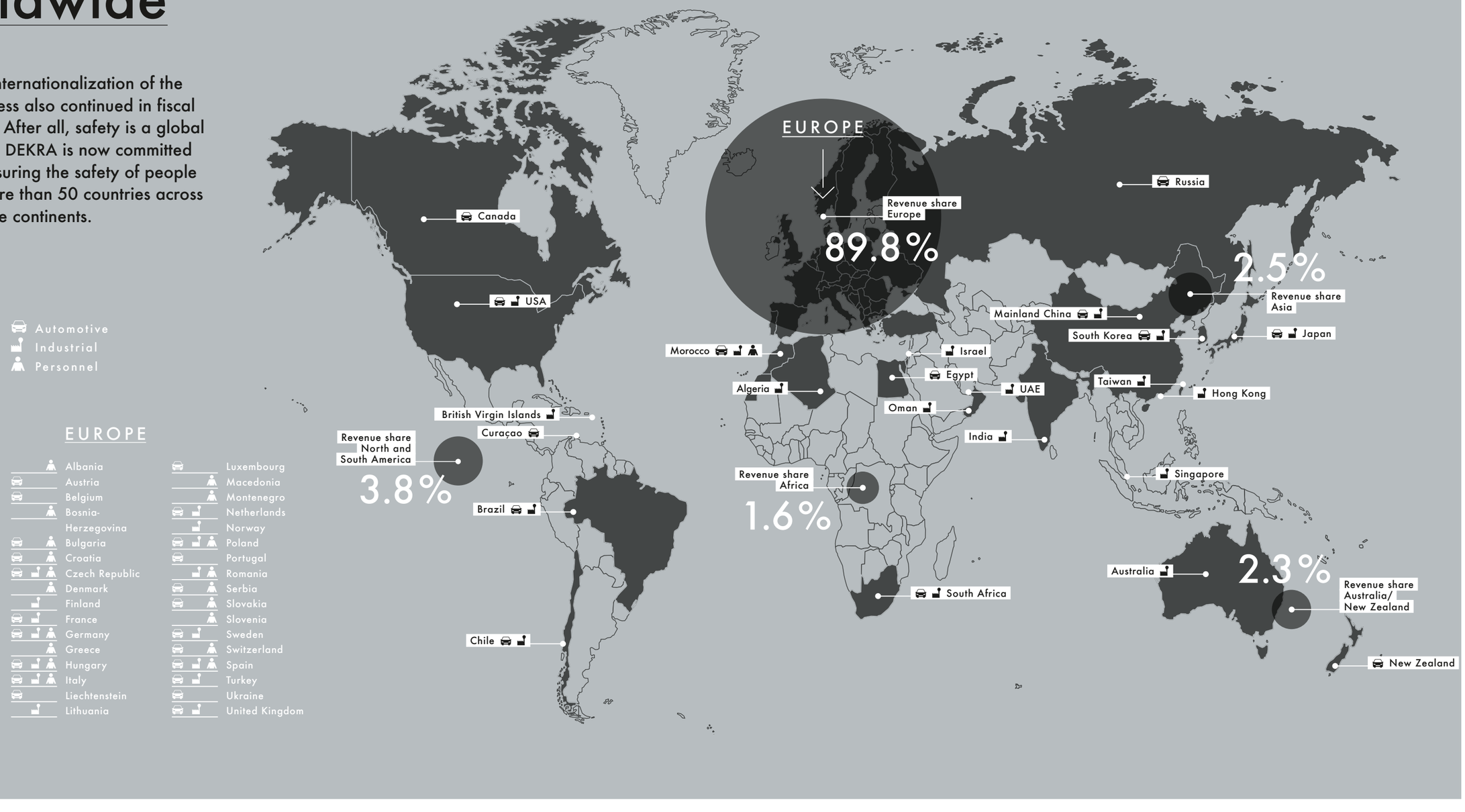
80%

of all fatal accidents in the home can be attributed to falls.

THOUGHTLEADERS FOR TRUST

DEKRA worldwide

The internationalization of the business also continued in fiscal 2017. After all, safety is a global need. DEKRA is now committed to ensuring the safety of people in more than 50 countries across all five continents.



EUROPE

- Albania
- Austria
- Belgium
- Bosnia-Herzegovina
- Bulgaria
- Croatia
- Czech Republic
- Denmark
- Finland
- France
- Germany
- Greece
- Hungary
- Italy
- Liechtenstein
- Lithuania
- Luxembourg
- Macedonia
- Montenegro
- Netherlands
- Norway
- Poland
- Portugal
- Romania
- Serbia
- Slovakia
- Slovenia
- Sweden
- Switzerland
- Spain
- Turkey
- Ukraine
- United Kingdom

DEKRA

Interview

Safe digitalization

A strong market position combined with high demand for safety has enabled DEKRA to record healthy growth for the 14th financial year in succession. At the same time, 2017 was used to extend the company's position as a safety expert in all aspects of the megatrends of digitalization and connectivity. For this reason, DEKRA CEO Stefan Kölbl believes that the company is well positioned for the future and expects its successful track record to continue.

MR. KÖLBL, HOW WOULD YOU SUMMARIZE THE PAST FINANCIAL YEAR IN A SINGLE SENTENCE?

In 2017, we thrust the doors to digitalization wide open and are consistently implementing our goals for Vision 2025.

WHAT DOES VISION 2025 INVOLVE?

We are firmly committed to becoming the global partner for a safe world by the time of our 100th anniversary in 2025. In other words, we want to become the world's preferred partner for technical and organizational safety in the relevant areas of life on the road, at work and at home.

HOW FAR HAVE YOU PROGRESSED ALONG THIS PATH?

First of all, we have achieved gratifyingly strong growth for the 14th successive year and have exceeded the threshold of three billion euros in revenues for the first time. Secondly, with record investments of 150 million euros – primarily in the area of digitalization – we have laid the foundation for continued growth in the future.

CAN YOU PROVIDE AN EXAMPLE?

One of the highlights of the past year was our takeover of the EuroSpeedway Lausitz race track in Brandenburg. This marked yet another important step on the journey to creating a international testing network covering all aspects of vehicle safety in the future. In so doing, we are also ensuring human safety in relation to the connected and autonomous mobility of tomorrow.

HOW SHOULD ONE ENVISAGE THIS IN CONCRETE TERMS?

In the same way as the increased connectivity of everyday devices in the Internet of things, the connectivity of vehicles in what is called the Internet of vehicles brings with it new safety requirements. Over the past few years, we have been preparing for this development – for example, by taking over specialists in all areas of wireless inspection technologies. In addition, we have opened six laboratories in the rapidly growing Asia-Pacific region within half a year. Here, automotive suppliers and spare parts manufacturers can have the connectivity and electromagnetic compatibility of their products tested and certified. The EuroSpeedway Lausitz is a perfect fit for the strategy of investing in new laboratories, installations, testing services as well as R&D activities with a focus on connectivity and cyber security. That is because we are currently building Europe's largest testing ground to date for connected and autonomous driving not affiliated with any particular manufacturer.

THE INTERNET OF THINGS AND AUTONOMOUS DRIVING REPRESENT THE TECHNOLOGICAL UPHEAVALS OF OUR TIME. BUT CAN WE REALLY TRUST THE TECHNOLOGY?

That is the crucial question. New technology only gains broad acceptance if we can rely on it at all times. Each new technology brings with it new challenges in relation to safety. This was also the case at the time of our foundation, when motorization was making its triumphant advance. And the same applies today with regard to the digitalization and connectivity of our lives.

WHAT ARE THE IMPLICATIONS?

We must refine a tried and tested principle. Independent third parties – expert organizations such as DEKRA – must play a stronger role. The past has shown how important they are when it comes to the safety of people. Without them, for instance, the number of traffic fatalities in the EU would not have been more than halved within 15 years and would probably not have been reduced in Germany over the years from a peak of more than 20,000 to the current level of around 3,200. Indeed, throughout the EU, safety was only achieved over the past number of years through independent inspection. This also applies to the future: The promise of autonomous driving, reducing the number of road casualties to zero, will only be achieved by the critical testing and inspection of systems in the vehicles by neutral authorities.

HOW WILL DEKRA CONTRIBUTE TO THIS?

Thanks to our decades of experience, we are extremely good at identifying potential safety risks early on and developing strategies to eliminate them. This applies not only to road safety, but also to the two other areas of life in which we are active – at work and at home. We see ourselves as pioneers of safety and therefore of trust in the technology. That is because digital transformation demands absolute trust in technical safety.

Digital transformation demands absolute trust in technical safety.

STEFAN KÖLBL
Chairman of the Management Board
DEKRA e.V. and DEKRA SE

Interview

Pioneering the safe world of the future

ROLAND GERDON
Member of the Management Board
DEKRA e.V. and DEKRA SE

DEKRA has grown continuously across all areas for 14 years. Roland Gerdon, Member of the Management Board since 2003 and responsible for Personnel, Finance and IT among other things, has supported and actively shaped this successful corporate development. After more than 19 years of service, he will depart from the company during 2018 and will hand over his duties to Thomas Müllerschön.

MR. GERDON, DEKRA STANDS FOR SAFETY. WHAT DOES THAT MEAN TO YOU?

Safety is one of the basic human needs. The rapid pace of technological change and the global economic interrelationships continuously present us with new challenges. We have prepared ourselves for this reality through our strategic alignment and the expansion of our business fields and, as a global partner for safety, we are making an important contribution to the future of our society. We are proud of that.

WHEN YOU LOOK BACK ON YOUR TIME AT DEKRA, WHAT WAS THE GREATEST CHALLENGE?

We grew rapidly and strongly, entered new markets and opened up a number of new business fields. The key challenge at that stage was to maintain this development over the long term. Revenues and earnings must be sufficient, new activities must be integrated and developed further together with the existing core fields.

DURING YOUR TIME IN OFFICE, REVENUES AND EMPLOYEE NUMBERS TRIPLED, WHILE PROFITABILITY INCREASED SIXFOLD. HOW DO YOU DO THAT?

The one thing you need above all else is committed and qualified employees. Naturally, customer focus, innovative services and transparent and high-performance systems are also required. However, it is essential to keep an eye on costs at all times.

GROWTH IS A BOON, BUT IT MUST ALSO BE MANAGED. WHAT IS THE SECRET TO SUCCESS IN THIS CONTEXT?

Growth must be planned and controlled. A company must always know where it is, where it wants to go and how it will get there. To do this, we need our strategy and our employees who know and implement the strategy. That is not always easy, it demands a great deal of discipline and consistency and, most of all, the willingness and determination to work together toward shared success.

DEKRA key figures

For many years, DEKRA has been renowned for its stable growth – in terms of both revenues and workforce. After all, you can only guarantee safety if you have the right experts on board.

DOUBLING OF SALES OVER THE PAST 10 YEARS
+118%

Ø LENGTH OF SERVICE 2017
in years
9.7

WORKFORCE GROWTH 2017
+4,700

ACQUISITIONS OVER THE PAST 10 YEARS: MORE THAN
90

WORKFORCE GROWTH HAS MORE THAN DOUBLED OVER THE PAST 10 YEARS
+140%

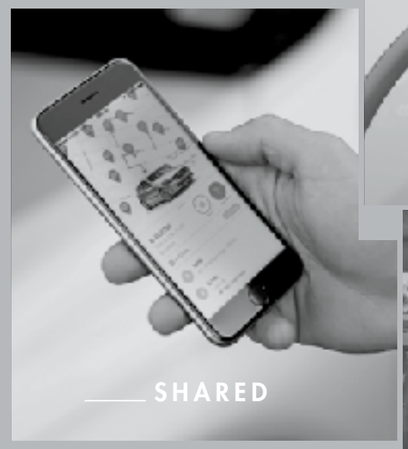
Ø AGE OF STAFF 2017
in years
42.5

THOUGHTLEADERS FOR TRUST

DEKRA Focus 1

Mobility of the future

How will we get around tomorrow?



Mobility has never been as exciting as it is today. A great many ideas are being put to the test. We are dealing with numerous questions:
Private or shared car ownership?
When does the car switch to autonomous control?
Which information is relevant?
Which type of drive has a future?

The automobile of tomorrow

The future of mobility is racing towards us: Automobile manufacturers and Silicon Valley start-ups are competing with one another to put a self-driving car on the roads as quickly as possible. The promises are great, but so are the challenges that accompany them. Particularly in the area of safety, the industry still has quite a lot of work to do.

MOBILITY TODAY

High-tech assistance systems and semi-autonomous functions

With the driver's hands resting in his or her lap, the steering wheel turns as if by magic: Reverse gear is engaged. The car starts to move. The steering wheel is turned briefly in the opposite direction. Forward gear is selected. The steering wheel turns again. Corrections are made. The engine switches off. The car is parked perfectly. And all without any human intervention.

Driver assistance systems such as parking sensors are fitted as standard on many of today's models. This means that cars are no longer the simple means of transport they once were. On the contrary, they now perform inspection and control tasks. With the help of technology, they ensure convenience and, above all, better safety. For this reason, DEKRA is calling for driver assistance systems that promote safety to achieve even greater market penetration. DEKRA sees this as an important step toward the realization of Vision Zero – a future without traffic fatalities by 2050.

The current crop of emergency braking systems already impress with superhuman reaction speeds. Lane and traffic jam assistance systems are already driving cars automatically in stop-and-go highway traffic. This helps maintain driver concentration on long journeys. And if the driver's eyes do get heavy on occasion, a fatigue sensor issues a warning. These little helpers represent level 2 of 5 on the evolutionary ladder leading to autonomous driving. The new Audi A8 will soon become the first production car to correspond to level 3. On routes where oncoming traffic is physically separated by a barrier, the A8 can drive autonomously at up to 60 kilometers per hour. It does this using aids such as radar sensors, a front camera, ultrasonic sensors and laser scanners. Other manufacturers and automotive suppliers are also working hard to develop cars that drive with the help of an electronic chauffeur.

Nevertheless, these technical aids do not yet relieve humans of their responsibility. The law states that the driver must intervene whenever the assistance system detects a situation that is beyond its capacity to control. This means that the driver must keep his or her hands on the wheel after all.

1

2

1 In the future, auto-pilot systems will take control of cars with increasing frequency.

2 The advanced emergency braking system not only detects other vehicles, but also the other road users.

16%

of new cars in Germany monitor lane change maneuvers or stay in the lane automatically.

1 Robo-taxis such as the Navya Autonom Cab are among the first autonomous vehicles to come on the market.

2 Autonomous vehicles such as the Smart Vision EQ are controlled from a touch-sensitive dashboard.

3 The era of autonomous driving starts at the push of a button.

1

90%

Forecasts predict that autonomous driving will cut the accident figures by 90 percent.

2

MOBILITY TOMORROW

A vision of autonomous driving

Until recently the stuff of science fiction, today the epitome of future mobility: Autonomous driving. People are now merely passengers, the system takes over control. Intensive research is being conducted around the world to turn this vision into reality – as quickly as possible.

"The technology will be ready for series production in ten years," says Lars Kröger. However, the traffic planner at the German Aerospace Center (DLR) Institute of Transport Research Passenger Transport highlights the obstacles that lie ahead: "Acceptance in society will be delayed." He goes on to explain that this is primarily because every innovation must cross a critical point: "The scenario in which we are all chauffeured around in self-driving robo-taxis can only come to pass if people no longer need their own car on an everyday basis," says Kröger.

3

After all, the vision of level 5, of autonomous driving, is a far-reaching one in which the car will be driving unaided on every street and in every situation. This is why many concept vehicles no longer feature a steering wheel, pedals or a cockpit, but just a passenger cabin, two sliding doors and four seats. These are arranged facing one another – like the table seats on a train. Driving in the future will offer an opportunity to sleep, work, read, play. Just not actually driving.

Mobility will then become second nature. For everyone, as a driver's license will no longer be required. This means that the blind, children or old people will also be able to travel. Self-driving vehicles not only promote social inclusion, but also offer other benefits: Eliminating human error from road traffic makes driving safer, the systems can avoid areas of congestion, thus conserving energy and pumping fewer pollutants into the air.

Interview

Drivers of a global safety culture

IVO RAUH *left*
Member of the Management Board DEKRA SE, Head of the DEKRA Industrial Business

CLEMENS KLINKE *right*
Member of the Management Board DEKRA SE, Head of the DEKRA Automotive Business Unit

Two management boards. One common theme. Safety in the digital age. Be it a self-driving car or an automated factory. All processes must be safe. At all times. So it's good that there are experts who can answer important questions…

YOU REPRESENT THE TWO LARGEST BUSINESS UNITS AT DEKRA, WHICH PREVIOUSLY OPERATED IN QUITE SEPARATE MARKETS. WHY ARE THINGS DIFFERENT TODAY?

KLINKE – When DEKRA was founded more than 90 years ago, its primary focus during the emerging era of mobility was on testing the mechanical safety of vehicles. The advent of digitalization brought about fundamental changes. Autonomous and connected driving present us with completely new challenges when it comes to guaranteeing and further improving road safety in the future. The safety of vehicles in the years ahead will also depend on the reliable and safe functioning of electronic systems and wireless connections. To overcome this challenge, we are tapping synergies within DEKRA with the DEKRA Industrial experts.

RAUH – I would go one step further. In the future, the car will become part of a smart, digital world and therefore faces the same challenges associated with modern technology that apply to all other areas of life. As DEKRA, we are collectively pursuing our vision of becoming the global partner for a safe world by 2025. And this world will be fully automated and connected. Consequently, reliable connectivity and cyber security are extremely important. We are working together in both fields.

HOW IS THIS REFLECTED IN DAY-TO-DAY OPERATIONS?

KLINKE – As indicated, autonomous and connected driving as well as the associated safety requirements play a major role in all our business fields. This applies in equal measure to intelligent vehicles and to everyday devices in the smart home environment. We recognized this development early on and focused our strategy accordingly, for example, by identifying and acquiring connectivity specialists.

RAUH – Digitalization and innovation know no boundaries. For this reason, the establishment of a global network of inspection centers specifically with a view to connectivity was a key milestone in our future strategy. In the meantime, we offer customers across the globe the opportunity to test and certify the connectivity, electromagnetic compatibility and cyber security of their products. This applies both to automotive suppliers and to computer vendors.

HOW DOES THE TAKEOVER OF THE EUROSPEEDWAY LAUSITZ FIT INTO THIS PICTURE?

KLINKE – It is a perfect fit because it allows us to carry out better research and develop new test procedures. It also enables us to offer our customers inspection and test services of a correspondingly high standard. Either by carrying out tests for them or allowing customers to use the test facilities themselves. At the EuroSpeedway Lausitz, we are currently building Europe's largest testing ground to date for connected and autonomous driving not affiliated with any particular manufacturer. There, we simulate relevant everyday situations on the road and carry out tests as an independent third party as to whether and how the driver assistance systems also function in extreme situations.

INSUFFICIENT CYBER SECURITY CAUSES ENORMOUS ECONOMIC DAMAGE AND ENDANGERS HUMAN LIFE. HOW CAN THIS BE CHANGED?

RAUH – Data also knows no boundaries. To prevent damage on an unprecedented scale, it is essential to have uniform standards. A great deal of work is currently being done in this area. DEKRA is contributing its expertise to this process. From this perspective, cyber security is a must. Only then will products and systems function reliably with one another and be protected against unauthorized access.

KLINKE – There are two other points to consider. On the one hand, technology companies and product manufacturers must work more closely than before with testing organizations such as DEKRA. We must become part of a collective network because without access to data, particularly with increasingly autonomous driving, safety cannot be ensured. On the other hand, testing processes must be continuously adapted or reinvented in consultation with regulatory authorities and industry in order to keep pace with technical progress. All of this is necessary to build trust in the digital technology. DEKRA sees itself both as a pioneer and a driving force in the development of a global safety culture.

IS DIGITALIZATION A CURSE OR A BLESSING?

RAUH – The technological transition poses major challenges to our society and, in particular, to industrial companies. Our goal is to guarantee safety, together with our customers, both at work as well as on the road or at home. This is without doubt an ongoing but critical process because human lives depend on it in an emergency.

1

2

1 Bigger than 700 soccer fields: The Technology Center Klettwitz (front) and the EuroSpeedway Lausitz race track (behind).

2 Test site in Málaga, Spain: Connective test scenarios are developed there.

100

times faster than its predecessor – the future DEKRA 5G network that will be available in Málaga.

TEST TRACK

Robot cars on the EuroSpeedway Lausitz

A racing and test track is being transformed into test and racing track. Since November 1, 2017, the primary focus at the EuroSpeedway Lausitz in Brandenburg is no longer on speed, but on safety. DEKRA is developing Europe's largest manufacturer-independent center for autonomous and connected driving around the asphalt tri-oval near the A13 from Dresden to Berlin. With an initial investment of 30 million euros, the company will be creating 100 highly-specialized roles. The goal is to bundle all the safety expertise at DEKRA for the mobility of the future. Customers, especially in the automotive sector, but also start-ups can then access testing services at a single location and from a single source.

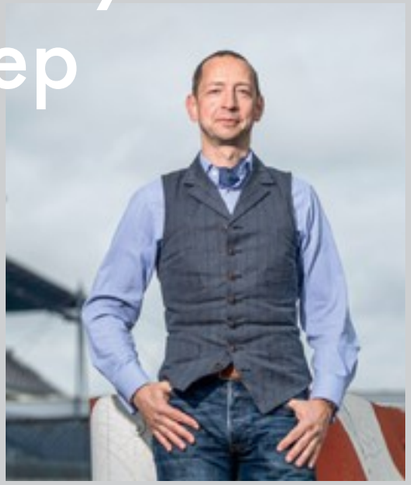
CONNECTIVITY

Connected mobility in Málaga

Connectivity plays a central role for the future of mobility. In the Spanish city of Málaga, DEKRA is testing how well and how reliably vehicles can exchange information with their surroundings – that is, with other vehicles, pedestrians or the infrastructure. These vehicle-to-everything technologies send and receive position and movement data from road users and connected traffic installations such as traffic lights. This includes assistance systems that must recognize and react to hazards with absolute reliability - as in the case of emergency braking if the "red light warning" is triggered or if the driver has overlooked something in the blind spot. DEKRA is getting ready to support the 5G standard, which offers data transmission rates 100 times faster than current networks.

Interview

Testing every step



VOLKER NOESKE
Head of the DEKRA Technology Center in Klettwitz

He is the new man in charge at the EuroSpeedway Lausitz: Volker Noeske. He is head of the DEKRA Technology Center and therefore the construction of Europe's largest test track for autonomous driving. In this interview, the 47-year-old engineer explains why the international network for testing the mobility of the future is so important.

MR. NOESKE, WHAT ARE YOUR PLANS FOR THE EUROSPEEDWAY LAUSITZ?

On the 540 hectare site, we are setting up an international testing center that will offer comprehensive testing facilities for mobility innovations. These involve driver assistance systems but also partially autonomous driving functions as well as fully autonomous driving. The equipment includes ultra-modern systems such as driving robots, self-driving platforms and mobile traffic infrastructure installations.

HOW EXACTLY DO YOU GO ABOUT TESTING?

We simulate everyday situations. At the EuroSpeedway Lausitz, we have numerous scenarios that are available immediately, such as a highway and country road route. City circuits and a large multi-purpose asphalt area are currently being constructed. Since we need to replicate the most varied situations, we will have a flexible backdrop of buildings. In a small town, for instance, the buildings are positioned just a few meters from the street, whereas they are much further away in megacities.

WILL DEKRA ALSO CONSIDER CONNECTED VEHICLES AT THE NEW TEST CENTER?

Our experts in Málaga are developing testing scenarios and test hardware for testing communication from vehicle to vehicle and to the wider infrastructure. In the next step, we will also set these up at the EuroSpeedway Lausitz, which will allow our customers to test autonomous and connected functions at a single location.

IN WHAT OTHER WAYS WILL YOU BE USING THIS SITE?

We want to network the industry focusing on all aspects of safety for the mobility of the future. As a result, customers and cooperation partners can and should also base themselves at the facility. This will include educational and training events relating to future mobility.

Approval tests

DEKRA homologation & type approval

BROAD SPECTRUM

The safety of a vehicle depends on numerous factors – from safety belts to advanced emergency braking systems. For this reason, DEKRA offers a broad spectrum of approval tests – from accompanying tests during the development phase to conformity-of-production tests all the way to market surveillance.

The DEKRA laboratories with their accreditations and international approvals guarantee a very high degree of confidentiality and legal certainty. This ensures that customers can avoid time-consuming and costly errors during the development phase.

1

2,000

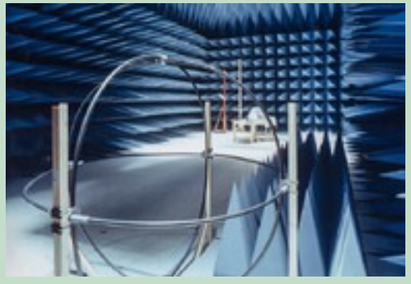
crash and sled tests per year

The DEKRA laboratories and test tracks cover the entire spectrum of tests – from function endurance tests and material tests to tests of active and passive safety and extending all the way to testing noise and exhaust emissions as well as electromagnetic compatibility (EMC). With the results of these tests, DEKRA customers can obtain general and partial operating permits for vehicles and systems.

2

60,000

pages of regulations for homologation & type approvals



3

1 Crash tests play a key role in the homologation of vehicles.
2 Driving robots in use at the DEKRA Technology Center.
3 DEKRA test chamber for electromagnetic compatibility (EMC).

Report

Electric power for the city

One thing is clear: Electric mobility will first start to play an important role in cities and municipalities. This is due not least of all to the growing awareness of air pollution caused by conventional drive systems (under the heading of nitrogen oxides). Added to this is the fact that previous weaknesses of electric mobility, such as range and charging station infrastructure, can be most quickly remedied in the municipalities. And ultimately, growing numbers of people are doing without a car of their own and turning to on-demand mobility instead. This is also strengthening electric mobility.

1 TESLA, the pioneer of electric mobility, now has more than 1,130 charging stations worldwide with approximately 8,500 charging spaces.

2 Standardized charging systems would boost acceptance of electric mobility.

2

3

To date, only three out of every 100 new cars are electric or hybrid vehicles.

INDISPENSABLE

Emission-free drive systems

Despite the availability of low-polluting diesel and gasoline engines and perhaps synthetic fuels, there is no getting away from the use of electric mobility in large cities: “Bans on internal combustion engines in our cities are coming down the tracks”, says Günther Schuh, “and sooner than most people think.” The Professor for Production Systems at the RWTH Aachen is firmly convinced that an emission-free drive system is essential if we want to be sure of meeting targets. “Hybrids and electric drive systems are gaining a major influence on urban mobility.”

However, electric mobility only makes sense if it is based on sustainable resources. To ensure that this is the case, we must continue to forge ahead with the energy transition. If that happens, then electric power can achieve a great deal, first and foremost, clean air with fewer nitrogen oxides and CO_2. We still have a long way to go. Although new registrations of hybrid and electric vehicles in Germany in 2017 almost doubled compared with the previous year, in total, only three out of every 100 vehicles ran on electric power according to the Federal Motor Transport Authority.

Public trust in the technology must first be strengthened. First and foremost, this requires the construction of more public charging stations – 35,000 is the target according to the Institute of Transport Research. The cost of the technology must also come down. This is best achieved through competition and demand. Things are happening in the industry: “In two years, the range of electric cars on offer will double or triple,” says Schuh. With a company that emerged from a university research project, he is launching a small electric car this year. “It doesn’t feature technologies from the drawing board, but is robust and functional, and benefits from minimal depreciation.”

Testing innovations

DEKRA laboratory in Hsinchu

NETWORK OF EXPERTISE

The test site in Málaga in Spain, the EuroSpeedway Lausitz with its adjoining technology center and the high-tech laboratory in the Taiwanese city of Hsinchu: Collectively, the three locations represent the competence centers of the international DEKRA testing network.

The Asian market has a central role in the internationalization of the business. Five new laboratories were opened in 2016. The largest of these to date was opened on the site in Hsinchu at the beginning of 2017. It is fully focused on the Internet of Vehicles, or connected driving, which also includes the major future topics of autonomous and electric mobility.

The DEKRA services in Hsinchu are therefore focused on new requirements relating to wireless and mobile communication technologies. No matter whether it is level 2 (driver assistance systems) or level 5 (autonomous driving), the issue of system reliability always applies.

How prone to error is the communication between vehicles and with the traffic infrastructure? Automotive suppliers and spare parts manufacturers can have the connectivity and electromagnetic compatibility of their products tested and certified there, for example.

“As a test service provider covering the key area of connectivity, we are one of the top five providers in the world,” says DEKRA CEO Stefan Kölbl, summarizing developments of the past few years.

1

2

An autonomous car generates

4,000

gigabytes of data per day.

Investigations conducted by Intel show that cameras, radar, GPS and laser systems generate between 10 and 70 megabytes per second.

11.4

billion euros is the amount that V2X technology could save by 2035.

777,000

electric and hybrid vehicles were sold in China in 2017, compared with around 55,000 in Germany in the same period.

1 Ultra-modern test equipment for connected car components.

2 Testing a motorcycle for electromagnetic compatibility.

Strategic cooperation

FUTURE TOPICS

China working together with DEKRA

With the help of DEKRA, the Chinese automobile manufacturers want to prepare for the future topics of electric mobility, autonomous driving and connectivity. This involves both the reliability of the systems installed in the vehicle as well as the undisturbed interaction with the connected environment. A corresponding agreement with the China Association of Automotive Manufacturers (CAAM) was signed in 2017. The CAAM is focusing in particular on advances in relation to standardization and certification.

STRATEGIC CONSULTING

Digital business models

In 2017, DEKRA acquired a 25.1 percent stake in the global technology-oriented strategy consulting firm Magility. One of the company's core competencies is the development and implementation of digital business models. Functional safety and cyber security play a key role in this context. Magility helps its customers to improve the product safety and corporate security of their technologies.

TOGETHER INTO THE FUTURE

Rinspeed

Time and again, the Swiss think-tank Rinspeed comes up with astonishing futuristic concept vehicles. The ∑tos – a self-driving sports car complete with its own drone and rear helipad – was first unveiled in 2016. With the Rinspeed Snap, presented at the CES in Las Vegas in 2018, the visionary mobility company turned its attention to an autonomous urban taxi. In this self-driving electric car full of IT systems, safety has to be ensured in a variety of ways. When it comes to autonomous and connected cars, aspects such as secure wireless connections, interoperability, electromagnetic compatibility, cyber security and functional safety are of paramount importance. This is why DEKRA is on board as a project partner to guarantee these aspects.

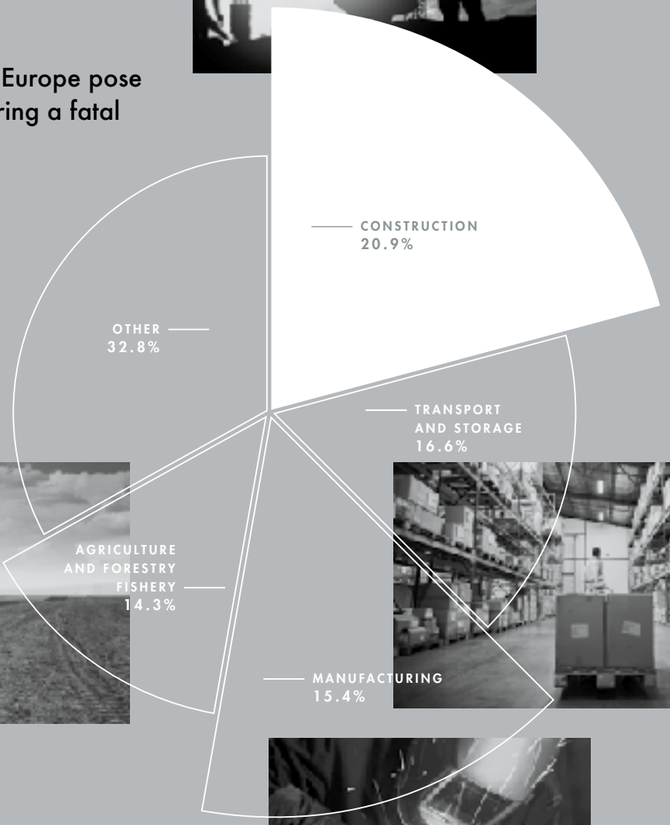
DEKRA Focus 2

Occupational safety

How safe is work today?

These four industries in Europe pose the highest risk of suffering a fatal accident.

FATAL WORK ACCIDENTS IN THE EU BY ECONOMIC SECTOR (2014)



2.3

Estimates published by the International Labor Organization ILO indicate some 2.3 million workplace fatalities each year due to accidents and illnesses.

Robots humanize the world of work

The digital transformation is an issue of great concern to society. Industry as a whole is also subject to radical change. Up to now, humans and machines have been strictly separated from one another. Today, the fields of automation and robotics are working toward a single goal: Cooperation between humans and robots. Hand-in-hand production that dispenses with dividing safety barriers. This is a major challenge with regard to safety.

11

fatal work accidents involving stationary machines and robots occurred in Germany in 2016.

1

2

3

3

Steps toward the future world of work: Developing ideas, transforming them into digital applications and testing safety.

WORLD OF WORK | SAFETY TODAY

High risk potential

In the automotive industry, humans and robots are already working on the same assembly lines. For instance, robots hoist heavy battery units with unerring accuracy into the bodies of hybrid and electric vehicles. Humans monitor the movements. If necessary, they can stop and reset them. Otherwise, they ensure that wiring looms are correctly laid and that the screws are properly tightened at the end of the production step.

It sounds simple. However, monitoring and controlling are difficult tasks. That is because the more complex the procedures, the less a machine can be used. Consequently, humans have so far been irreplaceable and work ever closer with machines. This presents hazards. Of course industrial jobs have become safer, but accidents continue to occur. The latest statistics compiled by the German Statutory Accident Insurance organization (DGUV) list 36,744 injuries caused by stationary machines and robots in 2016. In eleven of these cases, the outcome was fatal.

Research institutions such as the Fraunhofer IFF are doing everything within their power to bring these numbers down. One innovation is the smart work area in which cameras monitor every movement and send them to a control system. This system uses a projector to divided the entire floor space into green and red zones – work zones and hazard zones. If humans and robots are positioned close to one another, the mechanical systems operate more carefully. This means that minimal clearances and safety are no longer mutually exclusive. An additional safety measure is training in the virtual domain: Workers use a virtual-reality headset to familiarize themselves with their daily routines working with robots. Consequently, occupational safety in the future will require completely new approaches and a new understanding of human-machine interaction. On the basis of comprehensive process analyses, active accident prevention is therefore becoming increasingly important.

1 Ergonomically optimized work on an automobile production line thanks to robot support.

2 In the future, production line supervisors will work with 'KPI dashboards' that provide them with data in real time.

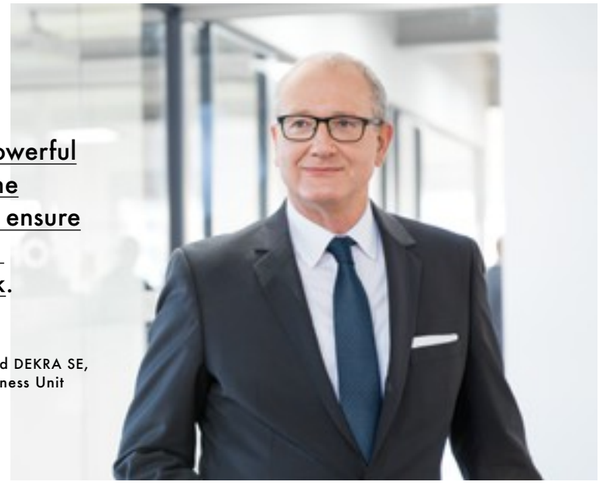
3 With the help of real-time data, production process can be continuously improved.

WORLD OF WORK | SAFETY TOMORROW

Robots and machines reduce workloads and support humans

The Bionic CRAY X is the first exoskeleton to be developed and produced in Germany. Weighing a total of eight kilograms, the body structure is strapped to the back and the thighs. These wearable robotics are becoming increasingly important. Also in terms of increasing productivity and safety at the workplace. The CRAY X makes it possible to lift and carry heavy objects by pairing the strength of a machine with human intelligence. It learns from the wearer's movements, imitating and reinforcing them. It is designed to reduce strain in the lower back area and prevent work accidents.

Digitalization is accompanied by rapid and comprehensive connectivity. Where this involves robots working on assembly line or sensitive data, the safety of an entire company can be at risk. To guarantee enhanced cyber security, an Alliance for Cyber Security was formed in Germany under the auspices of the Federal Office for Information Security (BSI) – it currently boasts more than 2,000 active members, including DEKRA. The European Commission has established a dedicated EU agency for cyber security.



Robotics is gaining powerful momentum. We put the conditions in place to ensure that no employees or investments are at risk.

IVO RAUH
Member of the Management Board DEKRA SE,
Head of the DEKRA Industrial Business Unit

1 Exoskeletons such as that designed by the Fraunhofer IAO follow the movement of the arms and provide power assistance; the additional load is introduced into the hip or the floor.

2 Man and machine in tandem: Robot sensors guarantee the necessary separation.

1

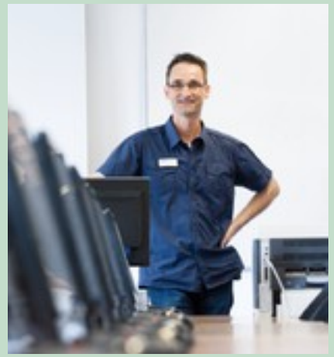
2

Organizational safety

DEKRA
Uncompromising safety advice

FEWER ACCIDENTS THANKS TO SAFE PROCESSES

DEKRA Insight is a global partner for organizational and process safety. For more than 30 years, mid-sized and large companies in 72 countries have profited from the market leader's wealth of experience. It pays off: Customers from the power supply and chemical industries report 25 percent fewer injuries during the first year. For this purpose, DEKRA Insight visits the companies, implements a safety management system and ensures that it is adhered to. In this context, the concept of safety is not confined exclusively to production personnel, but must also be planned and exemplified at management level. With this approach, DEKRA Insight boosts attentiveness across all business processes.



2

1

5,500 customers worldwide

Our customers come from 72 countries worldwide. Through our work, we protect approximately two million employees across virtually all sectors.

45%

fewer accidents thanks to the DEKRA concept of behavioral safety (Behavioral Accident Prevention Process)

550

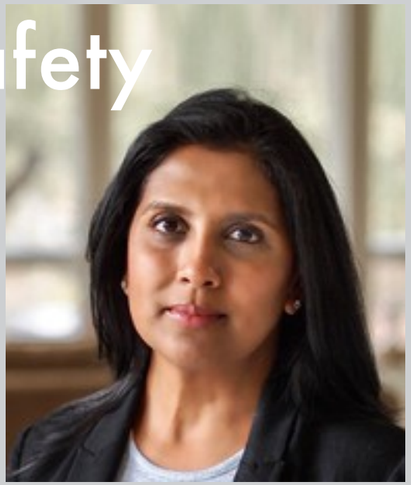
employees at 22 locations in 16 countries

1 The oil and gas industry is an example that demonstrates the importance of organizational and process safety – without it, the likelihood of accidents with catastrophic consequences increases.

2 Safety depends on the person and his or her behavior, regardless of the sector involved.

Interview

Establishing a culture of safety



SUNEETA MELLACHERUVU
DEKRA Insight

Every minute, over 600 work accidents take place worldwide. DEKRA Insight helps to lower this number and to embed safety in the customer's DNA in the long term, thus creating a sustainable safe working environment. In this interview, Suneeta Mellacheruvu, Director of Marketing and Demand Generation at DEKRA Organizational Safety explains how customer requirements can be systematically identified and met.

WHAT PREREQUISITES MUST BE MET TO ACHIEVE GREATER SAFETY IN AN ORGANIZATION?

First of all, we must get to know the company. Once we have a clear idea of the safety culture, we examine the work processes. We look for weaknesses, identify safety loopholes and close them. This is our core area of expertise, one that we have developed over decades of work.

WHAT DO DEKRA INSIGHT CONSULTANTS TRY TO IMPROVE FIRST OF ALL?

Communication. We bring representatives from every hierarchy level on board. From newly hired employees all the way to the decision-maker, everyone must accept that the status quo is not acceptable. That is because safety is often an objective pursued by many people. However, implementation often falters due to individuals who do not understand how important safety is for employee integrity and commitment as well as for productivity.

HOW DO THEY IMPLEMENT THE NEW RULES?

We recommend using supervisory bodies. This is why we assemble a team that monitors overall safety in the company and is in charge of discipline and implementation. Additional specialized teams are used during the transformation. These work closely with the management to guide the transition and to convince stakeholders to support the planned changes.

WHAT DO YOU SAY TO COMPANIES AS THEY EMBARK ON THIS JOURNEY?

Be patient. It will take three to four years to improve the safety culture. That is because it takes time to change the opinions and attitudes of all employees. What's more, success will only take hold if the company management itself internalizes the concept of safety and leads by example. The management must spearhead the transition.

Innovation partnership

DEKRA and the Fraunhofer Institute

MAN-MACHINE COOPERATION

Robotization is transforming the world of work from the ground up. Humans are being allocated new tasks, generally with a more challenging requirement profile, for example, because they are working hand in hand with a machine. However, this cooperation between man and machine also holds new injury risks. DEKRA is helping to shape the occupational safety of tomorrow. As part of an innovation partnership with the Fraunhofer Institute for Manufacturing Engineering and Automation, concepts for active accident prevention at the workplace are being developed.

1

+85%

of serious workplace accidents and injuries can be attributed to human error.

1%

to date, only very few companies have used digital assistants. However, trends point to strong growth.

2

FUTURE WORK LAB

In the Future Work Lab, a band saw is used as an example to show how the numerous possibilities of digitalization can increase safety: The worker wears digital transmitters on both wrists. Radio receivers positioned throughout the room can detect the exact position at all times. The machine immediately switches off as soon as the hands get too close to the jagged saw blade. The transmitters simultaneously perform an authorization function – only if a worker puts them on and approaches a machine will it start to work. This concept can be applied to numerous production steps, making them safer as a result.

1 Exploring new paths to safer work thanks to new technologies.

2 Automated emergency-stop mechanisms protect workers against accidents.

Report

Secure firewall for products

The Internet of things is a major driver of innovations. If five to six years, around 50 billion devices will have an Internet connection and be connected with one another. In practically every area of life, however, it is essential that devices not only communicate reliably with one another, sagainst unauthorized access. As a result, the issue of cyber security will assume enormous importance.

1

1 Ever-greater volumes of data are stored in server farms of ever-increasing size.

2 This makes it all the more important to protect data against unauthorized access and sabotage.

2

INTERNET OF THINGS

The challenge of cyber security

Cyber security is the key to ensuring that the promises of the Internet of things can be kept. For DEKRA, ensuring the safety of digital technology is therefore a central task. The company has reacted to the evolution of mobility and the associated connectivity of vehicles not least by establishing an international test network in Málaga and Klettwitz. The takeover of Spanish IT security specialists Epoche & Espri in 2017 also further strengthened our expertise in the field of cyber security. Along with international rules and standards such as FIBS 140-2 and ISO/IEC 19790, Epoche & Espri focuses on certifications in line with Common Criteria (CC), the leading recognized method of assessing the security of products.

32

The world's largest data center, the Lakeside Technology Center in Chicago, requires millions of liters of coolant.

Cyber security is a key component of the tests that DEKRA carries out for smart products. An international network of laboratories not only covers all stages of product development but also includes sectors such as industrial products, the consumer goods, medical and automotive industries. The focus in this case is on functional safety and reliable connectivity.

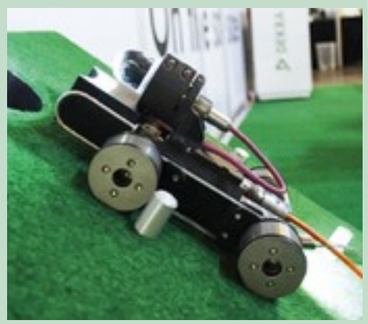
Visual inspection

DEKRA
Material Testing
and Inspection

1 Refineries in the chemicals industry feature complex pipe systems that must be inspected.

2 Inspection robots (crawlers) can also penetrate hard-to-access areas.

1



2

HARSH ENVIRONMENT

Whether it is installed deep in the tanks of a refinery or high up on the tower of a wind generator – even in challenging and harsh environments, technology requires regular maintenance. To avoid the need for people to put themselves in danger, DEKRA offers innovative solutions in the area of visual inspection. These include, for example, high-performance cameras that are resistant to salt water or can withstand high pressure. More than 450 well-known customers with projects across the globe now profit from DEKRA expertise.

10,000 DEKRA cameras can also withstand the pressures at depths of meters.

–55 °C Inspection technology by DEKRA even works at very low temperatures.

41 Number of DEKRA special applications

Power station inspection business

STRATEGIC TAKEOVER

Entry into an important testing market

On the road to becoming a global partner for safety, DEKRA has taken a further step: The takeover of American inspection company Core Visual Inspection Services (Core VIS) in 2017 marked the successful entry into the important market for power station inspection in the USA. Core VIS possesses special expertise in the use of remote-controlled inspection robots. These can travel along narrow shafts and lines, enabling them to penetrate sensitive areas, for example, in nuclear reactors.

The cameras record possible signs of damage, thereby supporting regular maintenance as well as safety. The Core Vis expertise is enhanced by the cutting-edge DEKRA technology in the area of inspection systems. Examples include high-resolution tube cameras whose high resistance to radiation allows them to operate in the vicinity of the fuel rods in the reactors.

With CoreVis, we have successfully entered the power station inspection business in the USA at the highest technological level. This provides an ideal platform for the further expansion of our inspection activities in North America.

IVO RAUH
Member of the Management Board DEKRA SE,
Head of the DEKRA Industrial Business Unit

THOUGHTLEADERS FOR TRUST

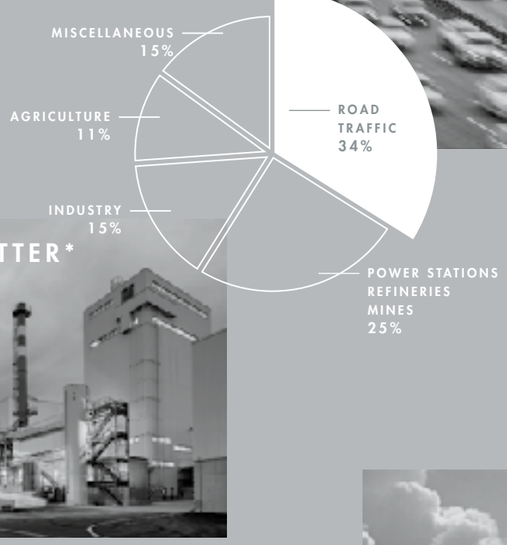
DEKRA Focus 3

Air pollution control

Where does the pollution come from?

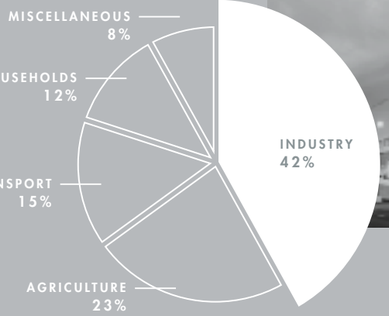
Selected air pollutants and their primary sources in Germany.

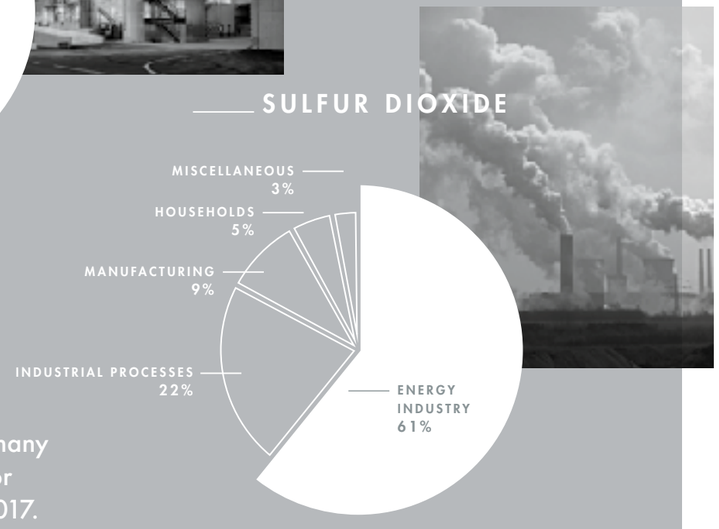
NITROGEN OXIDES



PARTICULATE MATTER*

SULFUR DIOXIDE





70

municipalities in Germany exceeded the limits for nitrogen dioxide in 2017. 20 fewer than the previous year.

* PM10 nationwide

Clean living spaces

Clean air for the world's major cities

Depending on the source, air pollution is responsible for up to three million fatalities (according to the WHO) worldwide each year. One thing is clear: Too many people are inhaling excessively polluted air. This is caused, for example, by smog, which comprises soot, sulfur dioxides and dust and frequently accumulates over cities. Road traffic is not the only source of additional particulate matter pollution – industry, power stations, agriculture and heating systems all contribute as well. For this reason, politicians, scientists and companies across the globe are working to combat air pollution.

1

AIR POLLUTION CONTROL TODAY

Smog in expanding cities

In the city of Beijing with its population of many millions, it is the inhabitants who are largely responsible for the smog pollution. That's because many of them still use coal as a source of heat. "Furthermore, sand from the Gobi Desert frequently blows toward Beijing," says Dr. Andrea Pozzer, a scientist at the Max Planck Institute for Chemistry in Mainz.

Due to a persistent pall of smog, China tightened its "blue-sky policy" in winter 2017 – and closed 176,000 factories and 44,000 coal-fired power stations for five months. The Government also banned Beijing residents from heating their homes using coal. At the same time, it pushed ahead with its program to switch households to gas. However, gas is now in short supply and many residents are secretly switching back to coal to avoid the cold. As a result, the smog problem continues. Andrea Pozzer knows why the project has faltered: "Switching all 21 million inhabitants of Beijing to gas is a technical and logistical problem. The blue sky policy can only be a long-term goal."

During the winter months, the formation of smog is encouraged by a weather phenomenon known as thermal inversion. Under these conditions, the air at ground level is cooler than the air above it. There is barely any wind and the layers of air are unable to mix. However, many Asian cities also disappear beneath a pall of smog in the summer. One example is Delhi. Smog is an ongoing issue for India's capital city because the farmers in the surrounding countryside burn their fields to prepare them for the next sowing season. The air quality is particularly poor after the Diwali festival. Across large swathes of India, the traditional festival of light is awaited with feverish excitement. The five-day festivities culminate in firework displays, which pollute the air throughout India. In Germany, this phenomenon occurs on New Year's Eve.

176,000

factories in China were shut down for five months in 2017 to curb emissions.

2

1 To combat smog in its major cities, China closes thousands of factories and power stations in the winter.

2 Respirators to combat air pollution: this is becoming an increasingly common sight in some Asian cities.

AIR POLLUTION CONTROL TOMORROW

Varied initiatives around the world

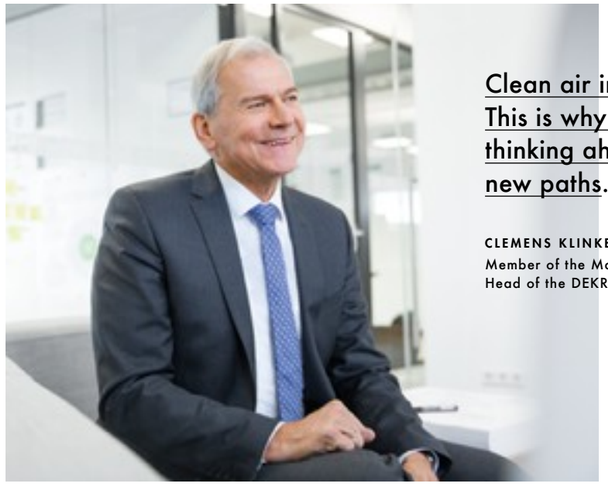
Italian architect Stefano Boeri sees the future of cities as a type of concrete jungle. A virgin forest that makes use of the vertical dimension and grows on high-rise buildings. To achieve this effect, Boeri plants trees, shrubs and mosses, a rich variety of vegetation, directly on the specially designed facades. In doing so, he wants to give nature back its space, but also to counter the effects of climate change. He first realized this dream in 2014 in Milan: At the heart of his home city, he designed the "Bosco Verticale", or vertical forest, on two adjacent green residential towers. His project was honored with the International Highrise Award.

These days, Boeri thinks on a grander scale. On the Liujiang River in southern China, he is developing Liuzhou Forest City. It will accommodate 30,000 inhabitants and will be powered with electricity generated by solar panels over the roofs and with the help of geothermal energy from the ground. In just two years' time, residents will be able to move in and enjoy fresh air even in the middle of the city.

This is made possible by the 40,000 trees and almost one million plants that will grow not only in the parks and on the streets, but also on the buildings. With the help of photosynthesis, the vegetation will absorb almost 10,000 tons of carbon dioxide and filter up to 57 tons of soot and particulate matter each year. At the same time, they will improve the entire city climate, curb noise pollution and provide a habitat for birds, insects and small animals.

Stefano Boeri is convinced that cities and urban sprawl are largely responsible for climate change. However, his forest city concept can turn the problem into the solution.

1



Clean air in our cities is vital. This is why we are committed to thinking ahead and exploring new paths.

CLEMENS KLINKE
Member of the Management Board DEKRA SE,
Head of the DEKRA Automotive Business Unit

1 Vegetation is an integral element of residential buildings – also in the vertical plane.
2 The future of the city is green to ensure that people can breathe freely.

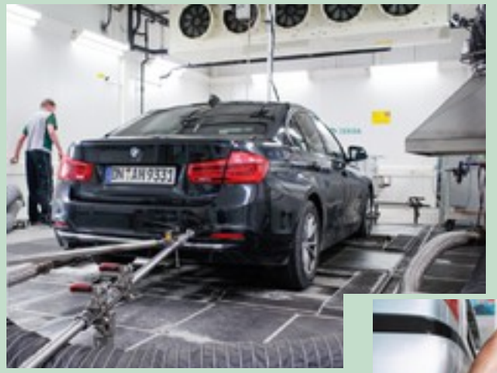
900

tons of oxygen is the amount that a forest city like Liuzhou can produce annually.

2

Monitoring emissions

DEKRA
Emissions testing



1

2

approx.

1,000

hours of testing on the topic of RDE

3

1 Exhaust gas roller dynamometer at the DEKRA Technology Center in Klettwitz
2 Emissions testing as part of the general inspection
3 RDE test drive (Real Driving Emissions)

MICROSCOPIC PARTICLES

The health implications of air pollution are serious: Microscopic particles in the air we breathe, nitrogen oxides or particulate matter increase the risk of illnesses such as lung cancer and heart disease. Ensuring compliance with statutory limits on vehicle emissions is therefore vitally important. At its modern laboratories, DEKRA simulates realistic environmental conditions to precisely test the everyday consumption and exhaust emissions of new car models or to renew roadworthiness certificates.

approx.

7,000

hours on the roller dynamometer, mainlyin the NEDC and WLTP

PREVENTING MANIPULATION

The primary focus of the exhaust gas analysis is on the current limit value and test requirements of the legislators. As a result, tailpipe exhaust gas measurements are mandatory in Germany since January 1, 2018. These not only rule out malfunctions, but also detect deliberate manipulation. This is a measure that DEKRA called for and now carries out during everyday testing.

Interview

Exhaust gas purification of the future

ERIK PELLMANN
Department Head for Motors, Emissions and Drivetrains, DEKRA Technology Center in Klettwitz

Wherever there is smoke, he is not far away: DEKRA's expert Erik Pellmann. In this conversation, the Department Head for Motors, Emissions and Drivetrains at the DEKRA Technology Center in Klettwitz explains the process that will be used in future to certify new vehicles. That is because the previous standard, the New European Driving Cycle (NEDC), is being replaced after 26 years.

WHY IS THE NEDC BEING RETIRED?

The EU introduced the NEDC standard in 1992 and it no longer conforms to the driving habits of today. The speeds at which the tests are conducted are too low, as are the dynamic parameters. This means that cars driven under real-world conditions consume more fuel than specified. The limit values for harmful substances such as nitrogen oxides have been reduced repeatedly since 1992. Despite this, the NEDC testing procedure remained virtually unchanged.

DOES THE NEW TESTING PROCEDURE CHANGE THIS?

Precisely. The World Harmonized Light Vehicle Test Procedure (WLTP) has applied since September 1, 2017. We also use the WLTP in Klettwitz. One of the main objectives of the WLTP is to enable standardized measurements of exhaust gas emissions and energy consumption around the world. And this applies to conventional, hybrid or electric vehicles.

WHAT EXACTLY HAS CHANGED?

The entire process is much more complex. In general, the boundary conditions have been newly and, above all, more precisely defined, thus eliminating the loopholes that still existed in the NEDC. The driving cycle is much more dynamic, with an average speed of approximately 47 kilometers per hour and a maximum speed of around 131 kilometers per hour. In addition, the procedure takes better account of the individual vehicle because it now incorporates the exact vehicle weight (including optional equipment), the rolling resistance as well as the aerodynamic characteristics. The result is a more realistic fuel consumption figure.

STARTING IN SEPTEMBER 2017, IT WAS JOINED BY THE RDE. WHAT IS THAT?

The 'Real Driving Emissions' method involves driving on the road with a portable emissions measurement system (PEMS) and measuring the emissions of nitrogen oxides, carbon monoxide as well as the particle count.

Measurement and analysis

DEKRA measuring stations and laboratories

1 DEKRA immission measurements and forecasts are now an indispensable component of approval procedures.

2 High-tech in the materials laboratory: DEKRA's experts perform analyses using the latest measurement equipment.

2

TRACKING DOWN HARMFUL SUBSTANCES

DEKRA operates an extensive network of accredited environmental measuring stations and laboratories. This measurement expertise is in demand, for example, for approval procedures, quality inspections and in the field of occupational safety. The spectrum extends from measurements to control air pollution through to noise and acoustic measurements right up to the analysis of contaminated sites in the environment and in buildings. In this context, on-site measurements are closely coordinated with the subsequent analysis conducted in the chemical, material and product testing laboratories.

Emissions measurements carried out by accredited DEKRA measuring stations in Germany in 2017.

2,000

15,000

test reports and expert appraisals were compiled by the DEKRA laboratories for chemistry and materials technology in Germany alone in 2017.

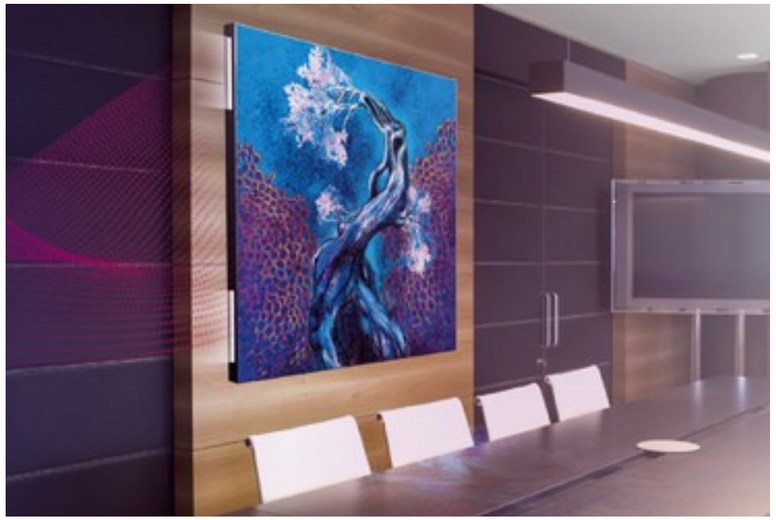
120,000x

is the magnification of the new emissions scanning electron microscope at the DEKRA materials laboratory in Saarbrücken.

Report

Combating particulate matter

Particulate matter is generated as soon as cars burn fuel or brake. Rubber, abraded particles and heavy metals then swirl through the air. The insidious part is that the smaller the particles, the more dangerous the particulate matter is to humans. Dust particles with a diameter down to ten micrometers, or one thousandth of a millimeter, only enter the mouth and nasal cavity. If the particles are smaller, they can penetrate as far as the bronchial tubes and pulmonary alveoli. They can even travel via the bloodstream to the brain and cause damage there. It is time to adopt new approaches.



1

PILOT PROJECTS

New paths to cleaner air

Steffen Braun, an urban planner for the cities of the future at the Fraunhofer Institute for Industrial Engineering IAO predicts: “Mobility in inner cities must change radically. We need greater emission regulations, otherwise we will poison ourselves.” The EU Commission is already threatening its member states with financial penalties if they fail to reduce their particulate matter and nitrogen oxide emissions.

Madrid, for example, has to cope with a thick cloud over the city, especially in winter. “Boina”, the locals call it – the beret. The city’s mayor, Manuela Carmena, has now introduced driving bans. Following the Parisian model, cars with license plates ending in odd numbers are permitted to drive on one day, while those ending in even numbers can drive the next day. Only zero-emission cars are permitted to drive every day.

Mayor of Paris Anne Hidalgo wants to have old cars banned entirely from the French capital’s streets by 2020. Vehicles are already required to display a pollution sticker and diesel vehicles first registered before 2001 are not permitted to drive in the city between 8 am and 8 pm on weekdays. At the same time, Hidalgo has promoted public transport. In Germany, cities are introducing environmental zones in an attempt to ensure clean air – and this is unlikely to be the final measure.

2

1 Californian company Artveoli is breaking new ground in purifying interior air.

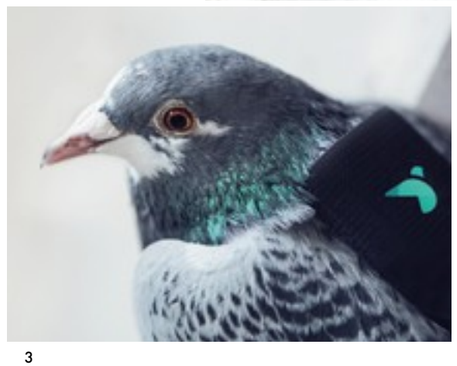
2 Good idea: Using architecturally attractive towers to clean the air in cities.

3 Pigeons fitted with sensors help cities measure air quality.

4 The Amager Resource Center in Copenhagen not only generates energy from waste, but is also integrated into its urban surroundings.

12

cubic meters of air are inhaled and exhaled per person per day.



3

4

“Artveoli” is a Silicon Valley start-up. It has set itself the goal of cleaning the air in conference rooms, classrooms and apartments. Excess carbon dioxide is extracted from the air in the room and flows back as oxygen. To do this, the inventors developed a bio-reactor. It imitates the photosynthesis in plants but looks like a picture hanging on the wall.

In the Netherlands, designer Daan Roosegaarde has created a “Smog Free Tower”. Standing seven meters high, the tower is capable of cleaning 30,000 cubic meters of city air per hour through its metal slats – using just 1,400 watts of green electricity. It is worth noting that an adult inhales and exhales twelve cubic meters of air each day. As the tower draws in polluted air, using copper coils to apply static electricity to the particulate matter and binding it, a smog-free cushion of air measuring of 60 meters across forms around the tower. Smog Free Towers have already been installed in Rotterdam and Beijing.

A paradigm for better air in cities

DEKRA IS WORKING WITH THE CITY OF STUTTGART TO COMBAT PARTICULATE MATTER

Cleaning trial enters the second phase

Motor vehicles are a major source of particulate matter. However, only five percent of localized particulate matter comes from exhaust emissions, whereas 32 percent is caused by tire and brake abrasion as well as particulate matter being churned up. In Stuttgart, limits are frequently exceeded at the Neckartor measuring station. In response, DEKRA proposed and coordinated a five-week trial, which was initiated in spring 2017 and involved intensive street-cleaning as a means of positively influence particulate matter measurements.

The objective was to eliminate larger particles before they are "ground down" by the traffic into particulate matter – and to find out whether this affects the particulate matter readings. The evaluation yielded initial indications that the cleaning was effective. To gain clear insights into the extent to which the elimination of coarse dust affects particulate matter values, DEKRA recommended extending the trial over a longer period of time. The second, longer trial was conducted on behalf of the city and ran from October 2017 until April 2018. An evaluation is currently ongoing.

CLEANING POWER AND ANALYSIS

Combination of water pressure and suction as well as laboratory analysis

During the trial, the roads around Neckartor were cleaned intensively using a combination of water pressure and vacuum removal as well as mechanical cleaning of the footpaths by DEKRA's partners. The Landesanstalt für Umwelt Baden-Württemberg (LUBW) contributed to the analysis of the results. The costs of the first trial were borne by DEKRA and the project partners and the second trial phase was commissioned and funded by the city of Stuttgart.

During the analysis, particulate matter levels at Neckartor will be compared with reference values from other stations. In addition to existing reference stations, DEKRA has set up another specially for the trial. The particulate matter concentration was measured both continuously and as a daily value. In addition, the particulate matter pollution was investigated in the DEKRA laboratory to determine its constituents. In this process, experts determine the dust components such as rubber, abraded particles form brakes and heavy metals, thereby gaining insights as to the sources of the various fractions.

THE CONTAMINATED FILTER SAMPLES ARE ANALYZED IN THE LABORATORY.

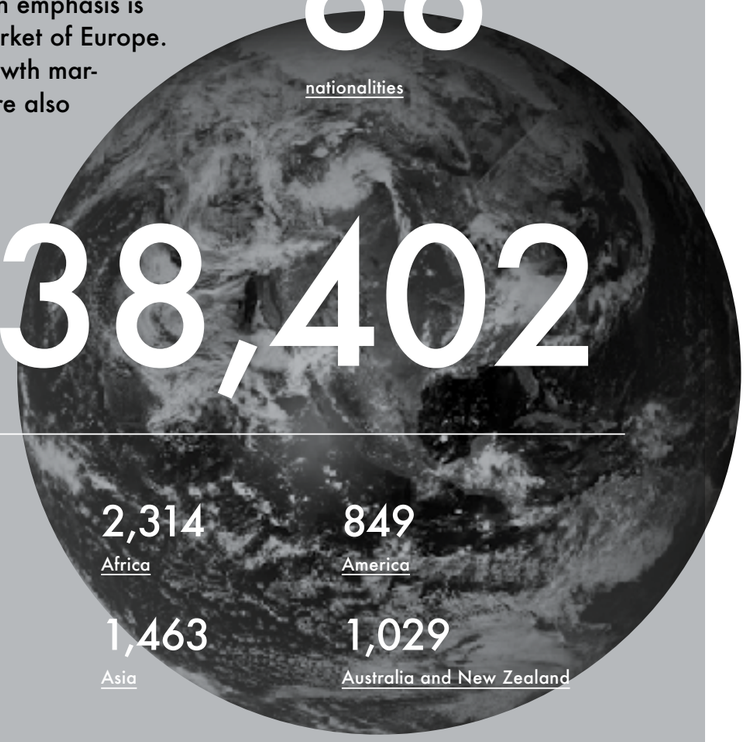
Expertise worldwide

DEKRA ensures better safety on all continents. The main emphasis is on the domestic market of Europe. However, other growth markets such as Asia are also expanding rapidly.

88
nationalities

EMPLOYEES IN EUROPE

38,402



22,693
Germany

2,314
Africa

849
America

4,740
France

1,463
Asia

1,029
Australia and New Zealand

EMPLOYEES GLOBAL

44,057

66 Committees
67 The Management Board
68 Report by the Chairman of the Supervisory Board
70 Management Team

Company report

Committees

Presidential Board
DEKRA e.V.

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President, Munich

DIPL.-WIRTSCH.-ING.
ARNDT G. KIRCHHOFF
Vice President, Attendorn

PROF. THOMAS EDIG
Hanover

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Stuttgart[3]

ULRICH GRAF
Bäch, Switzerland[3]

BERNHARD MATTES
Cologne[4]

DR. STEFAN SOMMER
Meersburg[4]

DIPL.-ING. BERND TÖNJES
Marl

DIPL.-WIRTSCH.-ING. PETER TYROLLER
Stuttgart

PROF. WOLFGANG WEILER
Coburg

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Chairman, Leinfelden-Echterdingen

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Stuttgart[5]

THOMAS MÜLLERSCHÖN
Emerkingen[6]

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DEKRA e.V.

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Chairman, Ludwigsburg

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Vice Chairman, Munich[2]

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THOMAS BAUERNHANSL
Pforzheim

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Küsnacht, Switzerland

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Cologne[1]

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Hürth

PROF. THOMAS WEBER
Stuttgart

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DEKRA SE

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Vice Chairman, Warendorf[7]

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Cuxhaven[7]

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Dermbach[5]

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Saint-Sulpice-et-Cameyrac, France[5]

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Munich

MONIKA ROTH-LEHNEN
Wuppertal[7]

DIPL.-WIRTSCH.-ING. PETER TYROLLER
Stuttgart

PROF. WOLFGANG WEILER
Coburg

Management Board
DEKRA SE

STEFAN KÖLBL
Chairman, Leinfelden-Echterdingen

ROLAND GERDON
Stuttgart[5]

CLEMENS KLINKE
Boffzen

IVO RAUH
Stuttgart

THOMAS MÜLLERSCHÖN
Emerkingen[6]

1 until March 28, 2017
2 from March 28, 2017
3 until April 25, 2017
4 from April 25, 2017
5 until May 16, 2018
6 from May 17, 2018
7 Employee Representative

Management Board

CLEMENS KLINKE – Member of the Management Board DEKRA SE, Head of the DEKRA Automotive Business Unit
STEFAN KÖLBL – Chairman of the Management Board DEKRA e.V. and DEKRA SE
IVO RAUH – Member of the Management Board DEKRA SE, Head of the DEKRA Industrial Business Unit
ROLAND GERDON – Member of the Management Board DEKRA e.V. and DEKRA SE Finance, Personnel and IT

Ladies and Gentlemen, dear Customers and Partners,

Whether it is traditional or new expertise in future-oriented fields such as cyber security, DEKRA know-how is recognized internationally by customers, partners and policy-makers.

DEKRA has been well on course for some time now with long-term, stable and sound growth. The figures for 2017 provide impressive evidence of this with the 14th successive year of growth.

Our success can be attributed to robust organic growth thanks to our strong market position in established markets on the one hand. On the other, DEKRA has further improved its access to growth markets through strategic acquisitions and by internationalizing its business. This applies, for example, to services relating to safety for the Internet of things, Industry 4.0 as well as autonomous driving.

This is represented by the international digital testing network comprising Klettwitz (Germany), Málaga (Spain) and laboratories in Asia. A particular focus in 2017 was the acquisition of the EuroSpeedway Lausitz race track and its expansion to become Europe's largest independent inspection and testing center for the autonomous and connected mobility of the future.

Moreover, the organization's competence in the field of cyber security was strengthened significantly in 2017 as a result of acquisitions and partnerships. Consequently, DEKRA is also well positioned for further growth of its business relating to the megatrend of digitalization and connectivity.

Whether it is traditional expertise or new proficiency in future areas of focus such as cyber security, DEKRA know-how is respected internationally by customers, partners and public decision-makers. This recognition is based on our corporate mission to ensure safety, which DEKRA has fulfilled for more than 90 years and our status as a truly independent, neutral third party.

The growing need for safety on the road, at work and at home is a megatrend that will further intensify in the coming years in industrialized and developing countries. I am convinced that DEKRA has prepared itself systematically and thoroughly for the associated customer requirements.

On behalf of the Presidential Board and Supervisory Board, I would like to thank all the members of DEKRA e.V. as well as our customers and business partners for the trust they have placed in us. I would also like to thank all the employees: Your exceptional dedication and knowledge represent the foundation for the continued success of DEKRA.

Thomas Pleines has been President of the Presidential Board of DEKRA e.V. and Chairman of the Supervisory Board of DEKRA SE since 2011.

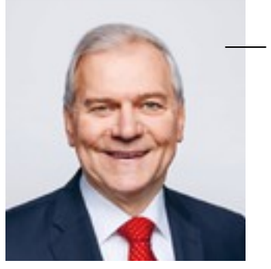
THOMAS PLEINES
President of the Presidential Board of DEKRA e.V.,
Chairman of the Supervisory Board of DEKRA SE

Management Team

The DEKRA Management Team stands for the corporate mission to ensure safety on behalf of the 44,000 employees worldwide.

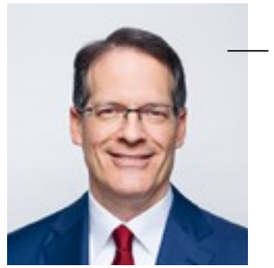
STEFAN KÖLBL
Chairman of the Management Board DEKRA e.V. and DEKRA SE

ROLAND GERDON
Member of the Management Board DEKRA e.V. and DEKRA SE
Finance, Personnel and IT



CLEMENS KLINKE
Member of the Management Board DEKRA SE, Head of the DEKRA Automotive Business Unit

IVO RAUH
Member of the Management Board DEKRA SE, Head of the DEKRA Industrial Business Unit



ERIC A. LABE
Chief Regional Officer North America

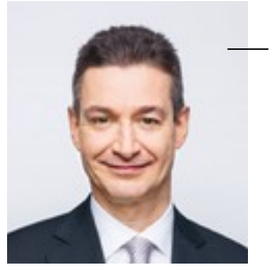
STAN ZURKIEWICZ
Chief Regional Officer East Asia

DR. GERD NEUMANN
Managing Director DEKRA Automobil GmbH

GUIDO KUTSCHERA
Managing Director DEKRA Automobil GmbH

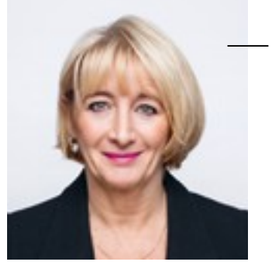
WOLFGANG LINSENMAIER
Managing Director DEKRA Automobil GmbH

JOHANNES VOSSEBRECHER
Managing Director DEKRA Automobil GmbH



NICOLAS BOUVIER
Managing Director DEKRA Automotive France

FRÉDÉRIC SCHMITT
Managing Director DEKRA Automotive Solutions



SOPHIE DOMINJON
Managing Director DEKRA Industrial France

DR. HANS DE REGT
Managing Director DEKRA Material Testing & Inspection

LOTHAR WEIHOFEN
Managing Director DEKRA Business Assurance Group and DEKRA Insight

BERT ZOETBROOD
Managing Director DEKRA Product Testing & Certification Group

SUZANA BERNHARD
Managing Director DEKRA Arbeit Group

JÖRG MANNSPERGER
Managing Director DEKRA Akademie Group

YVONNE BOLACH
Director of Accounting, Tax and Financial Controlling

STEPHAN HEIGL
Director Communications and Brand Management

ULRICH ROTHFUCHS
Director of Legal, Compliance and Data Protection

MARK THOMÄ
Director Strategic Marketing and Sales

KAI VARNAI
Director of Human Resources

DR. KAI ZERCHER
Director IT

74 Services
80 Opportunities

Services portfolio

1

Vehicle Inspection

As an officially recognized expert organization, DEKRA inspects vehicles of all types for roadworthiness and compliance with safety standards. The periodic vehicle inspection has been a core service of the company for more than 90 years. It represents the corporate mission of its founding fathers to promote road safety.

With a total of 26 million inspections, DEKRA is the market leader not only in Germany, but also worldwide. In its domestic market, the company operates an extensive network of 75 branches, around 500 of its own testing centres and more than 30,000 inspection sites.

Assistance systems perform numerous tasks in the vehicles, which are connected to one another and to their surroundings to an increasing degree. This explains the growing importance of an independent vehicle inspection service according to the state of the art. DEKRA focuses on the intelligent linkage of safety and connectivity inspections and is committed to refining existing and developing new test standards – so that the promise of autonomous driving, a world without traffic fatalities, is also realized.

www.dekra.com/en-us/vehicle-inspection

2

Expertise

When it comes to claims regarding vehicle damage, professional expert appraisals are indispensable. DEKRA's comprehensive expert knowledge offers maximum independence, quality and speed. DEKRA prepares more than one million expert appraisals annually across all continents. With approximately 500 locations in Germany alone, DEKRA experts always close to the customer. They assess the extent of damage and the replacement value, calculate the depreciation, analyze the causes of an accident and examine vehicle components.

1 million expert appraisals worldwide each year

www.dekra.com/en-us/expertise

3

Claims Services

After an accident, DEKRA not only prepares expert appraisals. As a long-standing partner for claims in accordance with the Green Card system, the company also handles cross-border claims services. Each year, DEKRA manages considerably more than 100,000 accident and transport claims in 52 countries on behalf of insurance companies and fleet operators. The individual services provided include claims management for fleets, external claims adjustment of accident damages, the processing of transport claims as well as the international claims management in accordance with the Green Card system.

Cross-border claims services in 52 countries

www.dekra-claims-services.com

4

Automotive Solutions

Used car management covers services from evaluating leasing returns all the way to supporting dealers in the resale of vehicles. Each year, DEKRA evaluates over 700,000 service and company cars as well as staff vehicles before these returns enter the market as used vehicles. The range of services includes condition inspections, vehicle returns, valuations, document management, used vehicle marketing and dealer communications as well as sales and after-sales advice.

www.dekra-automotivesolutions.com/en

5

Homologation & Type Approval

Before vehicles or vehicle components are approved for use on public roads, their safety must be verified. In its capacity as a neutral authority, DEKRA checks whether the products from manufacturers, importers and suppliers comply with the provisions of around 500 national and international rules and standards. Accredited to DIN EN ISO/IEC 17025, DEKRA meets the highest standards regarding the competence of testing laboratories. The varied services covering all aspects of homologation & type approvals include, for example, the overall vehicle and parts inspection, individual approvals, design approvals as well as crash and endurance tests.

500

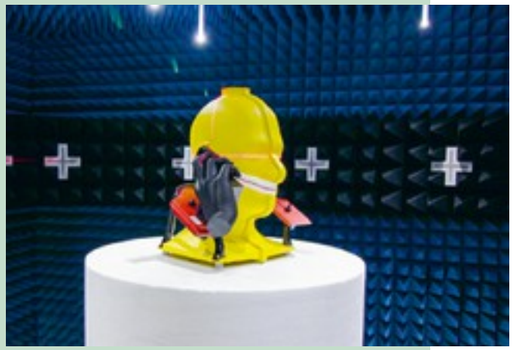
rules and standards

www.dekra.com/en-us/homologation-and-type-approval

6

Product Testing & Certification

Countless national, European and international standards & practices regulate market access for industrial products, medical technology equipment as well as all manner of consumer goods. DEKRA helps its customers negotiate these hurdles and successfully introduce their products on global markets. As a neutral and independent service provider, DEKRA offers the latest test laboratories, processes and resources for this purpose.



In light of the digitalization of more and more areas of life, DEKRA has specifically expanded the areas of cyber security and connectivity in the recent past. As a result, combined safety and connectivity inspections for smart products are an important element of the services currently on offer. In this case, functional safety is the subject of particular attention. In the rapidly-evolving energy markets, DEKRA also relies on innovative applications – including all types of renewable and decentralized energy generation, smart and micro-electricity grids, energy storage systems as well as charging technology for electric vehicles.

www.dekra-product-safety.com/en

7

Industrial & Construction Inspection

Expertise is essential when it comes to property: DEKRA's experts monitor construction services, check the installation of building technology and evaluate commercial and private properties. Thanks to DEKRA's experience and know-how in all areas of structural surveys, additional costs or even legal disputes over structural defects can be avoided. The range of services also includes valuations, energy efficiency, fire safety as well as the identification of harmful substances, structural renovations and risk assessments.

Choose DEKRA structural surveys to avoid additional costs

www.dekra.com/en-us/industrial-and-construction-inspection

8

Material Testing & Inspection

DEKRA supports safe and efficient industrial processes with a variety of material testing and inspection methods as well as with inspections of technical installations. For example, non-destructive material testing alone offers 16 specific methods – from radiography through to surface crack testing and all the way to wall thickness measurement. Added to this are micro-structure inspections.

DEKRA also has special expertise and experience in the inspection of installations using robotic systems. This involves the use of remote-controlled visual inspection robots that can penetrate into sensitive areas of power stations and installations, thereby relieving the burden of hazardous inspection tasks on humans. When it comes to testing and certifying devices, components and protective systems for use in areas at risk of explosion, DEKRA is not only a European notified body, but also a certification body and test laboratory conforming to international standards.

www.dekra.com/en-us/material-testing-and-inspection

9

Business Assurance

Thanks to DEKRA, companies know that their business practices comply with standards regarding safety, health, the environment and quality. In 2017 alone, DEKRA carried out approximately 25,000 system certifications.

Expert appraisals, inspections and audits by DEKRA, referred to as assessment services, provide verifications and criteria that can be used to fulfill statutory and official requirements. DEKRA carries out independent inspections and possesses in-depth industry expertise ranging from automotive to aerospace and defense. DEKRA also provides advice as well as education and training on the topics of chemicals and data protection legislation.

Fulfilling statutory and official requirements

www.dekra-assurance-services.com

10

Insight

As a specialist for safety at the workplace, DEKRA creates operational environments that reduce risks, protect people and assets and safeguard reputations.

Every 15 seconds, someone in the world loses his or her life in a workplace accident. DEKRA Insight counters this with a comprehensive consulting and service portfolio aimed at all hierarchical levels, from senior management to factory worker. The first step is to develop a wide-ranging safety strategy with the goal of establishing a holistic safety culture in the company. This is achieved with the help of a broad consulting and service spectrum focusing on safety management programs and training courses. In this context, recommendations for further improving process and organizational safety are based on comprehensive data analyses and software solutions for occupational safety.

www.dekra-insight.com

11

Training & Education

For more than 40 years, DEKRA has been a training partner to business and the public sector. Thanks to the trust shown by some 150,000 participants a year, the DEKRA Akademie is one of the largest private education providers in Germany.

Anyone wishing to pursue further education or training at the DEKRA Akademie has the choice: web-based training or computer-based training, a virtual classroom or a traditional classroom, going to one of 150 locations across Germany or going to their home computer, studying full-time or studying part-time while in employment. More than 1,000 experienced instructors will find the right educational path for everyone.

The specialist core competencies of the DEKRA Akademie are traditionally in the areas of transport, storage and hazardous goods logistics. In recent years, however, new business fields have been added. For instance, care workers and IT specialists from Eastern European countries are now also trained in their home countries and prepared for their work in Germany.

www.dekra.com/en-us/training-and-education

12

Temporary Work

DEKRA offers personnel services for employees and employers at 120 locations in Europe. With more than 17,000 temporary employees, DEKRA Arbeit Group was ranked seventh among the largest HR service companies in Germany in 2017. Since 1998, the range of services has revolved around a traditional placement-oriented model of temporary employment, which matches demand for employees from companies with attractive job prospects for temporary employees.

The DEKRA Arbeit Group's range of services includes numerous HR service solutions such as sector-specific recruitment, end-to-end applicant management and selective in-house training for HR managers.

Outside Germany, the international network includes European countries with foreign companies in Bosnia/Herzegovina, Bulgaria, Czech Republic, Croatia, Hungary, Macedonia, Montenegro, Morocco, Poland, Serbia, Slovakia, Slovenia, Spain and Switzerland. The spectrum of employees is also one of the most comprehensive on the market and includes business specialists as well as medical, IT or engineering experts.

7th

largest
HR service provider
in Germany

www.dekra-arbeit.de/en

www.dekra.de/karriere/en

Oppor-tunities

DEKRA is committed to its corporate responsibility. This starts with the employees, for whom we provide support for their personal and professional development, and extends to our multifaceted environmental and social commitments.

82 Sustainability
84 Commitment

Social responsi-bility

www.dekra.com/en-us/sustainability

Sus-taina-bility

Sustainability is a core value for DEKRA. With its expert services, the company makes an important contribution to sustainable development and promotes safety worldwide in important areas of life.

Responsible corporate management

The Corporate Sustainability division within the Legal, Compliance, Sustainability and Data Protection division oversees the DEKRA sustainability management with the goal of ensuring the long-term success of the company, taking into account its social, economic and ecological responsibilities.

Taking into account the strategic orientation, the values of the company and the alignment with criteria of recognized sustainability standards, DEKRA comes to the following understanding: "For DEKRA, sustainability means managing the company responsibly, maintaining an overview of the entire value-added chain, promoting innovations, assuming responsibility for employees and the environment and, above all, making a contribution to greater safety."

Principles and guidelines

DEKRA operates a unique, culture and value-based sustainability and compliance management system and attaches the greatest importance to ensuring that managers clearly demonstrate this outlook every day. The DEKRA Compliance Guidelines provide binding minimum standards as well as guidance for employees and business partners so that they comply with laws, legal standards and ethical principles across all continents.

The area of environmental protection, occupational safety and health and safety is regulated by a comprehensive set of guidelines. In its purchasing policy, DEKRA requires that its suppliers adhere to accepted sustainability standards, as specified in the General Terms and Conditions of Purchase.

German Sustainability Code (DNK)

Since May 2017, DEKRA officially complies with the German Sustainability Code. The DNK is an internationally recognized sustainability standard that was initiated by the German Council for Sustainable Development (RNE), an advisory body to the German Federal Government. The code includes 20 criteria for sustainable development in the areas of strategy, process management, environment and society.

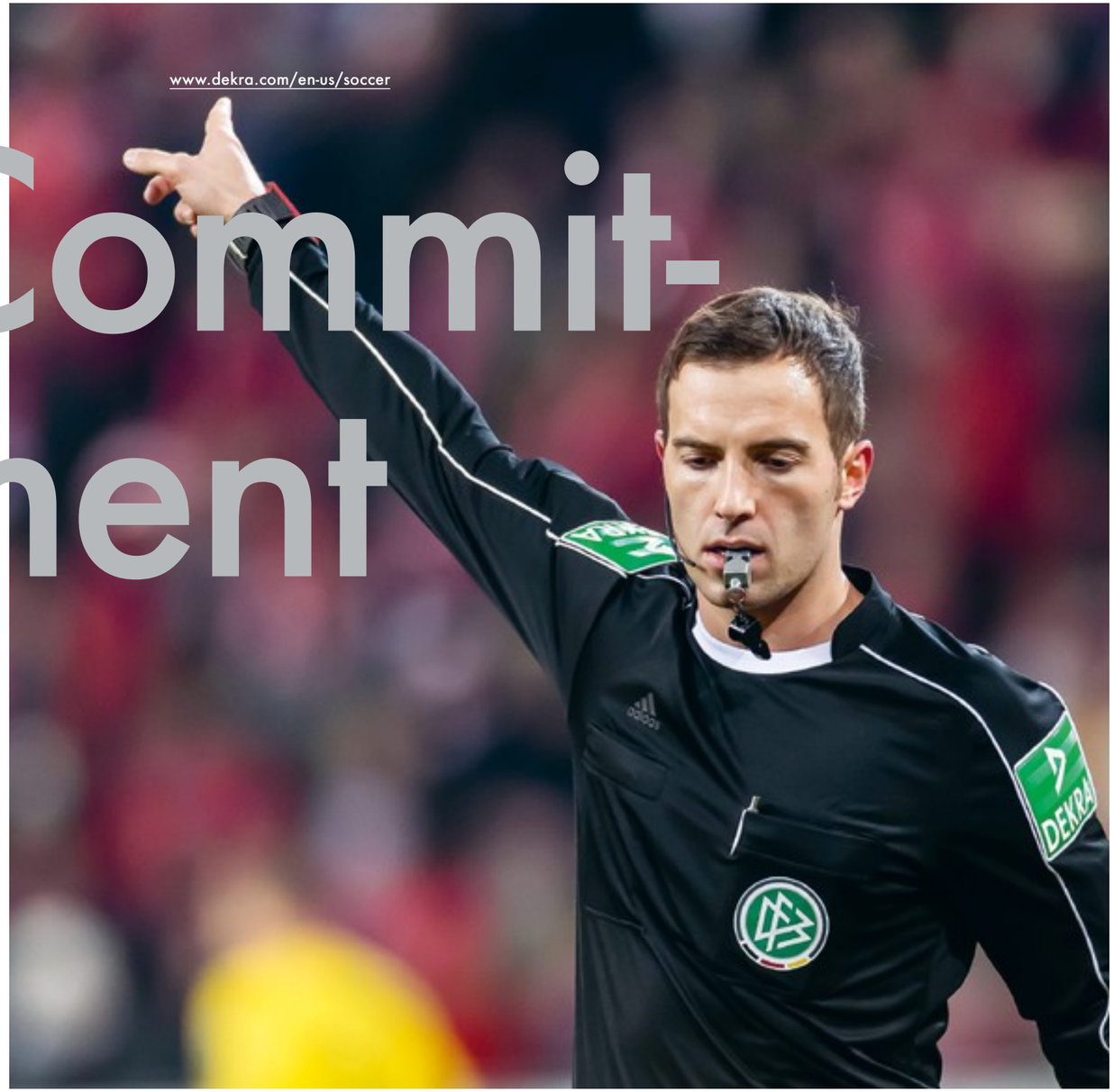
This is an important step for DEKRA in terms of demonstrating the company's sustainability performance and the individual sustainability profile in a credible manner – which is also reflected by the positive sustainability ratings for DEKRA, such as the EcoVadis (sliver status 2017).

Sustainable business model

In view of the current ecological and social challenges, expert services in the subject areas of sustainability and corporate social responsibility (CSR) are relevant. In this regard, DEKRA's experts support their partners worldwide, for example, with laboratory measurements, inspections, certification and advice in the areas of renewable energies, energy efficiency, environmental protection, environmental management, sustainable building and sustainability standards. DEKRA is also active in the fields of integration as well as eduction and further training.

www.dekra.com/en-us/soccer

Commitment



With a wide variety of campaigns and initiatives, DEKRA is committed to improving safety in all areas of life. An overview.

Road Safety Report

Each year since 2008, the DEKRA Road Safety Report has made up-to-date information and food for thought available to decision-makers in political circles, associations and companies. The report for 2017 features best practices from all over the world. Specifically, this refers to measures that have proven successful in certain regions of the world and could potentially help to further reduce the number of road traffic fatalities and injuries elsewhere.

Vision Zero

In 2017, the DEKRA Vision Zero Award was presented for the second time. It went to the Spanish city of Torrejón de Ardoz, where careful traffic planning and a dedicated police force have reduced the number of road traffic fatalities to zero for the past seven years.

Using your heads

Once they are enrolled in school, most children come into contact with road traffic on a regular basis. To keep them safe when out and about, DEKRA has been running their campaign “A head for safety” each year since 2004. Children on their first day at school receive bright red safety caps and are educated about the dangers of road traffic. More than 2.5 million caps have been distributed since the start of the campaign.

Smartphones

More than half of all drivers regularly use their cellphones while driving. In addition, an average of seven percent of all drivers are distracted by their cellphones while driving at any point in time. This statistic was revealed by DEKRA Accident Research as part of a traffic monitoring project throughout Germany. DEKRA also presented these worrying figures to the public at the International Motor Show in Frankfurt (IAA) in 2017.

Listen up

Many road users underestimate the risks associated with listening to music and making phone calls using headsets. People who wear headphones when in road traffic risk missing important warning signals and being distracted from what is happening on the road. This is connected with a higher risk of accidents and was highlighted by DEKRA Accident Research in 2017.

DEKRA Safety Day

The risks of hover boards are underestimated. The DEKRA experts brought attention to this fact at the DEKRA Safety Day 2017 in Bielefeld. The self-balancing single-axle electric boards with no handlebar are especially popular with children and adolescents. In a crash test, a car driving at roughly 40 km/h collided with a dummy on a hoverboard; the dummy was thrown to the ground. If this had been a real accident, the person on the hoverboard would have sustained serious injuries.

DTM

DEKRA has a long-standing partnership with the German Touring Car Championship (DTM). Since 2015, DEKRA has also been a partner of the US International Motor Sports Association (IMSA) and supports the Tudor United SportsCar Championship. The motor sports experts at DEKRA carry out the technical acceptance inspections on vehicles for both racing series.

Formula 1 racing

DEKRA has been a sponsor of Formula 1 for more than 20 years. Following in the footsteps of Michael Schumacher, who wore a DEKRA cap from 1992 until 2000, the company has supported Nico Hülkenberg since 2004. The DEKRA logo also featured on the front side of his driver cap in the 2017 season.

Fair play

DEKRA stands for fair play and is committed to upholding this principle in sport. For the past 15 years, the company has sponsored the referees of the German Football Association (DFB). This cooperation is founded on the shared values of neutrality, expertise, and reliability.

Safety Champions

DEKRA has recognized initiatives aimed at promoting safety in business and society for many years with the DEKRA Award. In 2017, the German Road Safety Council, Caverion Deutschland and the Pflasterpass initiative were honored. The award winners impressed with their degree of innovation, the effectiveness and transferability of their projects.

Imprint

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P. 27: Zooey Braun, Werner Sobek Group
P. 28: 1 – Manuel Lopez/Keystone, 2 – DEKRA
P. 29: DEKRA; P. 31: Rinspeed
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P. 60: 1 – Artveoli, 2 – Studio Roosegarde
P. 61: 3 – Digitas UK, 4 – BIG-Bjarke Ingels Group
P. 62: 1 – DEKRA, 2 – Max Kovalenko; P. 63: Lazi & Lazi, Stuttgart
P. 67 + P. 69 – 72: Sebastian Vollmert, Hamburg; P. 74 – 80: DEKRA

Highlights 2017

PERSONNEL

+4,700

new employees worldwide

GLOBALLY

active in over

50

countries on 5 continents

VEHICLE INSPECTIONS

26

million worldwide

DEKRA grew for the fourteenth year in a row in 2017. The company's innovative services, its consistent ongoing internationalization as well as the strengthening of its position in new growth markets all contributed to this growth. A selection of important highlights.

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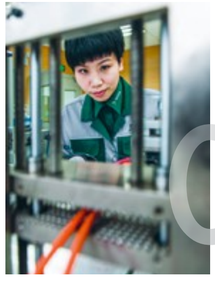
Highlights 2017



01

07

08

11

JANUARY

East Asia

DEKRA is further expanding its product testing business in East Asia. A new laboratory for testing automotive parts and components is due to be opened in Hsinchu (Taiwan). It will focus on testing and certification for innovations relating to connected and electronic driving.

FEBRUARY

Middle East

The GSO standardization organization in the Middle East appoints DEKRA as a notified body for the Gulf Country Type Testing Program (GCC). DEKRA was previously accredited by the GCC accreditation center as a certification body for low-voltage products in accordance with BD-142004-01.

MARCH

China

The DEKRA testing laboratories in Shanghai and Guangzhou receive ENEC accreditation for lighting products. The ENEC mark confirms conformity with European safety standards. DEKRA is one of the first certification bodies to receive this approval for its Chinese laboratories.

APRIL

Hungary

In the power and energy market, DEKRA expands its testing and certification offering by acquiring the large Hungarian test laboratory VEIKI-VNL Kft. The company specializes in testing and certifying equipment for power transmission and distribution.

MAY

Magility

DEKRA acquires a 25.1 percent share in Magility. The company, which is based near Stuttgart, is a global technology-oriented strategy consulting firm for companies operating in mobility industries. One of its core competencies lies in the development and implementation of digital business models.

JUNE

Sustainability code

As the 200th user of the German Sustainability Code (DNK), DEKRA joins the ranks of companies that comply with the heading German sustainability standard.

JULY

EuroSpeedway Lausitz

DEKRA and the previous owner sign the contract of sale for the EuroSpeedway Lausitz. The race track immediately adjacent to the existing DEKRA Technology Center in Klettwitz will be formally taken over by the expert organization on November 1. There, DEKRA is setting up Europe's largest independent inspection and testing center for connected and autonomous driving.

AUGUST

Portugal

In Portugal, DEKRA acquires the testing organization MasterTest, thus significantly expanding its market position in the southern European country. With the eleven MasterTest testing stations, the country-wide network will include 14 inspection stations by the end of the year. DEKRA has been operating in the vehicle inspection market in Portugal since 2016.

SEPTEMBER

USA

The US inspection company Core Visual Inspection Services (Core VIS) from Charlotte, North Carolina, becomes part of DEKRA. This marks the successful entry into the testing business for power stations in the USA.

OCTOBER

Spain

The takeover of safety and inspection company Epoche & Espri S.L.U. in Madrid, Spain sees DEKRA strengthen its international market position in the area of cyber security. Epoche & Espri supports companies manufacturing information and communications technology with inspections in line with the Common Criteria standard.

NOVEMBER

eCall testing

The Federal Motor Transport Authority in Germany appoints DEKRA as a testing organization for the eCall technology. From April 2018, the eCall system will be mandatory in all new passenger car and light utility vehicle models in the EU. Following serious accidents, eCall automatically alerts the rescue services.

DECEMBER

Luxembourg

DEKRA is the first international testing organization to offer vehicle inspections in Luxembourg. In 2016, the country's government reformed the market for periodic vehicle inspections.

DEKRA

Global partner for a safe world