

# Corporate Report 2019

## CSR Report

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This Corporate Report is published in German and in English.  
In case of deviations, the German version shall apply.

# CSR

## Report

Corporate Social  
Responsibility

**Six** chapters examine our contribution to sustainable development

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| 02 06             | 07 10      | 11 18     | 19 22       | 23 25    | 26 29                     |

TÜV Rheinland strives to apply gender-neutral language.  
If only one grammatical form has been used, this has been done for better readability.

## Sustainable action and business success go hand in hand



We are helping to shape a sustainable future that accords with both people and the environment. Because we are convinced that sustainable action contributes to long-term economic success. Therefore sustainability is a guiding principle for TÜV Rheinland – we operate profit-oriented without losing sight of our social and ecological responsibility. The ambition to make life safer and to act sustainably expresses itself in our commitment to the principles of the UN Global Compact and is reflected in our services.

**Dr.-Ing. Michael Fübi,**  
Chief Executive Officer, TÜV Rheinland AG

# 1

## CSR Management

Our sustainability work and our responsible corporate governance systematically intertwine.

Sustainability is very important to TÜV Rheinland. Our mission statement calls on us to pursue an ambitious goal: to be the world's best sustainable and independent provider of technical services for testing, inspection, certification, consulting, and training. Accordingly, TÜV Rheinland has derived a sustainability strategy along with the resulting sustainability objectives and programs. In so doing, TÜV Rheinland follows a consistent approach to sustainability: We conduct our own business operations sustainably, while helping our customers achieve their objectives at the same time with our innovative portfolio of sustainability services.

### Responsible corporate governance, sustainable engagement

In 2006, we signed the Global Compact. As an initiative of the United Nations, the UN Global Compact provides a unique framework for shaping globalization with fairness and justice. With its clear positions on human rights and labor standards, the preservation and sustainable protection of the environment, and the battle against corruption, the ten principles of the UNGC represent a central guideline for us. Moreover, we adhere to the Sustainable Development Goals (SDGs) of the United Nations, for example within the individual work steps of the current materiality analysis (see text section on pages 4 and 5). The UN General Assembly adopted the goals for sustainable development in 2015. It marked the first time that the international community agreed on common objectives covering all three aspects of sustainability: society, environment and economy. The global agenda formulates 17 goals for sustainable development, which call in equal measure on states, companies and civil society to act. The SDGs draw attention to global challenges that our core

competences address through new and existing service offerings. In the Service Responsibility section, we use selected examples to show which SDGs we address with our core business.

Moreover, we have already been involved in the German Global Compact Network (DGCN) for several years now. In that connection, our activities focus on intensive committee work designed to make UN Global Compact principles even more present in general business. We have served on the advisory board of the associated foundation since its establishment in 2009. Our committee work brings us into contact with an extremely wide range of participants, whereby the interaction itself is beneficial. Because in today's world where companies and nations are closely tied to one another and cooperate with one another, the goal of sustainable development cannot be achieved without working together.

### High-value networking

In so doing, the DGCN provides comprehensive insight into the expectations and challenges of TÜV Rheinland's major stakeholders. The aim is to use actions and partnerships to develop solutions for sustainable business operations – a solid foundation for successful CSR management. We participate in the “Climate Management” →



**Dr. Achim Ernst**  
Global Officer CSR

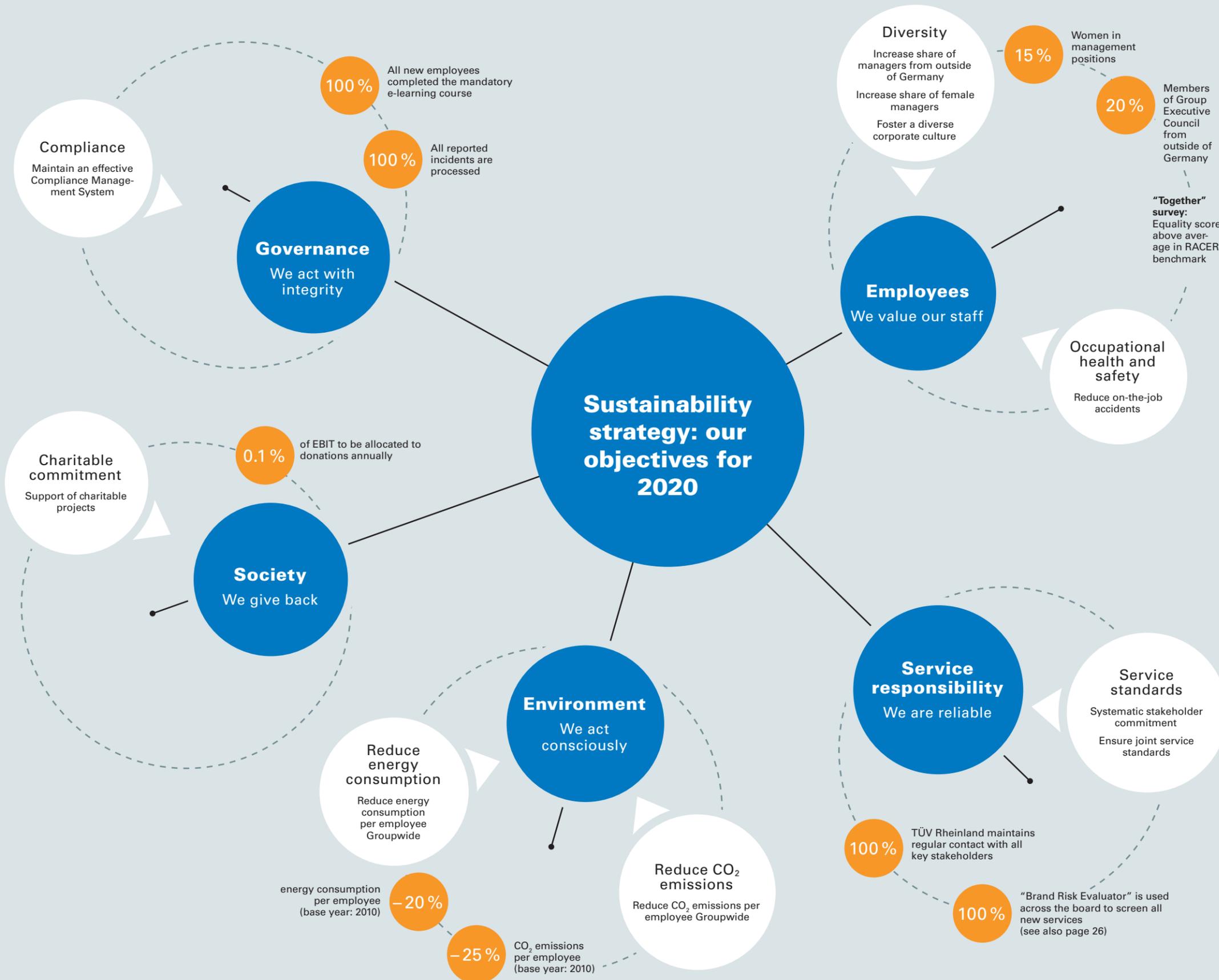
**“In order to identify the right focal points for our new sustainability strategy, it is important that all of TÜV Rheinland's stakeholders are heard – whether it be our customers, our employees, NGOs, or other interest groups, who are impacted in any way by the work of TÜV Rheinland.”**



## Stakeholders

We define stakeholders as all persons, companies and institutions with whom we enter into a direct relationship in the course of providing services, but also those indirectly affected by our business activities. It is particularly important to us to provide our

stakeholders with a clear picture of who we are, how we work, what we inspect and test, and who monitors our work. We use a broad range of instruments and channels to exchange information with our stakeholders on a regular basis.



→ peer learning group, for example, and are sponsor for the topic “Corruption Prevention” in the DGCN steering committee. We do so by, among other things, gathering findings and experiences from our business network concerning implementation of the topic and incorporating these into the process of developing the new Strategy 2025 for the German Global Compact Network.

In the year under review, we also had to keep up to date and track the direction of sustainability-related trends. One means of doing so is the Participants’ Conference of the German Global Compact Network, which was held once again during the year under review. For the first time, the gathering of participants in the Global Compact was coupled with the Global Goals Forum, which drew a balance on progress and the need for further action with regard to implementing the Sustainable Development Goals (SDGs) since their adoption by the international community four years ago. TÜV Rheinland participated in the event with representatives from Service Function CSR and from operations. The Head of the business field Customized Solutions – which is responsible for, among other things, carrying out supply chain audits – took part in the on-site workshop “How resilient is your supply chain?” as a panel discussion participant. The exchange of views with the other participants gave rise to intense debate and generated a wide range of ideas.

**Sustainability strategy 2025**

Our sustainable action is based on our current sustainability strategy. It comprises five dimensions: employees, environment, society, service responsibility and governance. This strategy is based on a stakeholder survey as well as a discussion of the results at the Executive Board level, which also incorporates findings from regular dialog with our stakeholders. The Global Officer CSR of TÜV Rheinland plays a special role in this regard: He informs the CEO about progress along the path towards each goal. Behind the Global Officer is a CSR team that initiates projects throughout the Group. Along with this, local and regional contacts also contribute. The Service Function CSR is part of Corporate Development, which also develops the Group strategy. Each of the following sections (Governance through Service Responsibility) provides detailed information on the progress we have made towards achieving our sustainability goals through 2020.

The current sustainability strategy of TÜV Rheinland expires at the end of 2020. That’s why the process of a materiality analysis was started during the year under review, in order to lay the groundwork for developing a new strategy. The process comprises multiple steps, some of which were already completed in 2019: Potential material topics were identified, summarized in higher-order categories, and assessed by major interests groups and the Management of TÜV Rheinland within the framework of a comprehensive stakeholder survey. The exchange with the stakeholders is examined in detail in the Service Responsibility section (more about this on page 26). →

→ Participants of the personnel development program Global Talent Team, which is designed to develop young top talents, were involved in the process. In the course of the program, their participation includes work on a project of relevance to TÜV Rheinland. In the year under review, that project was the new sustainability strategy. In 2020, the remaining process steps of the materiality analysis will be completed: The results of the stakeholder survey will be analyzed, weighted, and then mapped in a materiality matrix representing the sustainability topics of essential importance to TÜV Rheinland. Based on the material topics, the new strategy will be defined, adopted by the Executive Board, and communicated to the Supervisory Board accordingly.

**Memberships and networks**

Because professional exchange also plays a vital role for us within our industry, TÜV Rheinland is a member of several organizations. Our objective is to communicate and represent not only the interests of our Group, but also those of all firms that provide inspection and testing services. Some of the memberships that are most relevant to our business include.

**TIC COUNCIL** Leading firms of the testing, inspection and certification sector (in short: TIC) established the organization TIC Council in December 2018. The TIC industry represents about one million employees worldwide. This global association comprises more than 90 members and serves as the voice of the industry’s key players. It views its role as representing the testing, inspection and certification services of independent third parties to industry, society and policymakers. With headquarters in Brussels, TIC Council was formed by the merger of the former international industrial associations IFIA and CEOC. Our CEO, Dr. Michael Fübi, was elected president of the global association in Paris in 2018.

**GLOBAL REPORTING INITIATIVE (GRI)** In voting by the Stakeholder Council of the Global Reporting Initiative (GRI) – an organization that develops global guidelines for the preparation of sustainability reports – Fallight Xu, Regional Officer Corporate Social Responsibility Greater China, was elected council member in Amsterdam. The functions of the Stakeholder Council include, among other things, advising the GRI Executive Board on strategic matters as well as submitting recommendations for future policy and business planning. The Council is composed of members of international firms, human rights organizations, environmental organizations, labor organizations, and other stakeholders.

**VDTÜV** The German technical inspection and certification organizations have joined together to form the TÜV Association (VdTÜV), which represents our interests within Germany. Our CEO, Dr. Michael Fübi, has served as Chairman of the Executive Committee since 2018.

**TÜV MARKENVERBUND** German technical inspection and certification organizations (common abbreviation: TÜV) share an interest in a strong “TÜV” brand. In order to protect and maintain the value and the reputation of that brand, they have joined together to form the “TÜV Markenverbund” brand association. Our Executive Board Member Ralf Scheller is the Second Chairman of this association. ■

# 2

## Governance

Practiced values are the basis for trust.

Customers, business partners and the general public expect integrity, safety and objectivity from us. That’s why people trust the TÜV Rheinland brand as a globally active provider of testing and inspection services. And that’s why corporate governance in general and compliance in particular are crucially important.

Our daily compliance work is based on the principles of the UN Global Compact and is also aligned with the practiced values anchored in our mission statement: integrity, excellence, customer orientation, performance and agility. We use our corporate compliance management system to help achieve that overarching vision.

One essential cornerstone is management’s unwavering commitment: Once per year, the general management of all of our subsidiaries, together with our managers the world over, are required to explicitly confirm that they have operated in accordance with our compliance program and reported any violations to the responsible compliance officer. Moreover, we rely on a professional compliance organization to help ensure that all employees are adequately sensitized and trained and that any suspected misconduct is discovered early and appropriate countermeasures are initiated promptly.

**Compliance organization**

The compliance organization is led by the Global Officer of the Compliance Service Function, the Chief Compliance Officer. Acting independently in that function, he reports directly to the Chief Human Resources Officer of TÜV Rheinland AG. Consultation takes place in monthly meetings with one or more members of the Executive Board (including the Chief Executive Officer and the Chief Financial Officer), where the Global Compliance Officer reports on the work and current developments are discussed and assessed. In addition, the Global Officer Compliance reports semi-annually to the Audit Committee of the Supervisory Board of TÜV Rheinland about current compliance-related matters, objectives, and risks, and on the status of the compliance management system.

**Compliance Officer Network**

A globally active network of compliance officers is in place at TÜV Rheinland to implement our compliance principles at all locations. During the year under review, we systematically expanded that network, further enhancing its professional organization. Along with full-time Senior Compliance Officers in the Corporate Service Function, for example, we now employ full-time legal and compliance staff in all regions. Moreover, full-time local officers for legal and compliance matters have been appointed at other subsidiaries with large workforces, such as in India. The organization is rounded out by a large number of compliance ambassadors. As a result, officially designated and professional contacts for compliance issues are available to our employees worldwide. Here, too, routines are in place to ensure continuous dialog and the flow of information back and forth between the regions and the Compliance Service Function. Jour fixe meetings, for example, are conducted with the regional and local compliance officers at one- to two-week intervals. In June 2019, we organized our global meeting of regional and local compliance officers once again at our site in Cologne, Germany. The 30 participants focused on the topic of intensive exchange among all Service Functions with regard to effective cooperation, the compliance-related expectations of internal customers, and compliance whistleblower management.

**Risk management**

One key element of our compliance organization is the company’s centrally organized risk management process. Its core component is the corporate-wide risk unit, of which the Global Compliance Officer is a member. The unit also includes the Legal Service Function and the internal services Corporate Audit, Quality Management, and Finance & Accounting. The Corporate Compliance team works especially closely with Corporate Audit, consulting with one another regularly, for example, or conducting joint internal investigations. Compliance issues are part of the Corporate Audit Service Function’s list of audit items. This also serves to implement, on a local and corporate level, the compliance requirements that apply throughout the Group.

Connections between key areas of activity and the business model

| Key areas of activity   | Business partners   | TÜV Rheinland  | Customers/Consumers                                      |
|---|---|--|--|
| <b>Governance</b><br>Compliance                                     | Cooperation with business partners instills common values | Uncompromising commitment to acting with integrity                     | Reputation and protection of the brand                   |
| <b>Employees</b><br>Diversity, occupational health and safety       |   | Securing success factors through diversity and health of the workforce |  |
| <b>Environment</b><br>Energy consumption, CO <sub>2</sub> emissions |   | Conservation of resources through efficient processes                  |  |
| <b>Society</b><br>Charitable commitment                             |   | Making a measurable contribution to society                            |  |
| <b>Service Responsibility</b><br>Service standards                  |   | Strengthening trust through quality, safety and transparency           | Effect of the promised standard of service in the market |

### TÜV Rheinland compliance program

Our compliance program comprises, among other things, several guidelines which apply throughout the Group.

The most important binding compliance documents are:

- Code of Conduct of TÜV Rheinland
- Compliance Guideline
- Guideline for the Prevention of Conflicts of Interest and Corruption
- Business Partner Management Guideline
- Sponsoring Guideline

These documents are available to our employees in English, German and, in some cases, also in other languages in the central document management system and can be viewed there. Especially whenever new employees join the company in Germany, we inform them about the relevant compliance documents as soon as they start their job. We have also published the Code of Conduct and a

compliance leaflet on the internet for interested business partners and third parties.

To emphasize the importance of compliance and communicate the relevant content to all employees worldwide, we have established an e-learning program available in English and German for new employees throughout the Group. In the year under review, 4,466 employees completed the compulsory e-learning course on compliance. Along with Groupwide training on TÜV Rheinland's Code of Conduct, the Compliance Corporate Service Function has also developed additional voluntary training courses. These practical training units cover the compliance management system, anti-corruption, conflicts of interest, and how to handle invitations and gifts. In 2019, in collaboration with TÜV Rheinland Akademie GmbH, the Compliance Service Function successfully rolled out a refresher compliance course for employees who took the compulsory course more than three

years ago. By the end of the reporting year, 1,918 out of 4,407 employees who had been activated for the course successfully participated in the still ongoing training. In addition, as part of the new legal fundamental course, the training unit on compliance was further developed. In mid-2019, the training course was given to managers for the first time. For the Greater China region, a local, IT-supported compliance training seminar was established.

In Germany, new colleagues are regularly offered the two-day program "New at TÜV Rheinland." Intended for all newly hired employees in Germany, the seminar highlights the crucial importance of compliance and its organization for our company and CSR management, i.e. the CSR Service Function. Our compliance officers in other countries and regions (in India, Brazil, Poland or Greater China, for example) provide comparable classroom training on specific topics and local regulations. In their daily work, they make a key contribution to anchoring compliance in the mindset of our workforce. In the Greater China region, for example, 2,575 employees attended a total of 42 classroom seminars during the year under review.

in the Greater China region in the year under review. In five Business Streams, the local compliance team supported a total of 4,554 of our projects with so-called "integrity audits." In those audits, the local compliance team makes sure that our service delivery meets our compliance regulations.

### Dialog and clarification

In 2019, the worldwide compliance officer network processed a total of 1,094 compliance issues. The Corporate Compliance Office handled 347 of those issues. The issues are divided into queries and cases of suspected misconduct. The queries submitted to us involved the following specific topics:

- Potential conflicts of interest
- Personnel issues
- Involvement in M&A projects
- Business partner evaluations
- Acceptance of invitations and gifts
- Inspection of compliance-related documents in the course of contract reviews

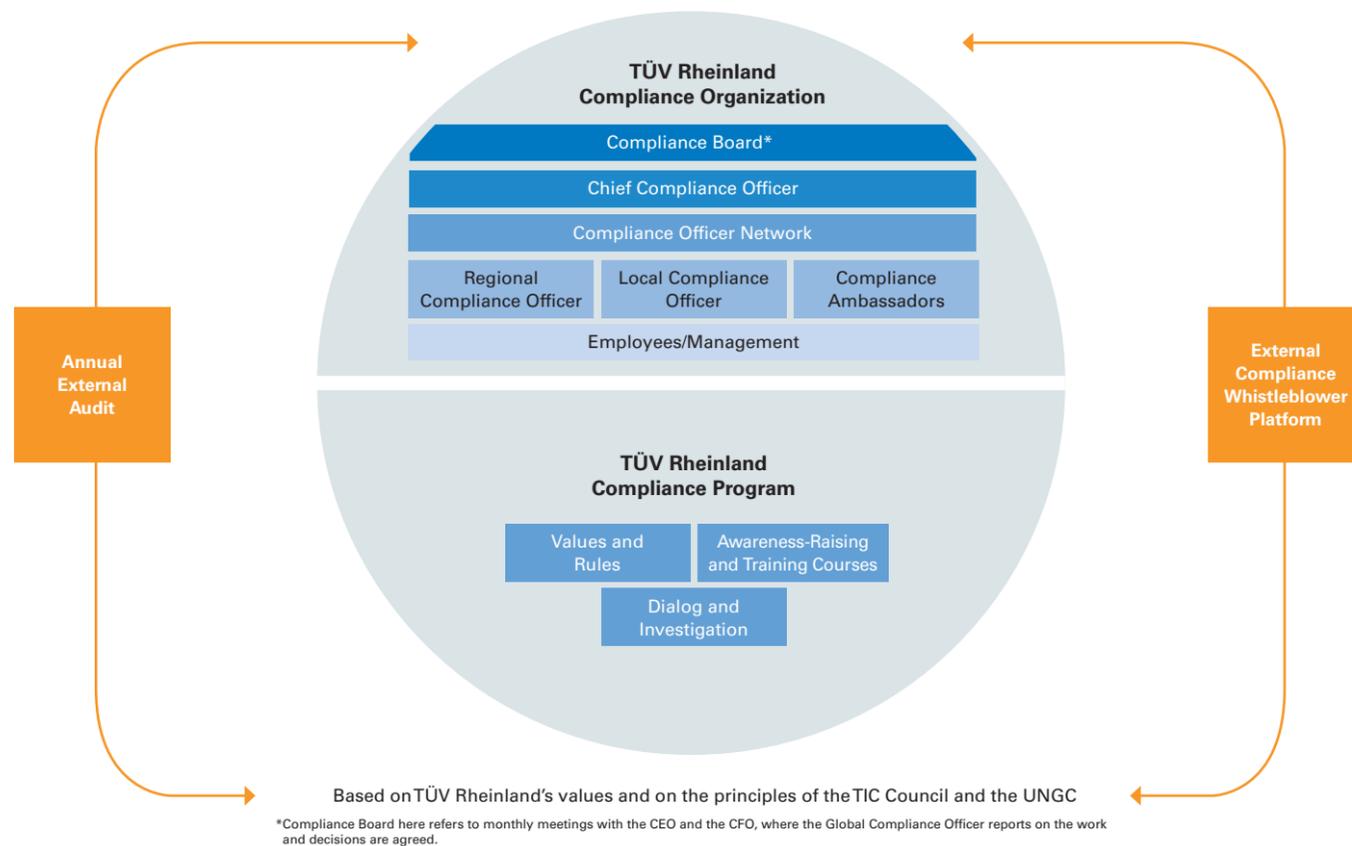
The TÜV Rheinland AG Group's approval catalog currently in force stipulates the mandatory involvement of the Compliance Service Function in specific business transactions. This is the case, for example, when contracting consultants, establishing companies, making donations, or sponsoring.

Despite all preventive measures, the possibility that TÜV Rheinland might violate compliance, or at least come under suspicion of such a violation, cannot be excluded. We always react to violations with the requisite consistency and resolve, whereby we follow a standardized procedure that is also transparently specified and published in a guideline applicable throughout the Group. Within the scope of that guideline, we reserve the right to take legal action – under both criminal and labor law – in cases of employee misconduct. The cases of suspected misconduct involving criminal law subject to review by the Compliance Service Function could be classified mainly into the following subject areas: corruption/bribery, fraud, forgery of documents. Most compliance issues were reported to the Compliance Service Function directly from the employees.

### Whistleblower system

TÜV Rheinland has implemented a whistleblower platform, on which its workforce and business partners – also anonymously – can provide information about possible misconduct or abuses in the company. The system is specifically designed for reporting compliance violations →

### Compliance Management System



### Procedural further development

For the purpose of procedural professionalization, additional work instructions and standard operating procedures covering the stated overarching principles and guidelines of the compliance program were drafted and issued. This includes the areas of compliance training courses, consultation and whistleblower management. The content of existing procedures such as business partner management is continuously updated. Furthermore, the layout, structure and content of TÜV Rheinland's website have been completely revised and redesigned with regard to compliance.

As part of initiating business relationships with suppliers in Germany, TÜV Rheinland solicits acceptance of our general terms of purchase and business. By accepting them, suppliers agree to adhere to applicable laws and ordinances and to the principles of the UN Global Compact in the areas of human rights, labor standards, environmental protection, and anti-corruption.

In 2018, the compliance organization adopted a compulsory global guideline on business partner management. Various risk factors are applied to classify business partners such as joint venture partners, subcontractors or intermediaries into different risk levels. Depending on the risk level, those business partners then undergo different approval processes and risk management measures.

Also as part of our compliance program, we continued to push ahead with so-called compliance monitoring

→ and not for general complaints such as customer satisfaction or quality problems.

Rather, the platform is used for information about violations of laws, internal company guidelines (the Code of Conduct, for example) or our compliance program. The compliance platform is administered for TÜV Rheinland by a worldwide leading provider. The system is used by many other major companies and available in English, German, Chinese, Spanish, Portuguese, Japanese and Russian.

#### Annual external compliance audit

Since 2009, an external auditor has audited our compliance management system annually at several of our locations. In 2019, TÜV Rheinland AG and TÜV Rheinland LGA Products GmbH in Germany and a foreign subsidiary in the United Kingdom (TÜV Rheinland Risktec Solutions Ltd.) were audited for adherence to the compliance management system during 2018. The requirements of that audit followed IFIA guidelines (so-called “agreed-upon procedures”), and the results were also reported to the IFIA. The recommendations of the auditing firm contracted to perform the audit are incorporated into the compliance management system’s continuous improvement program.

#### Compliance goals

TÜV Rheinland’s compliance management system will be the subject of further development again in 2020. That effort will focus on adapting the content of the compliance system to reflect the change of the industry association from IFIA to the TIC Council. We will also develop and implement an IT-supported refresher course for Germany and expand cooperation with the Compliance Officer Network. Furthermore, a revision of the corporate Code of Conduct is planned for 2020. ■



**Bhavna Arora**  
Local Officer Legal and Compliance,  
India

**“Compliance management can help our business stay ahead of issues before they become major problems. Compliance ensures that TÜV Rheinland can continue building customer trust, since customers are more likely to return to a service from TÜV Rheinland if they identify us as a service provider with integrity.”**

# 3

## Employees

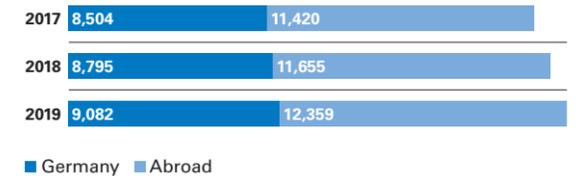
The appeal of a model employer: many programs and clear objectives to promote diversity, occupational safety and health

TÜV Rheinland doesn’t sell any physically tangible products. For us as a service provider, the knowledge of our experts is the key to our business success. And that’s why one of our most crucial tasks is to continuously foster a workforce that is not only well qualified but also highly motivated and effective.

With our more than 20,000 employees, we have embarked on an ambitious journey: We want to be the world’s best sustainable and independent provider of technical services for testing, inspection, certification, consulting and training. Launched in 2015, the Group program “Do it. Best!” is paving our way to the top – and will, in the process, profoundly transform TÜV Rheinland. This evolution can achieve its objectives only if the workforce at all Group locations the world over lives a shared corporate culture together in practice. The cornerstones of that culture are our five values: integrity, excellence, customer orientation, performance and agility. Those values are embedded in the documents and programs that define TÜV Rheinland’s culture: our company’s mission statement, our leadership principles and our competence model, which describes the full range of skills we expect our employees to have in addition to their high level of technical expertise.

The company takes these values very seriously and strives to anchor them in its corporate culture worldwide. Because without a cultural transformation, change projects are at risk of failing. We are convinced that a change in leadership behavior is an essential prerequisite for the change in culture. That’s why, since 2017, we have aligned our employee and manager development programs to our values.

#### Employees in Germany and abroad\*



Over the course of 2019, we employed an average of 21,441 people (previous year: 20,450). That means the workforce grew by 4.8 percent over the previous year.

\* FTE: Full Time Equivalent, average over the year – this includes the employees of all consolidated TÜV Rheinland companies, excluding dormant employment contracts.

#### Employee survey to determine the status quo

To determine whether we are making progress toward achieving our objective – to be the best independent provider of technical services for testing, inspection, certification, consulting and training – we need regular feedback from our employees. After all, the corporate culture lives through each and every individual. Moreover, it is only through feedback from colleagues that we can learn how they feel about their work at TÜV Rheinland and what we still need to improve. To that end, we ask our employees worldwide to take part in the anonymous employee survey, “Together”, at two-year intervals. The 2017 survey, in which some 14,500 employees participated, gave rise to more than 1,700 actions in the teams and operating areas. The overarching goal was to improve specific aspects in various thematic areas ranging from “Communication and Cooperation” to “Tasks and Work Processes” to “Work and Workload.” By mid-June 2019, 90 percent of those actions had been completed. Measures included the “Listening Tour” and the “Change of Perspective” project, for example, which were deployed in the region Germany in the context of the “Together” focus issue “Supporting Change in the Company.” During the “Listening Tour,” top management visited various locations, thereby enabling them to exchange ideas directly with some 1,900 employees through the end of 2019. With “Change of Perspective,” managers completed a one-day hands-on work program at the operational level, where they had the opportunity to see things from the employee’s point of view. Nearly half of all managers from the Service Functions participated in a hands-on workday experience of this kind by the time the program ended in the fall of 2019. As a result, →



**Dr. Silke Wechsung**  
Global Officer HR  
Development & Diversity

**“Through a variety of ideas, perspectives and approaches, we achieve better results. That’s why promoting diversity and ensuring equal opportunity are essential components of our sustainability strategy. We have specific offerings to promote the career advancement of women in technical and managerial positions, we maintain active networks, and we foster the transformation of mindsets.”**

→ managers gained new insights into the day-to-day work challenges and what employees actually do for the customers. At the same time, employees felt that managers appreciated their work and listened to their questions.

A fresh iteration of the employee survey “Together” began in mid-November 2019 and ended in early January 2020. The participation rate this time was also 74 percent. The results will be evaluated in the first quarter of 2020 and subsequently communicated to the teams and operating areas, who will then, in turn, develop suitable improvement measures based on the findings. For TÜV Rheinland, “Together” thus represents both a necessary determination of the status quo and an important tool to help drive the company’s overall progress.

### Where we’re headed – and where we stand today

TÜV Rheinland also intends to remain an attractive employer in the future. We want the company to appeal to potential recruits – newcomers to the job market, college graduates and experienced professionals. Accordingly, we have set clear objectives with regard to diversity and occupational health and safety. By 2020, we aim to have 20% of our top management positions staffed by executives from outside of Germany, raise the share of women in managerial positions throughout the Group to 15%, score above the RACER Benchmark average for equality according to the results of our employee survey “Together,” and reduce the number of on-the-job accidents.

Regarding those objectives, we made the following progress in the year under review:

- 33% of our top management positions are now staffed by executives from outside of Germany. Therefore we are currently exceeding the objective for 2020, as was already the case in the previous year. At the end of the year under review, 16% of managerial positions were held by women. This means that we have achieved our objective (see graphic “Managerial staff by gender”).
- We conducted another survey of our employees from November 2019 through mid-January 2020. Our goal was to once again score above the RACER Benchmark average in the area of equality. We achieved that goal. Background: TÜV Rheinland is a member of the so-called RACER Group. It currently includes twelve globally active companies. Members compare the results of their employee surveys and regularly exchange related information.
- The number of Lost Time Injuries in the Group declined (see table “Occupational Safety, Group”).

### Diversity

It’s the mix that matters: Studies show that diversely staffed companies are more successful economically. Like other companies, TÜV Rheinland relies on the interaction between colleagues from different countries and cultural groups, of different age groups and of different genders. That diversity enriches projects with a range of experience and fosters respectful interaction within the team. The goal is to create an environment where all players win – our customers, our employees, our company. That’s why diversity plays a key role in the corporate culture of TÜV Rheinland and constitutes a core element of our sustainability strategy. This is borne out not least by the fact that the diversity measures are developed and implemented by the global Service Function “HR Development & Diversity,” which reports directly to the Chief Human Resources Officer. →

### Employee turnover (Group) in % / headcounts



### Employee turnover (Germany) in % / headcounts



Groupwide, **63% of the people who left the company are men and 37% are women**. Due to extraordinary changes in processes and organization in all Group regions, the turnover rate remained unusually high again in 2019. The change processes are designed to prepare the company for the future.

The gender of the **employees who join or leave** the North American subsidiaries is not recorded and has therefore been excluded from the calculation of the share of employees who joined and left the company broken down according to gender. The calculation includes the employees of all consolidated companies whose data are available in SAP, including dormant employment contracts. This represents more than 90% coverage.

### New hires and new hire rates

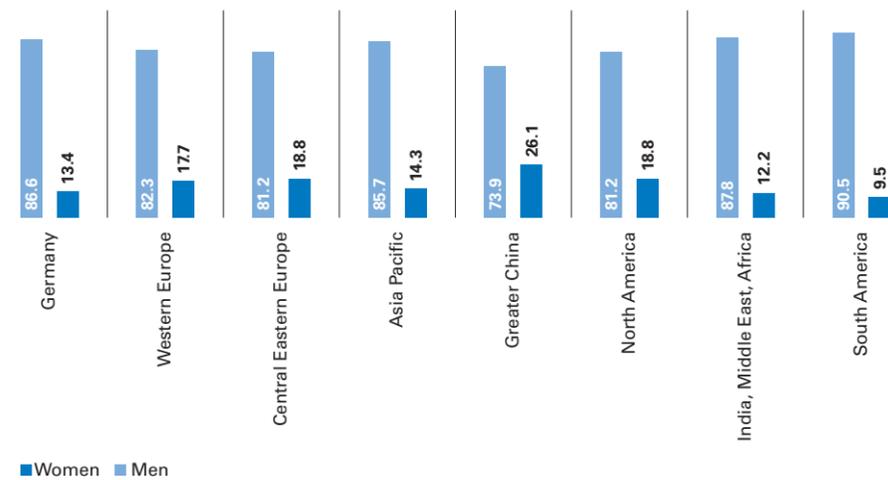
| Headcounts        | Group  | Germany | Abroad |
|-------------------|--------|---------|--------|
| Average workforce | 23,281 | 10,727  | 12,554 |
| New hires         | 4,985  | 1,534   | 3,451  |
| New hire rate     | 21.4 % | 14.3 %  | 27.5 % |

The **Groupwide new hire rate is 21%**; it is much higher in the foreign subsidiaries than in Germany. This is primarily the result of the many new hires in China and South America. Of the newly hired employees Groupwide, 36% are female and 64% are male.

### Documented training and further education days

|  | 2018          | 2019          |
|--|---------------|---------------|
| <b>Employees trained (classroom seminars)</b>    | <b>4,571</b>  | <b>4,848</b>  |
| Training days for new experts                    | 7,969         | 11,029        |
| Seminar days for new employees                   | 1,336         | 1,448         |
| Further education days                           | 17,069        | 18,300        |
| <b>Total training and further education days</b> | <b>26,374</b> | <b>30,777</b> |

Managers by gender\*  
in %



\* **Across the Group, 15.7% of all management-level positions are held by women.** This corresponds to a 16.0% share of women in managerial positions according to headcounts. The calculation includes the employees of all consolidated companies whose data are available in SAP, excluding dormant employment contracts. This represents more than 90% coverage.

→ In 2013, we signed the “Diversity Charter” and undertook to create a work environment that is free of prejudice. To that end, we regularly reflect on our attitudes and behavior, and make use of networking. As a member of the Rhine-Ruhr Diversity Network, we participate in the organization of an annual conference commemorating German Diversity Day. Thus, we co-sponsored another diversity conference of this network in 2019 under the banner “Diversity beats simplicity – I can do something you can’t.” The high-profile event focused on the inclusion of disabled people and was hosted by the Düsseldorf-based retailer Metro.

Moreover, in the year under review, we continued the diversity campaign that we initiated in 2017: “All different. All precisely. Right.” To encourage employees the world over to continue exchanging ideas about diversity and reflecting on subconscious thought patterns, the postcards issued for the diversity campaign were translated into English and distributed to employees in the regions of Central and Eastern Europe as well as Western Europe. The cards address the six diversity dimensions: age, gender, sexual orientation, physical abilities, ethnic origins and nationality as well as religion and ideology.

Like many technical firms, TÜV Rheinland employs

more men than women. That is why the promotion of equal opportunity for women is of central importance to TÜV Rheinland. In 2019, 35% of all TÜV Rheinland employees Groupwide were female and 16% of the managerial positions were held by women. We have slightly exceeded the goal we set for 2020 (15%) and are committed to maintaining that achievement. To that end, the Group has deployed various measures. These include, for example, the TÜV Rheinland mentoring program for (future) female experts and managers – or TAFF for short. Launched in 2013, this program illustrates how, beyond cooperations, we improve and selectively promote career prospects for women in our company. In Germany, we implemented the TAFF mentoring program for the sixth time. It gives female employees the opportunity to learn from the experience of an executive in upper management. This past year marked the first time that we have analyzed how previous TAFF cohorts have since fared in their careers. The results show that mentoring does indeed have a positive impact on the career development of the participants.

Building on our extremely positive past experience, in 2018 we introduced the TAFF mentoring program in the Group’s Greater China region as well. Although the HR in-

strument “mentoring” was still unknown there, 16 tandems were formed. By the end of 2019, five of the participants had already been promoted to a higher position. In addition, Greater China formed twelve new tandems in 2019.

Our internal women’s network Women@TÜV Rheinland has been working together with the European Women’s Management Development Network (EWMD) since 2015, thereby facilitating further exchange on female career models. During the year under review, the network held three events in the Rhine-Ruhr area dealing with issues related to work-life balance, the positioning of women in professional life, and effective self-marketing, respectively. The event on self-marketing entitled “Business Model YOU” was held at TÜV Rheinland in Cologne, Germany.

TÜV Rheinland is also committed to promoting women outside of Germany. In the UK in 2019, we were part of the “Women in Rail” initiative, which promotes diversity in the British rail industry and is designed to create networking opportunities for all women within the sector. In Japan, TÜV Rheinland received an award in 2019 for promoting women in the workplace. In Brazil, we started an internal video campaign, in which female managers report on their day-to-day experiences on the job. The goal is to raise awareness for the promotion of women.

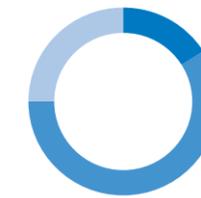
We are also committed to the “Chefsache” [“Management Issue”] initiative, a network for promoting a balanced ratio of women to men in management positions. In 2019, we were represented at a “Chefsache” conference that included Ursula von der Leyen, who was the German Defense Minister at the time. Under the banner “Dual career – Shaping success together,” the conference dealt with career models for professionals who are in a relationship, and how companies can facilitate equal career opportunities for both partners.

#### Fair to families

TÜV Rheinland addresses the responsibility that our employees bear for their relatives. To that end, we want to implement a flexible, family-conscious work culture and give the topic more attention in all regions. The company’s “TÜVtel Kids” childcare center at the Cologne site has now been expanded to accommodate 50 children, in order to meet the high demand there. In 2020, our existing childcare offering throughout Germany at facilities operated by the Fröbel Group – a nationwide non-profit childcare network that we have partnered with for many years – will be expanded through additional capacity for the Leipzig site.

In terms of family-oriented measures, we have expanded our engagement since 2018 by including the perspec-

Age distribution of  
total workforce  
Headcounts



■ under 30 years old 16.7%  
■ 30 - 50 years old 59.9%  
■ over 50 years old 23.4%

Age distribution of  
managers  
Headcounts



■ under 30 years old 0.0%  
■ 30 - 50 years old 53.1%  
■ over 50 years old 46.9%

Most of the employees (nearly 60%) are between 30 and 50 years of age, with that age bracket constituting 51% of the workforce in Germany and 66% of the workforce outside of Germany. Most of the managers are also between 30 and 50 years old. The overview of age distribution of the total workforce takes into account all employees, including managers, except employees of the North America region, where age data are not systematically recorded. The calculation includes the employees of all consolidated companies whose data are available in SAP, excluding dormant employment contracts. This represents more than 90% coverage.

tive of fathers in the company: TÜV Rheinland is participating in Germany’s nationwide “Father Network” project – with a “Fathers@TÜVRheinland” group. Specific topics that eventually attracted the most interest included additional flexible work time models, mobile work arrangements, and more acceptance for fathers who stay home to care for their sick children. The person responsible for operational personnel issues in the region Germany has been the sponsor of the “Father Network” since 2019. Along with continued regular meetings of the “Fathers@TÜVRheinland” network, information events concerning employees in their role as fathers with families are planned for 2020.

#### Against homophobia, for mutual respect

An internal LGBT network has been active at TÜV Rheinland ever since 2015. LGBT: These four letters stand for lesbian, gay, bisexual and transsexual/transgender. The LGBT contacts organize regular exchange. In 2018, the LGBT group also joined the LGBT Network Rhine-Ruhr, whose members include various major corporations in the region. In late November 2019, a meeting of the LGBT Network Rhine-Ruhr was held at TÜV Rheinland under the motto “There are more than 20,000 of us.” In →

→ May 2019, TÜV Rheinland called for mutual respect on the International Day Against Homophobia, Biphobia, Intersexism and Transphobia (IDAHOBIT). “No employee should have to fear reprisals due to their orientation or identity. We stand for diversity and against marginalization and exclusion,” was the clear message of Ruth Werhahn, member of the Executive Board and Labor Relations Director of TÜV Rheinland AG. In 2019, TÜV Rheinland also stood up against discrimination and in support of all employees, regardless of their sexual orientation, with an LGBT awareness campaign in Brazil.

## Occupational health and safety

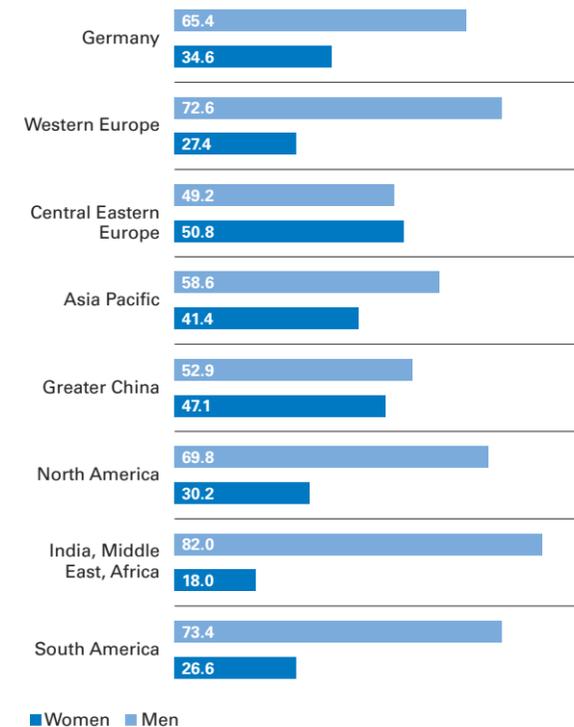
For TÜV Rheinland, nothing is more important than the health and safety of its own employees. We want to provide a safe work environment at all of our locations. We are convinced that the activities in our Group can be carried out safely and without harming the environment; all damage is preventable. The Executive Board and the managers undertake to continue the effective implementation and continuous improvement of the HSE management system (Health, Safety and Environment) at TÜV Rheinland.

For adequate safety awareness, positive attitudes and the continuous improvement of our HSE performance, all managers, employees and business partners have received so-called commitment cards in order to actively dedicate themselves to implementing our HSE guidelines, rules, and processes. Our approach remains unchanged: “We cannot and will not accept incidents that cause injuries or impair the health of employees or harm the environment.” That is the essential message of the HSE vision that we developed in 2017: “NO INCIDENTS. NO HARM. NO COMPROMISE.” – a vision that we continuously communicate to our employees. In 2019, we accorded a high priority once again to HSE, and to occupational safety in particular.

### Uncompromisingly safe

Our management system is based on the standards ISO 14001 and OHSAS 18001. We take the requirements of those standards as minimum requirements, but see ourselves as responsible for achieving an even higher HSE standard, and encourage every employee to contribute to their own well-being and that of colleagues and others affected by their activities. The HSE management system of TÜV Rheinland comprises:

### Workforce by gender



The majority of our workforce is male, 36% of the Group's employees are female. The share of full-time employees is just under 90%. Throughout the Group, we employ people from at least 122 countries. 33% of our top management positions are staffed by executives from outside of Germany.

- a QHSE policy (Quality, Health, Safety and Environment) that is generally subject to annual review,
- the HSE strategy, which is in effect through 2020, and
- the “Main Process HSE,” an overarching document that covers all areas of the HSE management system and serves as a road map for all relevant guidelines, standard operating procedures (SOPs) and documents.

In the first quarter of every year, we conduct a management review. During the review in 2019, we identified several areas for improvement. We were then able to implement those improvements in the year under review and do so on schedule. The HSE management system was re-certified in the year under review, both for occupational health and safety and for the environment.

We continue to conduct HSE audits throughout the Group, drawing attention to ways to improve performance at the local and global level. In 2019, we expanded our internal global HSE audit program to include all regions, in order to provide the Business Streams with a comprehensive explanation of HSE compliance within the Group. Altogether during the year under review, audits were conducted at 36 companies from all regions. Where non-conformities were found, we took corrective and preventive actions (CAPAs). They obligate the companies concerned to specify how and when the non-conformities will be eliminated. For 2020, we have determined to conduct at least 44 audits on a global basis.

The HSE performance dashboard across all Business Streams is reviewed monthly. The results are distributed to Executive Board members and Business Stream heads (executive vice presidents, or EVPs). The information is disseminated throughout all Business Streams and regions. Overall, the HSE performance dashboard helped us achieve significant successes for the year under review:

- The majority of our HSE objectives was met.
- The number of days lost due to on-the-job accidents (Lost Time Injuries) declined significantly.
- The number of Lost Time Injuries in connection with work activities was reduced.
- The reporting of near-miss accidents and hazards was expanded.
- All key indicators (audits and inspections) far exceeded the previous year's results.

TÜV Rheinland continues to focus on proactive measures to guarantee a safe work environment and reduce incidents to the lowest possible level. The following measures enabled us to meet our objective of raising standards, following best-practice examples, and implementing HSE initiatives once again during the year under review:

- HSE Orientation for Managers: This document was developed and issued in 2019, in order to ensure that all managers receive adequate information about how TÜV Rheinland will achieve its HSE commitment and what actions they should undertake as managers.
- HSE training for managers: At the same time as the guideline, a training course was developed and introduced in 2019 for more than 400 managers, in order to give them knowledge and understanding of their role in HSE. These training sessions will continue in 2020 for additional managers.
- Golden rules: In 2018, we developed and implemented nine golden rules that help shape a safe work environment. Those rules were rolled out worldwide in various languages, using posters and other communication means to introduce them to the workforce. Over the course of 2019, these golden rules were reinforced by wall-mounted newspapers giving employees a better idea of the expectations and providing examples taken from everyday work situations.
- Counter for Lost Time Incidents: In 2019, the Lost Time Incident counter was implemented on the home page of the corporate intranet portal “blueye” to make all employees aware of all significant Lost Time Incidents.
- Safety alerts: Safety alerts were introduced in 2017, in order to inform everyone throughout the company immediately in the event of a serious incident occurring that carried a high risk of such an incident possibly recurring at other locations. The safety alerts are an effective tool to prevent recurrences of this kind. In 2019, we issued six such safety alerts to the workforce. Following investigation of the incidents, those safety alerts were supplemented by HSE training courses.
- HSE engagement tours: Managers demonstrate their commitment to HSE by conducting a site visit and speaking directly with the workforce about HSE issues. We started conducting HSE engagement tours in 2019. This will be continued in 2020.

### Preventing work-related harm to health

TÜV Rheinland strives to prevent work-related harm to health and enhance the well-being of every employee through health campaigns and initiatives. Many health initiatives were undertaken during the year under review, for example:

- a flu vaccination as a preventive winter care program for employees,
- diabetes screening in India and Peru,

- Health Days – the most recent Health Day was held in November 2019,
- many health and fitness offerings, such as back fitness training, yoga and running groups,
- the ergonomic arrangement of our workplaces and
- stress management exercises. ■

### Occupational safety – Group in terms of reported Lost Time Injuries\*

|  | 2018       | 2019       |
|--|------------|------------|
| Number of employees covered in %                     | 100        | 100        |
| Lost Time Injuries                                   | 154        | 150        |
| Reported Lost Time Injuries per million hours worked | 4.4        | 4.2        |
| Lost workdays  | 2370       | 1782       |
| Number of work hours in the reporting year           | 35,043,355 | 35,415,329 |

### Occupational safety – Regions

Lost Time Injury Frequency Rate – reported accidents  
Lost Time Injuries per million hours worked\*

|                            | 2018 | 2019 |
|----------------------------|------|------|
| Asia Pacific               | 0.0  | 0.0  |
| Greater China              | 0.3  | 0.3  |
| Western Europe             | 8.7  | 2.8  |
| Central Eastern Europe     | 0.0  | 0.7  |
| India, Middle East, Africa | 0.9  | 1.5  |
| North America              | 1.8  | 0.0  |
| South America              | 7.0  | 1.8  |
| Germany                    | 7.0  | 8.8  |

\*Lost Time Injuries are all accidents that occur at work and result in one or more lost workdays (calendar days) starting from the day after the accident. Lost Time Injuries relate only to TÜV Rheinland employees and exclude commuting accidents. Hours worked were calculated on the basis of 7.7-hour days and 220 workdays per year. Lost workdays are counted starting from the first day after the accident and relate to all calendar days.

# 4

## Environment (also) a question of organization

TÜV Rheinland has worldwide operations with more than 20,000 employees. It goes without saying, then, that we have an impact on the environment, even though our company does not produce any material goods. After all, we do consume resources – when we operate our offices and testing facilities, when our employees commute to their workplace, when we travel to our customers. We want to keep the negative environmental impacts of our activities to a minimum, however. That's why we try to optimize the efficiency of our business and management processes and use eco-friendly technologies wherever it makes sense to do so.

Clear processes and responsibilities enable us to implement our Quality, Health, Safety and Environmental (QHSE) policy consistently throughout the Group. In other words: Environmental protection is an essential component of our organization. That's why most TÜV Rheinland companies are covered under group certifications that audit management systems: ISO 9001 (Quality Management), ISO 14001 (Environmental Management) and OHSAS 18001 (Occupational Safety and Health). All activities of our Systems Business Stream are generally excluded from such group certifications because that Business Stream provides certification services of its own.

Our managers the world over are responsible for implementing our QHSE guidelines with the help of a relevant manual and a Groupwide HSE Main Process, which clearly specifies the HSE methodology. A monthly report informs our senior executives whether or not we achieve our HSE targets and about progress made.

### Own objectives achieved

In our sustainability strategy, we set concrete objectives for ourselves regarding the dimension "Environment." Taking the base year 2010 as a reference, we want to

- reduce CO<sub>2</sub> emissions by 25% and
- energy consumption by 20% per employee throughout the Group by 2020.

In the year under review, we achieved both objectives once again: We lowered our energy consumption by 25% versus 2010. Moreover, we managed to reduce CO<sub>2</sub> emissions by 38% versus 2010 – thereby surpassing our goals, in some cases even significantly. This progress is the result of many factors. We continued to renovate our buildings in Germany with major energy-related investments totaling more than 1.5 million euros; the scope of energy efficiency measures outside of Germany is limited because most of our facilities there are leased. Various measures to optimize our IT systems have also helped us reduce energy consumption. In Cologne, for example, we put a new data center section into operation in 2019. It is cooled by a new high-efficiency cooling system. In addition, the planned renovation of the existing data center scheduled for 2020 and 2021 will further reduce energy consumption and CO<sub>2</sub> emissions. Meanwhile, we have populated our data center systems with new high-performance servers in low quantities, thereby lowering the power and cooling requirements and the associated CO<sub>2</sub> emissions.

Moreover, the composition of energy sources has improved further at many locations. We now purchase climate-friendly electricity also for our large site in Nuremberg, for example, which enabled us to reduce CO<sub>2</sub> emissions by almost 70,000 tons in 2019. Other energy-saving measures implemented in 2019 include the conversion of our postal dispatch services at the Cologne site to the GoGreen service of Deutsche Post, the German postal service provider, which enables climate-neutral mail dispatch. In the future, we want to arrange for additional climate-neutral postal dispatch services.

To collect these and other environmental data throughout the Group, we use the software solution "EtQ Sustainability Module." Having implemented this solution in 2016, we covered 75% of our employees worldwide as of the balance sheet date of the year under review (previous year: 88%).

To further develop our strategic expertise in climate management, we are actively involved in the peer learning group of the German Global Compact Network (DGCN). In that regard, 2019 marked a first: Whereas German companies dominated the exchange of ideas in years past, this was the first time that the network organized a format on a European scale. Companies from France, Germany, Italy and Switzerland collaborated mainly on the exchange and development of best practices for climate strategies.

→ To ensure that we as TÜV Rheinland achieve our environmental objectives, we will continue to pursue the following actions in particular:

- use efficient energy technology in our building services,
- reduce the number of business trips through increased use of video conferencing,
- favor fuel-efficient company cars over other models, and
- use state-of-the-art technologies to operate our data centers, test labs, and facilities.

**Acting responsibly – staying mobile**

As a global service provider, the business travel of our employees and their commute to and from work play a major role with regard to the resulting emissions. Even if we use telephone and video conferencing wherever possible, our business often still requires the in-person presence of experts and managers at the customer’s facilities or other locations away from home base. In the year under review, our employees in Germany logged about 70 million kilometers of business travel by company car, rental car or private car (previous year: 68 million kilometers). Our fleet of 1,991 leased vehicles (previous year: 1,850 leased vehicles) accounted for about 43.7 million of those kilometers (previous year: 41.7 million) and consumed 2.6 million liters of fuel (previous year: 2.5 million liters). That represents an average fuel consumption of 6.01 liters per 100 km (previous year: 6.09 liters per 100 km), which corresponds to a CO<sub>2</sub> emissions rate of 158 grams per kilometer (previous year: 160 g/km). These calculations are all based on the assumption that 70% of leased vehicle operation is for business purposes. Employees who choose a low-emission company car with a CO<sub>2</sub> exhaust rating below a specified



**Tobias Richter**  
Head of IT CC Data Center Operation

**“In 2019, we eliminated 160 servers, installing a mere 20 high-performance servers in their place. Along with the associated increase in overall capacity, this enabled us to reduce the total number of servers by 87%, significantly lowering the data center’s electricity and cooling requirements.”**

limit continue to be rewarded with a bonus.

Business travel by air worldwide by our German employees in the year under review totaled 30 million kilometers (previous year: 31 million kilometers). When we include our non-German companies, the total comes to 136 million kilometers traveled by air (previous year: 120 million kilometers). Our internal calculations are based on a per capita jet fuel consumption rate of 0.05 liters per kilometer flown. This results in a Groupwide jet fuel consumption of 6.7 million liters (previous year: 5.9 million liters).

In the year under review, our employees traveled 7.8 million kilometers (previous year: 7.6 million kilo-

meters) on the German rail service, Deutsche Bahn. That represents an electrical power consumption of 404 MWh (previous year: 397 MWh). We continue to use Deutsche Bahn’s climate-neutral option on these long-distance trips.

**Our energy, water and material consumption**

We use energy mainly for the heating and lighting of our properties as well as for the operation of technical equipment. In Germany, we rely on fuels, natural gas, heating oil and wood pellets as direct sources of energy, while gradually reducing heating oil consumption and replacing it with climate-friendlier energy sources. In addition, we buy district heating from local utility companies. Besides those direct sources, we also use electricity and heat as indirect sources of energy. For all German locations under consideration, this power consumption during the year under review totaled 35,124 MWh (previous year: 35,805 MWh).

Even though our company does not produce any material goods, we consider water and materials as relevant environmental parameters in the context of ISO 14001 and report them accordingly. In the year under review, water consumption at our properties worldwide totaled 375,946 m<sup>3</sup> (previous year: 431,357 m<sup>3</sup>). Of that

total, our German locations accounted for approximately 183,076 m<sup>3</sup> (previous year: 260,768 m<sup>3</sup>). Based on full-time equivalents, those cumulative annual water consumption figures for the year under review correspond to 16,839 liters of water per employee Groupwide (previous year: 20,744 liters) and 18,368 liters of water per employee in Germany (previous year: 29,650 liters).

Because we do not procure or process any semi-finished products, we do not document the weights or volumes of the materials we use – with the exception of paper. We strive to reduce our use of paper – through digital archiving, for example, and SharePoint systems for the exchange and processing of files. Groupwide, we purchased 383 metric tons (previous year: 403 metric tons) of paper in the year under review. Of that total, our German locations – where we use FSC-certified paper from sustainable forestry as standard – accounted for 228 metric tons (previous year: 234 metric tons). The per capita consumption of paper was 14.6 kg Groupwide (previous year: 19.4 kg) and 17.2 kg in Germany (previous year: 26.6 kg), in both cases on a full-time equivalent basis. →

**Energy consumption (Germany)**

| in megawatt-hours              | 2018   | 2019   |
|--------------------------------|--------|--------|
| from natural gas               | 25,881 | 27,917 |
| from heating oil               | 4,687  | 2,789  |
| from district heating          | 11,803 | 11,409 |
| from electricity (real estate) | 35,805 | 35,124 |

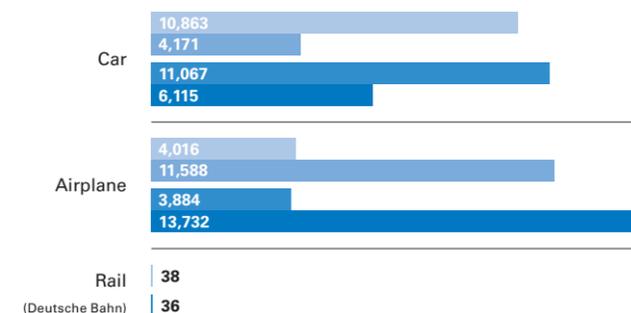
**CO<sub>2</sub> emissions from energy consumption (Germany)**

| in metric tons of CO <sub>2</sub> equivalents | 2018  | 2019  |
|---|-------|-------|
| from natural gas                              | 2,036 | 2,443 |
| from heating oil                              | 1,236 | 736   |
| from district heating                         | 3,175 | 3,069 |
| from electricity (real estate)                | 9,341 | 5,040 |

Energy production from wood pellets is considered as CO<sub>2</sub>-neutral.

**CO<sub>2</sub> emissions from business travel**

in metric tons of CO<sub>2</sub> equivalents  
 ■ 2018 (Germany) ■ 2019 (Germany)  
 ■ 2018 (abroad) ■ 2019 (abroad)



**Progress in target achievement**

|  |                               | 2010 | 2016 | 2017 | 2018 | 2019 | Delta* | Target 2020 |
|--|-------------------------------|------|------|------|------|------|--------|-------------|
| CO <sub>2</sub> emissions per employee (Group)** | t CO <sub>2</sub> equivalents | 6.4  | 5.3  | 5.0  | 4.0  | 3.9  | - 38%  | - 25%       |
| Energy consumption per employee (Group)**        | MWh                           | 26.6 | 22.0 | 20.5 | 20.0 | 20.0 | - 25%  | - 20%       |

**TÜV Rheinland environmental performance per employee\***

|                     |                               | Germany |        |        | Group  |        |        |
|---------------------|-------------------------------|---------|--------|--------|--------|--------|--------|
|                     |                               | 2017    | 2018   | 2019   | 2017   | 2018   | 2019   |
| CO <sub>2</sub> **  | t CO <sub>2</sub> equivalents | 5.2     | 3.5    | 2.6    | 5.0    | 4.0    | 3.9    |
| CO <sub>2</sub> *** |                               |         |        |        | 5.0    | 4.1    | 4.0    |
| Energy**            | MWh                           | 23.4    | 24.1   | 20.9   | 20.5   | 20.0   | 20.0   |
| Energy***           |                               |         |        |        | 20.8   | 20.3   | 20.2   |
| Business travel     | km                            | 12,747  | 12,121 | 10,823 | 11,917 | 10,316 | 10,965 |
| Paper               | kg                            | 33.8    | 26.6   | 22.8   | 23.2   | 19.4   | 17.1   |
| Water               | l                             | 18,260  | 29,650 | 18,368 | 16,819 | 20,744 | 16,839 |

\* Full Time Equivalent.  
 \*\* Values resulting from all energy sources and business travel. In order to maintain comparability with previous years, this calculation excludes the district heating, natural gas and heating oil used by our foreign subsidiaries.  
 \*\*\* Values resulting from all energy sources and business travel and the calculation includes the district heating, natural gas and heating oil used by our foreign subsidiaries. This has been possible since 2017.

\* Base year 2010.  
 \*\* Values resulting from all energy sources and business travel. In order to maintain comparability with previous years, this calculation excludes the district heating, natural gas and heating oil used by our foreign subsidiaries.

→ The further drop in our worldwide paper consumption is also attributable to initiatives at our locations outside of Germany. We continued the “paperless initiative” launched the year before in Greater China, for example, and in 2019 we formulated paper consumption reduction goals for that region, the Asia Pacific region, and the India, Middle East, Africa region.

We also implemented measures at other locations outside of Germany, to make them more energy-efficient and to conserve resources. In Chile, for example, we donate used paper from our office operations to the “Fundación San José para la adopción” – a foundation that supports pregnant women, adoptive parents and children in the process of adoption. The foundation collects the used paper for a recycling company and receives material goods such as diapers, toilet paper and milk bottles in return. This benefits the orphanages of the foundation and also helps the environment at the same time. In Brazil, we launched the #Gogreen campaign. As part of that program, for example, the Finance Department stopped issuing printed documents to employees and now uses a fully electronic process instead. This has not only reduced waste generation, but has also improved internal processes.

Introduced in 2019, the digital signature diSign is also saving resources. diSign enables employees to sign documents directly on their PC and then file them in the document management system or send them by e-mail. This makes it easy for colleagues to exchange a signed document across international borders, for example. It is more efficient and saves paper and ink. ■

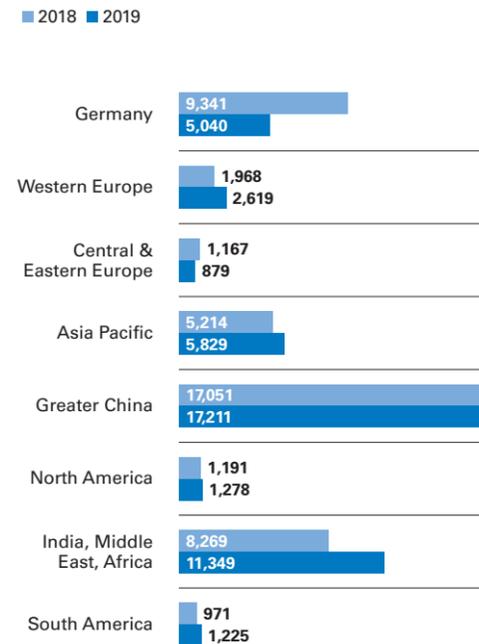
**CO<sub>2</sub> emissions (direct and indirect)\***

| in 1,000 metric tons of CO <sub>2</sub> equivalents | 2018 | 2019 |
|---|------|------|
| Total / Group**                                     | 84.9 | 88.4 |
| of which, direct                                    | 14.9 | 16.7 |
| of which, indirect***                               | 70.0 | 71.7 |
| Germany   | 30.7 | 26.3 |
| of which, direct                                    | 9.9  | 10.1 |
| of which, indirect****                              | 20.8 | 16.2 |

\* Unlike the presentation of Scope 1, 2 and 3 emissions used in the GRI index, the direct emissions listed here also include CO<sub>2</sub> from the operation of our company cars.  
 \*\* Since 2017, improved data acquisition now also enables us to measure CO<sub>2</sub> emissions from energy sources such as heating oil and district heating at our locations outside of Germany. Those data were first taken into account in 2018. For values at the Group level comparable to those of the previous year, the following figures apply: 16.2 (direct) and 71.5 (indirect).  
 \*\*\* CO<sub>2</sub> emissions from rail travel were taken into account in Germany only.  
 \*\*\*\* Including CO<sub>2</sub> emissions from rail travel

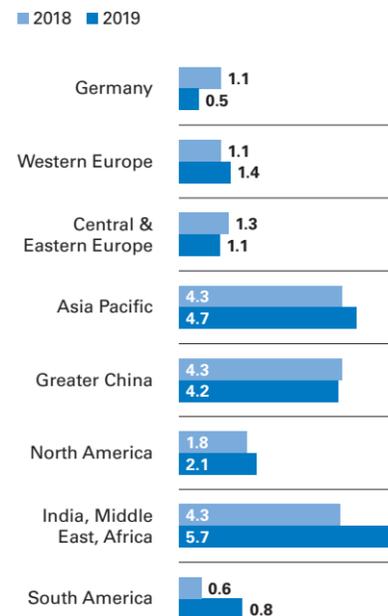
**CO<sub>2</sub> emissions from electrical power consumed by real estate**

in metric tons of CO<sub>2</sub> equivalents



**CO<sub>2</sub> emissions from electrical power consumption per employee**

in metric tons of CO<sub>2</sub> equivalents



# 5

## Society

Support for charitable projects – from the integration of refugees to training programs to care for children of migrant workers

As a provider of testing and inspection services, TÜV Rheinland is dependent on basic societal conditions: A well-qualified workforce is essential – from young talents to experienced specialists. Along with that, a modern and effective infrastructure or the business and legal framework also play an important role and contribute directly or indirectly to our company’s business success.

That’s why social commitment represents a dimension on its own in our sustainability strategy. TÜV Rheinland has embraced the idea of using its own contribution to shape its surroundings in positive ways and to give something back to society. This takes the form of financial support for charitable projects, for example. That’s why we want to donate up to 0.1 percent of our EBIT annually. All projects and activities follow the principle that they must be in harmony with the values of TÜV Rheinland, be closely connected to our business activity, or have a regional connection via locations and markets. They are subject to clearly defined criteria, which are documented in mandatory company guidelines. In this context, we focus on projects that promote education, science and technical progress, protect people and the environment, or support the principles of the UN Global Compact.

In our social commitment, we also rely on cooperation with aid organizations, non-governmental organizations (NGOs), state institutions and other companies. We supported the organization Engineers Without Borders through an annual Christmas donation once again in 2019.

But we also honor personal engagement for others in the context of volunteer work. Employees of TÜV Rheinland are active in many areas, are involved in social projects, share their knowledge, and work in environmental protection.

**Projects and actions**

We achieved our established objective to spend 0.1 percent of EBIT once again in 2019. In so doing, a wide range of actions were implemented in different regions. Those actions directly benefited the target groups in each region.

**Germany**

In Germany, the integration of refugees is one focus of the activities of TÜV Rheinland. Our company has been committed to implementing concrete measures in the context of the program “We together – Integration initiatives of the German economy” (www.wir-zusammen.de). After around three years of initiative efforts, “We together” has achieved its objective of establishing integration initiatives at its member companies. That’s why, in mid-2019, the “We together” project office withdrew from the support program. The activities at TÜV Rheinland will be continued beyond the existence of the initiative. Since 2016, young people with a refugee background have started a training program with us at our Cologne and Nuremberg locations. That offering was expanded in subsequent years. We created three additional trainee positions for refugees in Cologne, Nuremberg and Berlin in 2018, and then three more in 2019. In this context, TÜV Rheinland provides training in different professions. The spectrum ranges from IT specialist for system integration to mechatronics technician, to the commerce and food services area. The technical departments give the refugees full support. Along with technical content, trainees also receive orientation covering all aspects of everyday life and professional life – in Germany, and in particular, at TÜV Rheinland. We also provide them with training seminars and language courses as well as assistance with administrative formalities.

**South America**

In Chile, a campaign was launched to collect clothing for babies and children. The articles of clothing collected were given to public hospitals that supplied them to people – especially immigrants from Colombia, Peru, Venezuela and Haiti – who live in Chile due to difficult conditions in their respective home countries (political and economic crises, social unrest).

**North America**

For the organization “Soles4Souls” a TÜV Rheinland employee started a collection campaign with the goal of providing footwear to the needy. The organization supports underprivileged people by making high-quality used shoes available for resale to them at low prices. This micro-company business model facilitates sustainable assistance for self-help. The colleague drew attention →



**Simon Hung**  
Section Manager,  
Marketing Greater China

**“Our local social engagement – with the Young Men’s Christian Association (YMCA) in Hong Kong, for example – underscores our ambitions for sustainable business leadership. In selecting social projects, the decisive factor for us is that we initiate sustainable development together with our employees.”**

→ to the project within the context of her work at TÜV Rheinland and took in 100 pairs of shoes with her first collection campaign.

#### **Western/Central and Eastern Europe**

In Hungary, our company supported the Gezenguz Foundation, an organization that provides aid to disabled children, through a pro bono ISO 9001 certification. We also donated used office furniture to various charitable organizations in Hungary. The donation was made possible by the relocation of one of our subsidiaries in the country. Our employees in Serbia, for their part, participated in a campaign to collect plastic bottle caps. The organization CEP ZA HENDIKEP then sold the caps to suitable companies for use as recycling material and the revenue was used to purchase orthopedic supplies.

#### **India, Middle East, Africa**

TÜV Rheinland’s Christmas donation to Engineers Without Borders in 2018 made it possible to fund a project in Cameroon in 2019. The organization there is training turbine builders and maintenance staff who install micro-hydropower plants in areas where they are needed most. Thus the project not only offers the people of Cameroon a path to self-sufficiency, but also sustainably advances the rural electrification of the country. Water power is a constant, efficient and environmentally sound means of energy production

and incurs comparatively low costs. Engineers Without Borders’ micro-hydropower plants have been developed and tested in Germany for this purpose.

#### **Asia Pacific**

In Japan, TÜV Rheinland is particularly committed to supporting students. For example, the company organized a “Girls’ Day” in Yokohama during the year under review. On the day of the event, employees of the Tsuzuki Ward Office visited TÜV Rheinland’s Global Technology Assessment Center (GTAC) together with female students from the University of Electro-Communications. Along with this event, employees volunteered at schools, gave presentations at the junior high school, and invited students to participate in internship programs.

#### **Greater China**

In 2019, TÜV Rheinland received several awards for its CSR activities in the Greater China region. A film project of our company, for example – one of 490 entries submitted – was recognized in the context of the China International Philanthropic Movie Festival hosted by the organization China Charity Fair (CCF). The award-winning film entitled “Color of the Future” is a documentary that our CSR department produced in 2017 together with our Marketing department. The film is divided into two parts: The first part describes the changes experienced by teachers and students at Sichuan Renjia School, which is financially supported by TÜV Rheinland, while the second part focuses on conversations with children about their hopes and dreams.

#### **YMCA cooperation**

Since 2015, TÜV Rheinland has been collaborating with the Young Men’s Christian Association (YMCA) of Hong Kong on the introduction of a series of volunteer services. Together with the YMCA, the company launched a community canteen for the needy in 2018. Employees participated actively in the project through volunteer work at the canteen. At the awards ceremony of the Y-Care program in April 2019, YMCA presented the Bronze Partner award to TÜV Rheinland in recognition of its CSR services.

#### **Caring for left-behind children**

In the Greater China region, TÜV Rheinland works together with the ICTI Ethical Toy Program (IETP). The organization takes care of migrant workers’ children – so-called “left-behind children” – who often live thousands of kilometers from their parents. According to the UNICEF Annual Report 2017 on China, there are 69 million such girls and boys in the People’s Republic of China who see their

parents only once or twice a year. The project makes it possible to implement childcare offerings and seminars that bring the migrant workers and their children closer together again and seek to enable the children to spend summer holidays together with their parents. In collaboration with the IETP, TÜV Rheinland started another campaign in 2019 to gain volunteer employees in support of the project.

2019 marked the second year of the partnership between TÜV Rheinland and the ECNU Foundation. With our support, the “I Fly: Training Rural Teachers” program has been launched. Its goal is to qualify rural teachers and to improve the quality of education in underdeveloped areas of China. To involve more colleagues in the project, TÜV Rheinland participated in the subproject “Inviting rural teachers to be my guests” and invited teachers from Yunnan and Sichuan to take part. Along with that, we promote literacy in rural regions within the context

of a partnership with the organization STARS Youth Development Center. As part of the STARS program to promote the reading skills of school children, TÜV Rheinland donated crates of books to the main library in the Xinxing district in the city of Yunfu. For one month at a time, teachers there can borrow a crate of books that correspond to the reading level of their class, and bring back another new crate of books with different reading materials every month, in order to give the children access to a larger range of content and topics.

In July 2019, TÜV Rheinland Greater China launched the “21-Day Public Welfare Challenge.” Its goal is to inspire colleagues to participate in volunteer activities and to develop healthy lifestyles. Along with various other activities, employees in Mongolia participated actively in the “Alxa SEE 100 Million Haloxylon” project, which aims to plant 10,000 haloxylon trees. ■

# 6

## Service Responsibility

Our services should make the world a little better every day.

As with other aspects of our sustainability strategy, we have also set quantitative objectives for service responsibility. They are designed to help ensure that the effect of our services – the ones we provide ourselves and also those provided by our stakeholders – lives up to our aspirations: Concerning our stakeholders' commitment, we want to ensure that we remain in regular contact with 100 percent of the interest groups that we have identified as important. In 2019, we were able to verify the achievement of this objective for the first time. In the context of developing our new sustainability strategy, we worked closely with our interest groups on a thorough examination of their requirements and communication channels.

With regard to the assessment of risks in our services, we intend to use the Brand Risk Evaluator (BRE) tool in the future to screen 100 percent of new services throughout the company. Likewise, we plan to significantly expand our analysis of the existing service portfolio for possible risks. Our ambitious objective: A 100-percent screening rate.

### Stakeholder involvement

We have been developing our new sustainability strategy since 2019. It started with a comprehensive materiality analysis. In that connection, the stakeholder groups of relevance to TÜV Rheinland in the context of sustainability were reanalyzed. All stakeholder groups deemed to be of relevance were then asked to complete an online survey indicating their assessment of material sustainability issues for TÜV Rheinland for the future. The online survey was supplemented by individual interviews with especially important stakeholder groups, so-called "key stakeholders." Moreover, the joint image campaign started in December 2019 with five other TÜV companies and the TÜV Association (VdTÜV) also reached a significant number of our stakeholders. In that sense, target achievement with regard to stakeholder involvement is 100 percent.

### IT tool identifies risky services

To protect the high reputation of our brand, we have been using our Brand Risk Evaluator (BRE) tool ever since 2016. Developed in-house, the tool helps us identify possible risks in connection with our services. It considers not only the service itself, but also the customers, their industry, and the country in which the service is performed. It evaluates whether the service carries any risks for our brand – because it conflicts with our corporate values, for example, or might give the consumer the wrong impression, or serves a customer identified as critical. Where we see risks, we apply appropriate countermeasures, adapt the service and/or its context – or, in case of doubt, decline the business opportunity entirely. In 2019, work on the analysis of risks in our services focused primarily on the further development of the underlying process as well as the supporting IT tools. The goal of currently scheduled activities is to transfer risk assessment from its current centrally managed role into the routine operations of our day-to-day business.

Our reputation is also attractive for other actors, however. In the year under review alone, we faced a mid-double-digit number of cases of test mark fraud. We fight back regularly against such fraud. And we do so without hesitation – after all, consumers have to be able to rest assured that nothing says TÜV Rheinland *on* it unless TÜV Rheinland is actually *in* it. That's why our certificates have a built-in "copyright": They include a prominently displayed ID number, whose authenticity can be verified with our "Certipedia" certification database ([www.certipedia.com](http://www.certipedia.com)). The latter also contains product characteristics, services, companies, systems or personnel certifications.

### Bundled measures against trademark infringement

The establishment of TÜV Rheinland Intellectual Property GmbH in 2019 enables legal, marketing and communication experts to join together in a uniform approach to protecting our trademarks the world over. This includes clear structures for the positioning, architecture and communication of our brand, as well as strict control of compliance with those requirements. In conjunction with that, we monitor online marketplaces for any trademark infringements, for example, and work with international law enforcement agencies – nor do we shy away from trademark-related administrative disputes or litigation. Once again as in years past, we attended trade fairs to track down brand pirates during the year under review – often in direct collaboration with customs authorities, public prosecutors' offices, and representatives of other TÜV companies that have joined us as members of the

"TÜV Markenverbund e.V." The customs office continues to help us fight against the import of products bearing counterfeit TÜV Rheinland trademarks. The legal basis for this is the so-called "Border Seizure Application" that we filed with the European customs authorities in 2010, which affects all imports that cross the EU's external borders.

### Worldwide sustainability actions

The worldwide impact of our services on sustainability aspects and thereby on the SDGs (see "CSR Management" section) is demonstrated by the following selected examples.

In June 2019, for example, TÜV Rheinland's Sino-German Sustainability Summit was held in Beijing (SDG 17: Partnerships for the Goals). More than 200 representatives of Chinese and German companies, financial institutions, think tanks, and non-governmental organizations gathered to exchange their experiences and practices with regard to corporate social responsibility in the context of the Agenda 2030 for Sustainable Development ("Sustainable Development Goals"). Together with the participants of the conference, TÜV Rheinland aims to use its technical resources and global networks to achieve the joint SDGs in China, Germany and beyond. Further proof of our commitment to SDG 17 is the participation of our general manager from TÜV Rheinland India in the round table on the National Action Plan for Business and Human Rights (NAP). Hosted by the Indo-German Chamber of Commerce (IGCC) and the Embassy of the Federal Republic of Germany, the event was held at the Indo-German Chamber of Commerce in New Delhi in June of the year under review. The round table was designed to bring together selected representatives of German companies in India and to discuss the expectations of German companies in India with regard to the implementation of the NAP, as well as to ascertain the current implementation situation and required support.

TÜV Rheinland is making a contribution to SDG 9 (Industry, Innovation and Infrastructure) by advising the German Federal Ministry of Transport and Digital Infrastructure (BMVI) on the development of sustainable public transport in the Alps. The analysis of the potential benefits of using alternative drives or innovative technologies and the development of the associated policy options for transalpine passenger transport are aimed at reducing the environmental impact of traffic and protecting the mountainous region over the long term. Furthermore, TÜV Rheinland Korea and the company SpeedMate have signed a cooperation agreement in Korea, a rapidly grow-



**Thomas Tillmann**  
Field Sales Specialist,  
Business Stream Systems

**"With the ZNU Standard 'Driving Sustainable Change,' we offer a certificate that bundles all ecological, economic and social sustainability requirements of companies. This standard is unique because as a neutral body we render more sustainable business practices measurable and verifiable, thereby giving other companies clear guidance."**

ing market for electric vehicles. It covers the transfer of know-how in connection with the operation of electric vehicles, such as high-voltage safety training, the maintenance of electric vehicles, and the safety of charging facilities. Another proof of our successful commitment to SDG 9, this time in China, is the award as "Best Testing and Certification Body in China's Energy Storage Industry 2019." TÜV Rheinland has introduced many innovations in the sector and demonstrated through several pioneering certificates that it can serve the entire industrial chain of energy storage.

Through an accreditation from the Worldwide Responsible Accredited Production (WRAP) program, TÜV Rheinland has reinforced its ability to satisfy SDG 12 (Responsible Consumption and Production) since 2019. The new accreditation makes it possible to certify operations in the clothing/textiles, footwear and sewn products industries. WRAP is supported by the International Apparel Federation and the American Apparel & Footwear Association along with more than 20 international trade and industry associations.

TÜV Rheinland is also active as an inspection services provider in the "Green Button" ["Grüner Knopf"] program, a new state-supervised quality seal for clothing. →

→ Launched by the German Federal Ministry for Economic Cooperation and Development in the summer of 2019, this seal is designed to serve as a distinguishing feature to indicate that the selected article of clothing has been manufactured under socially and ecologically responsible conditions.

The new TÜV Rheinland “vegan” seal – a decision aid when purchasing textiles and shoes – has also been available since 2019. Unlike comparable seals, it guarantees a standardized test method.

Further proof of commitment to SDG 12 is the new inspection service introduced in the Systems Business Stream for people with allergies. “Quality-Controlled for Persons with Allergies” is a certificate of the Bavarian Spa Association (BHV) that spas and health resorts in Bavaria intend to use to help people with allergies select vacation destinations in the future.

On behalf of the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU), TÜV Rheinland audited 70 monitoring stations throughout Germany for compliance with the legal requirements (SDG 13: Climate Action). The expert opinion of TÜV Rheinland shows that the monitoring stations in the German federal states are generally set up correctly and do not contradict EU regulations. The collaboration with the Taiwanese “Maritime Training Center of the National Kaohsiung University of Science and Technology NKUST” also contributes to SDG 13. The support for professional training and inspection that TÜV Rheinland provides for the training center not only enhances the technical competence of wind power workers, but also raises their safety awareness and improves their practical skills, thereby ensuring workplace safety in Taiwan’s wind power industry.

#### Continuation of sustainability actions already initiated

In 2019, TÜV Rheinland also maintained its commitment to the qualification of refugees (SDG 4: Quality Education). Moreover, TÜV Rheinland Academy’s training center in Chemnitz has been offering additional courses for refugees since 2019 – including “LALiD compact” training (“Learning, working and living in Germany”). This program helps people of refugee and migrant backgrounds become properly situated in their new everyday life. The continuing education course “Working as a qualified laborer in Germany” takes a somewhat different approach: It combines features such as professional German language skills and the identification of opportunities in the employment market with guidance from an integration coach, who has been performing that function at TÜV Rheinland since 2018.

Our commitment to SDG 12 (Responsible Consumption and Production) also increased in 2019. The green product mark that certifies environmentally friendly and energy-efficient products, for example, was granted for many products from various industries – for the first time also including cuddly toy animals.

Another contribution to SDG 12 was the increasing demand for the “Driving Sustainable Change” certificate offered by the Systems Business Stream, which certifies that a company complies with ecological, economic and social standards. The unique service developed together with the Center for Sustainable Leadership (ZNU) – an independent institute of Witten/Herdecke University – is designed to promote appropriate action. ■

#### The 17 UN Sustainable Development Goals (SDGs)



# Financial Report

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## Group Management Report

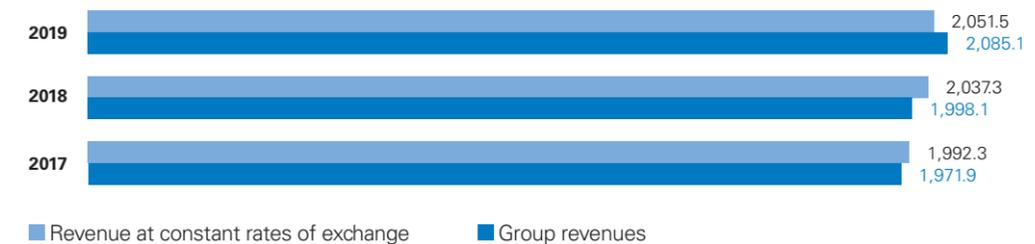
TÜV Rheinland Aktiengesellschaft for the financial year 2019

### TÜV Rheinland at a Glance

#### Group revenues

- Group revenues (incl. inventory changes) increased 4.4% in the 2019 financial year and stood at €2,085.1 million. By comparison – i.e. excluding currency-rate effects – revenues totaled to €2,051.5 million.
- The €87.0 million year-over-year increase in total revenue is mainly attributable to international business. €972.3 million of total revenue was generated abroad. This corresponds to a total revenue share of 46.6% (previous year: 44.5%). The Europe region (excluding Germany) reported a 6.6% year-over-year increase in revenue. The Asia Pacific, Greater China and IMEA regions even managed to increase revenue by 13.3% year-over-year.

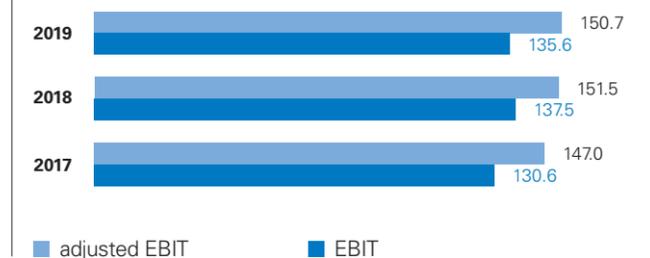
#### Group revenues in € millions



#### Operating result (EBIT)

- The operating result (EBIT) totaled to €135.6 million in the 2019 financial year; this was slightly lower than the previous year's figure of €137.5 million.
- After adjusting for special effects totaling €15.1 million, EBIT amounted to €150.7 million. Special effects mainly included €10.1 million in personnel and restructuring measures, effects from business combinations totaling €8.8 million and a contrasting positive effect of €3.6 million as a result of initial application of the international accounting standard IFRS 16 as of January 1, 2019.
- Amortization of intangible assets and depreciation of property, plant and equipment was €63.9 million higher year-over-year and stood at €139.1 million. Amortization included amortization of right-of-use assets in conjunction with IFRS 16 in an amount of €54.6 million.
- Investments in intangible assets and property, plant and equipment totaled to €70.0 million in the 2019 financial year.
- The EBIT margin in the 2019 financial year was 6.5% and was a slight 0.4% points lower year-over-year. One reason for this drop, among others, was higher personnel expenses (+5.9% year-over-year), which had to do with personnel and restructuring measures instituted in the current financial year.

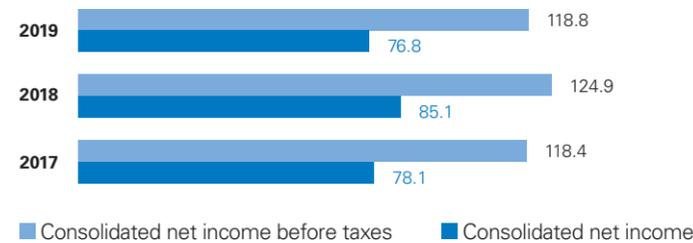
#### EBIT in € millions



### Consolidated net income

- Consolidated net income totaled to €76.8 million, representing a decrease of €8.3 million from the previous year.
- The factors behind the lower figure for consolidated net income are an operating result (EBIT) that was €1.9 million below the previous year's, a negative financial result that had increased by €4.2 million, and a €2.3 million higher income tax burden. Interest expenses for leasing liabilities totaled to €3.6 million in the 2019 financial year and exerted downward pressure on the financial result.
- Consolidated net income before income taxes amounted to €118.8 million, which was 4.8% lower year-over-year. Income tax expenses rose from €39.8 million the previous year to €42.1 million; this change is mainly attributable to greater losses for which no tax assets were recognized.
- The tax rate in the 2019 financial year amounted to approximately 35.4% (previous year: 31.9%).
- The imputed consolidated net income of other shareholders in the 2019 financial year stood at €11.5 million (previous year: €9.0 million).

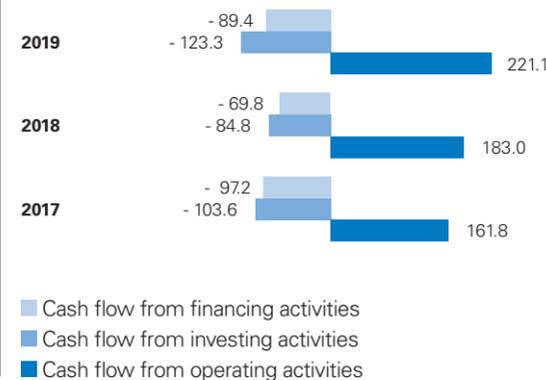
Consolidated net income in € millions



### Cash flow

- The positive cash flow from operating activities amounted to €221.1 million in the 2019 financial year (previous year: € 183.0 million); this represents an increase of +20.8%.
- The consolidated result of €76.8 million was offset by non-cash amortization and depreciation totaling €139.1 million. At the same time, acquisitions in the 2019 financial year – particularly Certio ITV, S.L.U. (“Certio” for short) – contributed to the positive cash flow from operating activities. In addition, initial application of IFRS 16, with separate recognition of the repayments of leasing liabilities in financing activities, led to improved cash flow from operating activities year-over-year. On the other hand, the increase in net working capital to 7.1% (previous year: 6.6%) had a negative impact on cash flow from operating activities.
- The negative cash flow from investing activities increased by €38.5 million year-over-year. €34.9 million in investments in financial assets and payments for acquisitions – for Certio in particular – were the cause of the increased capital expenditures in 2019.
- The negative cash flow from financing activities totals to €89.4 million, representing an increase of €19.6 million over the previous year. The main element of this increase, representing €56.6 million, was the result of repayments of leasing liabilities within the meaning of IFRS 16; these repayments are offset by reductions in loan repayments.

Cash flow in € millions



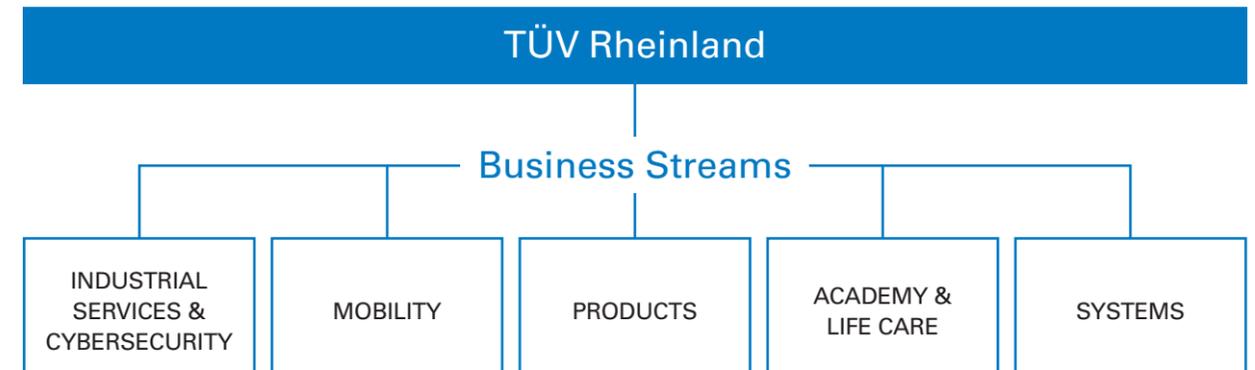
### Presentation of the Business Streams

As an independent testing company, for more than 140 years TÜV Rheinland has stood for quality, efficiency and safety in the interaction between people, technology and the environment in almost all areas of the economy and life.

As a neutral and independent third party, TÜV Rheinland inspects and tests technical equipment, products and services, and monitors projects and processes for companies. The Group does so on the basis of recognized standards as well as national and international legal provisions. Added to this are services relating to information security, occupational health and safety, as well as training and professional qualifications.

With new ideas, expertise, and a global network, this is how TÜV Rheinland lends a hand in making products, services, systems and people safer and more competitive.

The work carried out by TÜV Rheinland is based on the conviction that societal and industrial development is not possible without technical progress. That is precisely the reason why the safe and responsible use of technical innovations, products and systems is of decisive importance for future development. TÜV Rheinland monitors, inspects, tests and certifies. This is how it helps build a future that sustainably does justice to the requirements of humankind and the environment. The work of TÜV Rheinland is organized into five Business Streams:



In 2019, the financial year under report, the once-independent DIGITAL TRANSFORMATION & CYBERSECURITY Business Stream was integrated into the former INDUSTRIAL SERVICES and ACADEMY & LIFE CARE Business Streams. The previous INDUSTRIAL SERVICES Business Stream was renamed INDUSTRIAL SERVICES & CYBERSECURITY. Consolidation of the Business Streams helped simplify the organizational structure.

**INDUSTRIAL SERVICES & CYBERSECURITY** This Business Stream comprises the Business Fields of Pressure Equipment, Elevators & Lifting Equipment, Electrical Engineering & Building Technology, Industrial Inspection & Material Testing, Infrastructure & Project Supervision, Energy & Environment as well as Cybersecurity and Functional Safety. The services include,

for example: testing of pressure vessels, elevators and lifts, and systems in building technology; monitoring of industrial and infrastructure projects; engineering as well as materials inspection and testing; environmental and pollutant analysis; and all aspects of cybersecurity.

**MOBILITY** This Business Stream is responsible for: Periodical Technical Inspections with its network of motor-vehicle testing authorities in Germany, Spain, France, Latvia and Chile; theoretical and practical Driver's License Testing; Car Services and Appraisal, with its extensive service portfolio in the after-sales sector; eligibility testing of motor-vehicle components and motor vehicles (homologation), with the undergirding of a global network of laboratories; as well as the rail sector, which includes testing/monitoring, in-

spection and certification. The Business Stream is additionally involved in developing new services for safety in the networked mobility of the future.

**PRODUCTS** Among other things, this Business Stream performs testing for product functionality, serviceability, ergonomics and safety, as well as the certification of products. This is often the prerequisite to ensuring that manufacturers, importers or trading companies can offer their products in certain markets. The Products Business Stream tests everyday articles such as consumer electronics, glass, furniture, textiles, toys, leisure articles or household appliances. Added to this, for instance, are tests in environmental and pollutant analysis; testing of the electromagnetic compatibility of electrical and electronic products, machinery and medical devices; as well as testing of solar modules, batteries or fuel cells.

**ACADEMY & LIFE CARE** This Business Stream combines the expertise and services of TÜV Rheinland applicable to the individual in his or her workplace and career environment. This comprises topics in HR de-

velopment and consulting services, further education and seminars, corporate health management, occupational health and safety, as well as certifications of individuals and labor market services. Specialists here also offer strategic consulting, conceptual design and process optimization, as well as implementation of secure IT systems, cloud technologies and telecommunications networks, on an international scale. The aim is to support businesses as well as government agencies and institutions with effective strategies and solutions for information security and telecommunications within the context of digital transformation processes.

**SYSTEMS** This Business Stream certifies management systems and processes, certain services or entire enterprises as an independent third party based on internationally recognized standards or individual performance criteria. These include, in particular, quality management systems (ISO 9001) and environmental management systems of numerous businesses (ISO 14001 and the European EMAS system), as well as service quality, compliance management and energy management.

## General Conditions

### General Economic Conditions

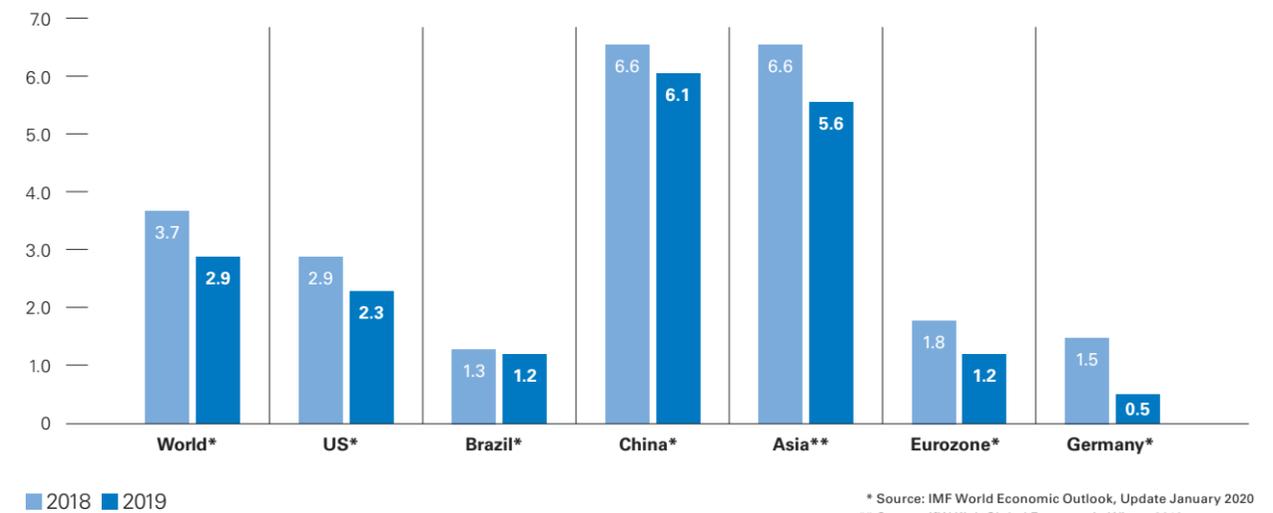
The expansion of the global economy continued to slow down during the financial year under report. With growth of 2.9%, expansion was, then, still positive, but it was also at its lowest level since 2008/09. Weakness in industry and in global trade remained dominant. Compounding the situation was the fact that weakness in industry is now being felt in other sectors of the economy as well. The global economy was burdened by the intensification of the trade dispute between the US and China. At the same time, tensions between the US and the European Union intensified. Particularly in the advanced economies, the business climate deteriorated further, and industrial production even contracted. In contrast to the previous year, divergences in economic cycles narrowed. In addition, unemployment has fallen to new lows in many of the advanced economies; oil prices have fallen in these countries, resulting in inflation dropping there again as well. These economies have now adopted a more expansionary stance in terms of monetary policy. In summer 2019, the US Federal Reserve began cutting interest rates, and the ECB has passed measures in this regard, too. The dynamics

have stabilized in many of the emerging markets, and industrial production has increased, primarily because the trend in production in China was still upward despite a clear slowdown. Below is a presentation of economic growth in important markets of the TÜV Rheinland AG Group (shown in %).

Risks to economic development relate to protectionist trends, especially in the USA; a Brexit that, while carried out, will have consequences that are still unclear; escalation of trade conflicts; and the spread of the new coronavirus.

**US** The US economy lost some of its momentum during the financial year under report, with growth of 2.3% in 2019. This growth is less than the previous year's (previous year: 2.9%). The strong fiscal impetus generated by the tax reform of 2018, among other things, has leveled off. The country's exports have decreased as well. Household consumption was again the greatest contributor in this regard. The US economy was burdened by ongoing trade uncertainties, particu-

Growth in Important Markets of the TÜV Rheinland AG Group shown in %



larly with China. Following the increase in import tariffs on imports from China, Chinese countermeasures were imposed. While unemployment remained at a very low level, employment growth slowed during the reporting period. The solid employment trend and rising wages strengthened household incomes. Parallel to this, inflation rates were lower.

**BRICS COUNTRIES** The economic development of the BRICS countries is particularly important to the TÜV Rheinland AG Group due to its presence in these countries, particularly in Brazil and China.

Economic growth in the BRICS countries was slightly slower in 2019, chiefly as a result of the expected decline in China, and totaled to 4.6% (previous year: 5.2%). India posed an additional burden, as its economic growth was 2.0% lower and stood at 4.8% due to a lack of credit availability and subdued household consumption. The economic situation stabilized in many emerging markets, however.

**CHINA** With a growth rate of 6.1%, in 2019 the Chinese economy recorded continued lower rates of growth (previous year: 6.6%). In addition to the trend of slower growth, it was also cyclical factors, the policies of the Chinese government and trade conflicts that were likely responsible for the lower rates of growth. China remained the focus of the US government's trade policy. With the additional import tariffs that went into effect in September 2019, a full two-thirds of US imports from China are now subject to extra duties. Customs duties, combined with the un-

certainty associated with the trade dispute, are likely to weigh noticeably on the Chinese economy. At the same time, state initiatives in fiscal and monetary policy, together with regulation of the financial markets, dictated the current momentum for growth. The policies were more expansive once again. Thus, tax cuts and additional expenditures on infrastructure led to an increase in the sovereign deficit. At the same time, lending to companies is set to expand. Finally, there are also structural reasons for a further slowdown in Chinese growth. In addition to demographic trends, lower growth in productivity is expected to lead to reduced growth rates. The process of structural transformation of the Chinese economy, with the less productive service sector gaining significance versus the manufacturing industry, continued in 2019.

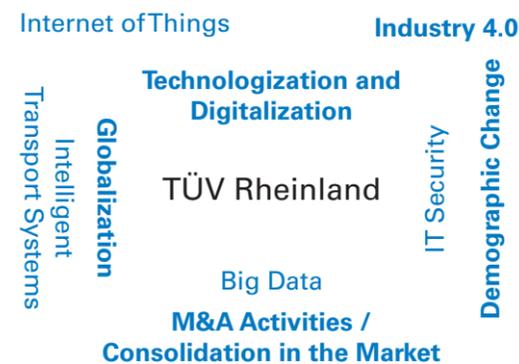
**BRAZIL** Brazil is still in a phase of recovery from the recession and reported positive yet still low growth of 1.2%. President Bolsonaro's government implemented a reform of social security in 2019 that raises the retirement age and aims to reduce inequalities. Beyond the agricultural sector, Brazil is losing the global productivity race. Improving the situation would call for tax reforms and the liberalization of trade. Brazilian infrastructure is in a critical state as well. Potentials can be found in the fields of transportation, electricity and telecommunications.

**EUROZONE** Growth slowed even further in 2019. Gross domestic product was 1.2% higher in 2019 (previous year: 1.8%). This development was fed particularly by weaker growth in investments and exports. It can be

noted, however, that the recovery since the end of the financial crisis and the sovereign debt crisis in the eurozone has now become one of the longest periods of economic expansion in the post-war era. There were variations in the trends among the different member states. The example of the labor market demonstrates that Germany has a significantly lower unemployment rate than before the global financial crisis, while the situation in Italy, Spain and Greece is not so positive. Of all the components that go to make up GDP, private and public consumption in particular contributed positively to growth. In the case of households, the good situation in the labor market should support this development. Continued job creation and rising wages and salaries led to an increase in employee compensation. At the same time, consumer price inflation is only moderate, not least as a result of lower energy prices. Taken together, this led to a resumption of stronger growth in real disposable household income. In addition, in September 2019, the Governing Council of the ECB instituted another noticeable easing in its monetary policy, which has been very expansionary for years.

### Market-Specific Development

TÜV Rheinland offers its testing, inspection, certification and training services through companies on six continents throughout the global TIC (Testing, Inspection, Certification) market. This gives the Group the ability to offer full service for clients' often worldwide value chains. Demand for the services of TÜV Rheinland remains high among clients in economically strong, industrialized countries, while demand is developing in emerging markets as well. The global TIC market, and hence the business of TÜV Rheinland as well, are influenced by the following market factors and trends:



**GERMANY** The long-lasting recovery came to an end for the time being in 2019, as economic growth fell another 1,0%, standing at 0.5%. A key reason for this was the cross-border weakness of industry. For some time now, for instance, the trend in productivity has been persistently weak. This makes the current challenges to economic policy – such as demographic and technological change or climate protection – of even greater importance. To date, however, there is no reason to expect a deeper recession. A crucial factor going forward will be the extent to which this development affects the hitherto solid job market and domestic demand. Domestic demand proved robust in 2019, as continued increases in wages and favorable terms for financing strengthened this demand. The global economic downturn was an additional factor contributing to the slowdown in growth. This reduced the stimulus effect of foreign trade in Germany. On the other hand, the measures of fiscal policy adopted by the German federal government led to strong stimulus on the demand side. The net financial balance decreased as a result, although the government continued to generate surpluses.

**GLOBALIZATION** Issues such as energy supply, infrastructure, international division of labor and mobilization are still of crucial importance for a globalized society. For the TIC market, globalization entails opportunities and risks at the same time. Increasing liberalization efforts in markets strengthen global trade and open up opportunities to enter new markets. Worldwide supply chains render high-quality and globally uniform testing standards and certification services indispensable. On the other hand, the trend toward increasing regulation continues in emerging markets as well. Due to its strong international focus, TÜV Rheinland is already very well positioned to manage the demands of globalization and is increasingly focusing on the expansion of services for local markets.

**TECHNOLOGIZATION AND DIGITALIZATION** The advance of new information technologies is changing society as well as the global markets and products. Against the backdrop of this digital transformation, TÜV Rheinland ensures the quality, safety, and controllability of the technologies involved. The following market trends are of particular importance here:

- **INTERNET OF THINGS** Through the networking of technologies of everyday life with the internet, in the area of smart home solutions or industrial components and products, for instance, the physical and online worlds are converging. This presents sweeping new opportunities but also challenges for providers and consumers.
- **BIG DATA** Rapidly increasing use of the internet means that data providers are generating large volumes of data. The challenge is to make these quantities of data manageable while creating conditions that support profitable use of them.
- **IT SECURITY** Round-the-clock availability and transmission of data – with mobile payments, for instance, or data storage in the cloud or in industrial plants – provide a textbook case of the growing importance of IT security.
- **INTELLIGENT TRANSPORT SYSTEMS** The vehicles of tomorrow will drive autonomously, permit remote diagnostics and offer a host of systems for safety and comfort. Mastering and securing the communications infrastructure that this requires while at the same time ensuring transportation safety are central challenges for the mobility market.

**INDUSTRY 4.0** In the future, the shape of industrial production will be characterized by strong customization of products under conditions of highly flexibilized production. Under this form of hybrid production, complex data networks will link customers and suppliers with production along the entire value chain. Labor-intensive and monotonous activities in production are increasingly being performed by robots, and networking of machinery will increase. The resulting requirements in terms of the availability, functionality and security of data and networks will produce additional potentials.

**DEMOGRAPHIC CHANGE** TÜV Rheinland also views the demographic trend toward a globally aging population structure as an opportunity. In certain markets, such as health care and nursing care, an increase in demand for relevant services can already be seen.

**M&A ACTIVITIES / CONSOLIDATION IN THE MARKET** Consolidation trends continue in the market for technical services and especially in the TIC market. These trends are accelerating the transformation in the TIC market and offer companies the opportunity to acquire other companies that fit in with their core business.

The TÜV Rheinland AG Group provides products and services in the area of TIC for a variety of markets and industries worldwide. While global economic trends are important to TÜV Rheinland, they are not all-deciding, given the Group's diversification across indus-

tries and regional markets. In addition, the company is largely unaffected by specific developments in individual industries when it comes to mandatory inspections. At the same time, the following general economic and market-specific conditions in 2019 had an effect on TÜV Rheinland's business:

While the trend in the underlying macroeconomic conditions in 2019 remained an upward one, the situation deteriorated compared to previous years. One factor here is the decline in global economic growth. Although the business climate in the services sector has held steady to date, signs that the dynamics are in decline are also increasing. Most recently, the assessment for incoming orders in the services sector was less favorable. Because in some cases the economy developed very differently in the individual regional markets, the effects on the business of TÜV Rheinland must be analyzed by countries and regions.

In the 2019 financial year, the Greater China region, with growth of 8.2% and a share of revenue of 17.0%, again represented the main sources of revenue growth for the TÜV Rheinland Group. The share represented by the Asia Pacific and IMEA regions are significantly smaller, but in percentage terms they both managed to generate revenue increases in the double digits. By contrast, revenue was slightly lower in South and North America.

**EUROPEAN BUSINESS** TÜV Rheinland's European business posted positive development in the past financial year. Revenue growth outperformed conditions in the general economic environment. In the area of Periodical Technical Inspections, Germany, Spain and France show positive development. In Spain, the strategic acquisition of Certio strengthens the Spanish network of testing authorities, with ten locations in Catalonia and two on Menorca. Market liberalization in the Spanish region of Murcia also opens up new opportunities to expand the network of testing authorities there. Demand for driver's license testing remains high. The Driver's Licenses Business Field in the MOBILITY Business Stream is at the same level as last year and in the current financial year exceeded what was already a high number of examinations administered the previous year attributable among other things to former refugees. Despite the uncertainties in the UK as a result of BREXIT, TÜV Rheinland was able to increase its revenue in a difficult market environment.

**NORTH AMERICA** In the US, economic growth was slightly slower year-over-year in 2019. TÜV Rheinland's business had to cope with a slight decline in demand. In contrast to the United States and Mexico, the Canadian company achieved increased revenues.

**GREATER CHINA & ASIA PACIFIC** Against the backdrop of positive overall economic conditions in the regions of Greater China and Asia Pacific, TÜV Rheinland's business in those regions plays a significant role in the Group. Overall revenue growth in the Asia Pacific region is distributed relatively homogeneously across the individual countries, with particularly noteworthy revenue increases in Japan, Korea and Indonesia.

**SOUTH AMERICA** South America is experiencing only weak economic growth. With slightly positive indications in the investment-driven business in Brazil (infrastructure projects), revenue in South America held steady at the previous year's level.

As a globalized service company, the goal of TÜV Rheinland is to systematically strengthen its operations worldwide. The focus at TÜV Rheinland in this regard is particularly on expanding its operations in the markets in which the company can optimally enhance its competitiveness. The acquisition of Certo ITV, S.L.U. in Spain can be cited as an example of this in 2019. This enabled TÜV Rheinland to strategically expand its portfolio in Periodical Technical Inspections to include the regions of Catalonia and the Balearic Islands.

In its sector, the TÜV Rheinland AG Group ranks among the largest market participants. Overall, TÜV Rheinland views itself as extremely well positioned compared to the international competition, and is confident that it will succeed in further improving its position in the global TIC market.

Consumers' increased demand for information – in relation to production conditions, for instance, or a responsible approach toward the environment – can be met through transparency. Independent testing companies such as TÜV Rheinland play a crucial role in this connection, as they generate trust through certification and proof of testing in the areas of safety and quality. To optimize the comprehensibility of the testing approach, TÜV Rheinland provides the certificate database Certipedia, in which users can search online for details such as testing criteria or methods. TÜV Rheinland also offers a Customer Information System in which customers can transparently access important information on their order and its processing status. This close communication between customers and TÜV Rheinland improves efficiency for both sides.

Further advances in digitalization increase the risk of hacker attacks and cyber crime. The IT security experts at TÜV Rheinland provide support to companies with the "APT Defense Service" (APT: Advanced Persistent Threat), which encompasses a sensor-based review of network traffic. In addition, solutions are offered for the main security issues involved in networked production facilities, smart home systems or the still-increasing use of cloud data storage.

Legislatures have turned to measures such as the German IT Security Act or the EU Cybersecurity Directive in an attempt to counter the growing risk of cyber crime. These legal rules include obligations to comply with minimum standards with regard to IT security. In this context, TÜV Rheinland offers services worldwide that extend from strategic consulting and process optimization to implementation or certification of secure IT systems and telecommunications networks.

In addition to growth opportunities presented through advances in digitalization, other positive effects are also expected for the core business of TÜV Rheinland. Increased demands on the mobility market by intelligent transport systems present opportunities for expansion in TÜV Rheinland's business. Other growth opportunities are anticipated by means of system certification, product testing and inspections in the areas of energy and infrastructure through increasing demand for quality assurances along the supply chains.

## Corporate Management



The business strategy of the TÜV Rheinland AG Group defines the company's focus and goals for the coming years.

Profitable growth, reducing complexity, expanding scalable businesses, accelerating digitalization and retaining quality leadership are core elements of the current business strategy, TR+.

The area of corporate management relies on a group-wide management information and controlling system, creating cost and income transparency in all areas and thus contributing to a profitable earnings performance. Reporting is standardized worldwide and is based on the International Financial Reporting Standards (IFRS).

The annual focus is on financial targets and management figures, such as revenues, earnings before interest and taxes (EBIT) as well as requirements for optimized working capital management. The Group's value-oriented management is further strengthened by making these performance and management figures a fixed component of the executive-level compensation structure.

The Group's TR+ Strategy comprises several stages of development. First, based on environmental and strategy scenarios, a strategic thrust was developed that defines the underlying logic of the Group's strategy. The aim here is to ensure that TÜV Rheinland remains sustainable and successful in a TIC market characterized by continued consolidation and reaches the target vision it has set for itself for 2024. A portfolio analysis was also performed that analyzed the economic environment in the service segments, highlighting developmental trends and risk profiles and deriving forecasts for growth. Based on this, decisions were made as to the businesses in which TÜV Rheinland intends to operate, and how these businesses should be further developed, both individually and collectively, in the short and long terms. Finally, working along the direction of strategic thrust and based on the findings of the portfolio analysis, the strategies of all Business Streams and Business Fields were reviewed and, where necessary, revised.

TÜV Rheinland's target vision for 2024 is to be a major global provider in the industry. The Group will be sustainably profitable and independent, providing its customers with excellent services through a service portfolio that is slimmer than it is today. Areas of investment focus for organic and inorganic growth are on scalable services and measures to improve the qual-

ity and efficiency of service delivery. Investments in digitalization will continuously be at a higher level than before. The workforce will be prepared for increasing digitalization and will grow in spite of advances in automation.

In addition to these goals, the effort to protect the TÜV Rheinland brand and its reputation remain a top priority. The mission also remains to reduce the number of accidents in the TÜV Rheinland AG Group even further.

TÜV Rheinland's strategic thrust is rooted in strategic guidelines, four of which are particularly important and go to make up the Group's "strategy DNA."

**REDUCING COMPLEXITY** The current complexity in the AG Group is based, among other things, on a broad portfolio of services, a large number of companies and business units and an inhomogeneous process and system landscape across individual areas and regions. The broad portfolio in particular makes it difficult to make the most of economies of scale and a consistent digitalization of services and processes. TR+ Strategy will streamline the service portfolio, mainly through the sale or discontinuation of loss-making, critical or non-core services. The strategy will also reduce the complexity of the company's organizational structure. In this connection, the number of Business Streams has already been reduced from six to five, and the Business Fields of the former DIGITAL TRANSFORMATION & CYBERSECURITY Business Stream have been transferred to and integrated into other Business Streams. The "INDUSTRIAL SERVICES" Business Stream has been renamed "INDUSTRIAL SERVICES & CYBERSECURITY," and further consolidations within this Business Stream have been made to simplify the organizational arrangement.

**EXPANDING SCALABLE BUSINESSES** In the future, investments will be made mainly in businesses that offer the greatest scaling potential, meaning – to describe this in simplified terms – investing in services with high demand and/or major market potential. These potentials are seen across Business Streams, particularly in the case of inspections and laboratory testing. Major acquisitions are one effective way to achieve economies of scale. If corresponding opportunities present themselves in the market, they will be consistently pursued.

**ACCELERATING THE DIGITAL TRANSFORMATION** "Digitalization" means more than the mere development of new and digital business models. This also in-

cludes converting processes that are still analog into digital ones, and evaluating existing data to generate additional benefits from them – in the form of customer benchmarks, for instance. These topics will be the focus of future investments. The development of data-driven business models will certainly not go overlooked and will be furthered by appropriate means.

**RETAINING QUALITY LEADERSHIP** The positioning as a provider of high-quality services will be retained and expanded. Both customer requirements and strict in-

ternal requirements must be consistently met. For this purpose, service-performance processes will, wherever possible, be standardized and automated, and the understanding of the standard of quality in service performance advanced where necessary, with quality indicators – if not yet carried out – systematically introduced, recorded and used for management purposes. These measures will also contribute to risk reduction.

## Results of Operations

**GROUP REVENUE** Consolidated revenue (including inventory changes) of the TÜV Rheinland Group increased from €1,998.1 million in the previous year to a total of €2,085.1 million in the 2019 financial year; this represents an increase of €87.0 million. Of the total revenue, €972.3 million is attributable to foreign countries; this accounts for a 46.6% share of total revenue. Due to exchange-rate fluctuations, the table below shows, in addition to the revenues per Business Stream, currency-adjusted values, with intra-group revenues and central functions stated in a separate item:

### Revenue by Business Stream

| in € millions  | 2019           | 2019*          | 2018           |
|--|----------------|----------------|----------------|
| Industrial Services  | 0              | 0              | 513.3          |
| Industrial Services & Cybersecurity                        | 597.5          | 590.9          | 0              |
| Mobility   | 558.9          | 555.3          | 531.7          |
| Products   | 570.1          | 550.6          | 540.6          |
| Academy & Life Care  | 298.3          | 296.6          | 226.8          |
| Systems  | 221.1          | 215.0          | 212.3          |
| Digital Transformation & Cybersecurity                     | 0              | 0              | 121.8          |
| Miscellaneous (intra-group revenues and central functions) | - 160.8        | - 156.9        | - 148.3        |
| <b>Group revenues</b>                                      | <b>2,085.1</b> | <b>2,051.5</b> | <b>1,998.1</b> |

\* Revenues at constant exchange rates

If the DIGITAL TRANSFORMATION & CYBERSECURITY Business Stream, which was independent in the 2018 financial year (see PRESENTATION OF THE BUSINESS STREAMS), had been stated separately in the 2019 financial year, the resulting revenue would have been as follows.

| in € millions                          | 2019  |
|--|-------|
| INDUSTRIAL SERVICES                    | 545.7 |
| ACADEMY & LIFE CARE                    | 250.3 |
| DIGITAL TRANSFORMATION & CYBERSECURITY | 99.9  |

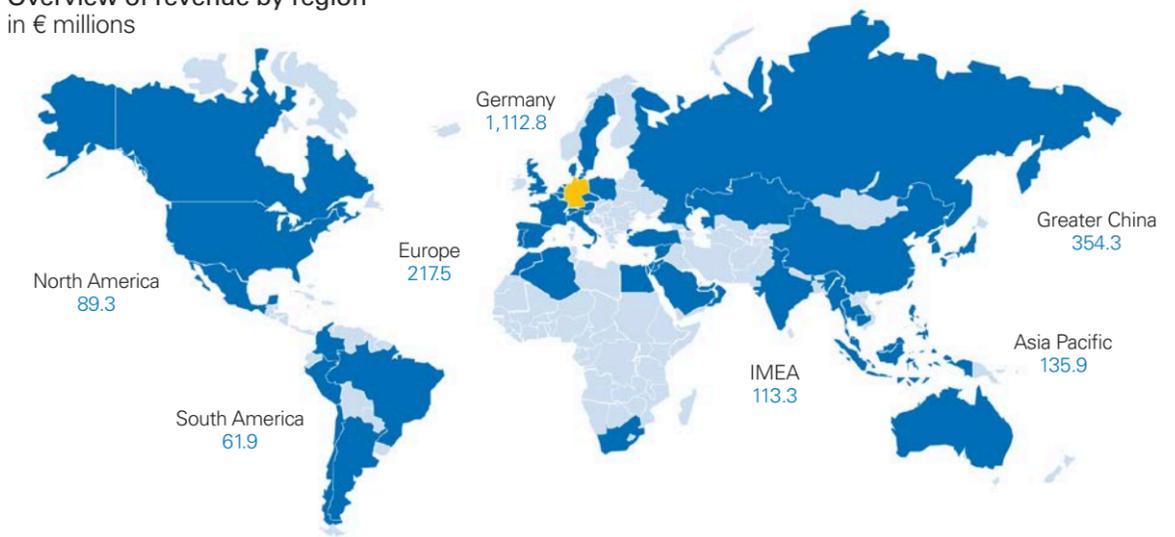
Most of the 4.4% year-over-year increase in total revenue is due to organic growth. Company acquisitions in the second half of 2019 contributed €5.1 million to revenue. If the acquisition date had been at the beginning of the reporting period, revenues totaling €20.7 million would have been recognized in the consolidated financial statements, with total revenues of €2,105.8 million achieved. The pre-tax return on sales in the 2019 financial year amounted to 5.7% (previous year: 6.2%).

**DOMESTIC REVENUE** Germany accounts for 53.4% of total revenue, managing to increase its revenue only slightly year-over-year. The €4.2 million year-over-year revenue increase in Germany is mainly attributable to the MOBILITY Business Stream.

**INTERNATIONAL** Revenue generated abroad totaled €972.3 million and was 9.3% higher year-over-year (previous year: €889.4 million). The Greater China region accounts for 17.0% of total Group revenue, followed by the regions of Western Europe with 8.6%, and Asia Pacific with 6.5%. The remaining regions each have a revenue share of less than 6.0%. The Greater China region recorded the largest absolute growth in foreign revenue, with €26.9 million, followed by the IMEA region at €23.6 million and Asia

Pacific with €20.3 million. Changes in currency exchange rates generated an €8.5 million increase in Group revenue in the 2019 financial year. The currencies that performed particularly positively were the US dollar, the Japanese yen and the Chinese yuan and this is reflected in total revenues. As in the 2018 financial year, the Argentine peso again had a negative impact on revenue in the current reporting year. The following presents a global overview of revenue by region, in € millions:

### Overview of revenue by region in € millions



**INDUSTRIAL SERVICES & CYBERSECURITY** This Business Stream generated the largest contribution to revenue, with €597.5 million, representing 28.7% of the entire TÜV Rheinland Group. The positive trend in the area of Electrical Engineering & Building Technology continued in the 2019 reporting year. Particularly noteworthy is the Industrial Inspection Business Field, which trended upward not only in Eastern Europe but also in South America as a result of an increase in major projects in the 2019 financial year. The Business Field recorded revenue growth of 62.1%. The Electrical Engineering & Automation Business Field increased revenue by 8.5% year-over-year and stood at a total of €120.5 million. The Energy & Environment Business Field generated a 7.5% increase in revenue year-over-year as well. Growth trends from international regions such as Greater China and Asia Pacific were additional drivers of a welcome boost in revenue throughout the entire Business Stream.

The continuing political and economic crisis in Brazil, which is accompanied by ongoing weak demand for

services in the infrastructure and civil engineering sectors, continued to present a challenge in the 2019 financial year. The Project Management & Cybersecurity Business Field fell short of revenue forecasts for 2019. The Business Field generated €65.1 million in revenue, €14.7 million shy of the previous year's figure. Business in the US continuously contracted; countermeasures did not fully materialize, and this led to an overall drop in revenue.

**MOBILITY** This Business Stream increased its revenues by €27.3 million year-over-year. Particularly in the Engineering & Type Approval Business Field, business grew significantly both nationally and internationally, with revenue growth of more than 19.0%. With annual revenue of €91.1 million, this Business Field made the second-largest contribution within the Business Stream. In addition to the increased demand in the area of Type Approval, the expansion of existing laboratories, together with the acquisition of international teams from competitors, significantly increased capacity, in Europe and Asia in particular. Also during

the 2019 financial year, a new service portfolio was developed and investment was made in laboratory infrastructure to meet customer needs relating to connected vehicles within the scope of “Global Internet of Things (IoT) – Wireless Testing and Certification.”

The largest Business Field, Periodical Technical Inspection, with a revenue contribution of €304.0 million, reported a 1.3% increase in revenue. Growth in Germany is accelerated particularly as a result of the franchise organization within the framework of the nationwide Service Campaign. Market presence in Latvia was further expanded by the construction of a new state-of-the-art, two-lane testing facility. In Spain, the strategic acquisition of Certio strengthens the Spanish network of testing authorities, with ten locations in Catalonia and two on Menorca. Market liberalization in the Spanish region of Murcia also opens up new opportunities to expand the network of testing authorities there. Demand in the Driver’s License Business Field remained at a high level in 2019.

Growth in the Car Services & Appraisal Business Field also remained encouraging. There was growth in the insurance business in particular. In addition to the established services, the service portfolio was expanded through acquisition of adomea GmbH (“Adomea” for short), the industry leader for mobile, automatic damage assessment. Regional expansion continued in the Rail area. New and long-term projects were acquired as well, both nationally and internationally.

**PRODUCTS** Revenue for this Business Stream increased again in the financial year under report, to €570.1 million, thus making the second-largest contribution to revenue across all of the Business Streams. Once again, the main drivers for this development were the Asia Pacific and Greater China regions. The largest Business Field, Electrical (testing of electronic products for safety and quality), with a revenue share of €209.2 million or 36.7%, achieved a year-over-year increase of 9.4%. Another encouraging development was the €9.0 million or 13.6% year-over-year increase in the Commercial Business Field, particularly in the US. Overall, there was a 5.5% year-over-year increase in revenues across all Business Fields.

Large segments of the revenue for the Softlines (testing of toys, cosmetics and textiles, among other things) and Hardlines (testing of furniture and household goods as well as mechanical products) Business Fields are at prior-year levels.

**ACADEMY & LIFE CARE** Revenue in this Business Stream totals to around €298.3 million. While the previous year saw lower revenues in Training and Education in Saudi Arabia and in Labor Market Services, the

Business Stream finished the reporting year 2019 on a positive note. The Training & HR Development Business Field generated €101.9 million in revenue, for a year-over-year increase of 18.0%.

Participation in tenders in the Labor Market Services & Private Schools Business Field also contributed to an increase in revenue, which increased by €5.7 million and stood at €74.2 million. The Academy business in Germany registered strong growth again in the 2019 financial year, following the very strong revenue trend the previous year, which was mainly the result of high demand for training and education around the EU GDPR. An encouraging development was that this growth was driven by a broad portfolio of seminars in the areas of electrical engineering, IT, fire protection, medical products and construction. The Digital Transformation Business Field fell short of revenue forecasts for 2019. The Business Field generated €48.1 million in revenue, €17.8 million shy of the previous year’s figure.

The Occupational Health & Safety Business Field continues to contribute to very positive development, with a solid revenue contribution of €74.2 million. There is increasing demand for the “Occupational Integration Management Plus” service.

**SYSTEMS** Revenue in this Business Stream was 4.2% higher year-over-year. The largest Business Field in revenue-share terms (62.5% within the Business Stream), Certification of Management Systems, reported €138.2 million in revenue in the 2019 financial year. This fell short of the previous year’s figure of €143.5 million, an amount that was characterized by a disproportionate revenue increase driven by revisions in standards (ISO 9001, IATF, among others) and hence an increased number of recertifications.

Revenue in the Customized Services Business Field (auditing based on internal rules and individual requirements of companies vis-à-vis suppliers and business partners) increased by 16.7% and stood at €47.5 million. A key driver of growth here was the successful expansion of strategically relevant services in the area of “Supply Chain Audits,” especially in the Greater China and Asia Pacific regions.

The Government Inspections & International Trade Business Field posted significant growth of 26.3%; revenue here increased by €7.4 million in the past financial year and totaled to €35.4 million. The IMEA region recorded the largest revenue increase. Due to the strong presence on the ground, to date its business has developed very positively within the framework of the new SALEEM approvals program in effect in Saudi Arabia.

There has been a positive revenue trend across all Business Streams over the past few years. In the period from 2017 to 2019, Group revenue increased by a total of 5.8%, representing an average increase of 1.9% per year.

**OPERATING RESULT (EBIT)** Operating result (EBIT) totaled to €135.6 million in the 2019 financial year; this fell slightly short of the previous year’s figure of €137.5 million. After adjusting for special items – including personnel and restructuring measures totaling €10.1 million, €8.8 million in effects from business combinations and a positive effect of €3.6 million from initial application of IFRS 16 – adjusted EBIT stood at €150.7 million. What follows is a presentation of the trend in operating result year-over-year:

| in € millions  | 2019         | 2018         |
|--|--------------|--------------|
| <b>Earnings before interest, taxes, depreciation and amortization (EBITDA)</b>       | <b>274.7</b> | <b>212.8</b> |
| Amortization of intangible assets and depreciation of property, plant, and equipment | - 139.1      | - 75.3       |
| <b>Operating result (EBIT)</b>   | <b>135.6</b> | <b>137.5</b> |
| Financial result   | - 16.8       | - 12.6       |
| <b>Earnings before income taxes</b>  | <b>118.8</b> | <b>124.9</b> |
| Taxes  | - 42.1       | - 39.8       |
| <b>Consolidated net income</b>   | <b>76.8</b>  | <b>85.1</b>  |

At €274.7 million, earnings before interest, taxes, depreciation, and amortization (EBITDA) for the financial year are 29.1% higher than the previous year’s total of €212.8 million.

The operating result and earnings before taxes are slightly below the previous year’s level. The overall EBIT margin for the 2019 financial year is 6.5% (previous year: 6.9%). On balance, the operating result of €135.6 million additionally includes income of €0.9 million from currency translation.

**INDUSTRIAL SERVICES & CYBERSECURITY** This Business Stream generated an EBIT of €58.1 million (previous year: €52.7 million). In the 2019 financial year, the Lifting Equipment & Machinery Business Field posted an EBIT of €18.3 million, roughly matching the prior-year level (previous year: €18.0 million). The Energy & Environment Business Field reported an increase of €2.0 million year-over-year, due in particular to the encouraging developments in the UK in light of an increase in incoming orders. Here, EBIT totaled to €5.9 million and was some 51.0% higher year-over-year. The Electrical Engineering & Automation Business Field even boosted its result year-over-year by €2.8 million, for a total of €23.8 million. The In-

dustrial Inspection Business Field generated an operating result of €2.6 million, for a €2.4 million increase over the previous year’s figure. Additional hires and employee training, along with targeted restructuring measures, had a reverse impact on the earnings trend, which would have been more favorable if not for these factors.

The Pressure Equipment and Project Management & Cybersecurity Business Streams did not manage to match the previous year’s figures and fell short of expectations. Countermeasures were not in a position to prevent the steadily contracting business in the US.

**MOBILITY** This Business Stream generated a result before interest and taxes that totaled to €39.6 million (previous year: €56.4 million). Consequently, the result was even lower than in the previous year. This was attributable to several factors: changes in market conditions, including market liberalization in Murcia, Spain; the trade dispute between the US and China; expansion of the regional network, and specifically the training of engineers to compensate for age-related employee redundancies; collective-agreement increases in Germany and also costs of developing new services. The most significant decline in EBIT was seen in the Periodical Technical Inspection Business Field. EBIT in this Business Field dropped by a total of 30.3% and stood at €23.1 million.

**PRODUCTS** This Business Stream continued to experience increasing demand, even though the earnings targets were not met in all markets. This Business Stream generated a result before interest and taxes in the amount of €85.6 million (previous year: €69.0 million), thus making the largest EBIT contribution in the TÜV Rheinland AG Group. Together, the Softlines and Hardlines Business Fields posted an increase in EBIT of 14.0% year-over-year, for a total of €22.8 million. Lack of growth in North America, weaker demand in China and high future investments in digital infrastructure and laboratories in the area of wireless-communications products stood in the way of reaching the high targets that had been set for EBIT growth. Overall, however, the entire Business Stream was able to improve its results by 24.1% over the previous year.

**ACADEMY & LIFE CARE** Albeit with a positive revenue trend compared to the previous year, the operating result for this Business Stream is short of expectations. The Academy business most recently in focus in India was significantly improved in fiscal year 2019 as a result of successful implementation of the restructuring project. The Training & HR Development Business Field was able to boost its EBIT year-over-year by €7.3 million, for a total of €12.1 million. EBIT for the Labor Market Services & Private Schools Business Field

improved by 92.9% year-over-year. The Occupational Health & Safety Business Field posted an EBIT of €8.7 million; this represents a 6.2% year-over-year improvement. It should be emphasized in particular that significant costs for the implementation of the strategy, such as for the further international expansion of technical vocational training, personnel certification and digital learning formats, placed downward pressure on the EBIT for this Business Field.

**SYSTEMS** In this Business Stream, EBIT was at the previous year's level of €22.4 million (previous year: €22.9 million). Although there was a decline in revenue in the Certification of Management Systems Business Field, an increase in earnings was recorded for the two other Business Fields. This was particularly significant and in excess of expectations in the Government Inspections & International Trade Business Field. EBIT in this Business Field totaled to €8.0 million and was some 66.5% higher year-over-year. In the Customized Services Business Field, strategic investments, particularly in the area of Supply Chain Audits, will not fully develop their positive impact on earnings until the years to come.

**REGIONS** In terms of regions, Greater China was able to increase earnings before interest and taxes by 10.9% to €64.2 million. EBIT for the Asia Pacific region even increased by 67.0% to €18.7 million. As a result of the political and economic challenges mentioned above, the regions of North and South America were unable to keep pace with the previous year's figures.

**PURCHASED SERVICES** Purchased services in the 2019 financial year totaled to €317.8 million; this is €5.8 million higher year-over-year.

**PERSONNEL EXPENSES** Personnel expenses increased by 5.9% compared to the previous year and totaled to €1,173.9 million. The average number of (full-time) employees increased to a total of 21,441 in the reporting year 2019, for an increase of 4.8% compared to the year prior.

**AMORTIZATION AND DEPRECIATION** Amortization of intangible assets and depreciation of property, plant, and equipment amounted to a total of €139.1 million and increased by 84.8% year-over-year as a result of initial application of the IFRS 16 accounting standard. Excluding amortization of right-of-use assets, amortization and depreciation stand at €84.5 million (previous year: €75.3 million).

**EXPENSES** Other expenses in the reporting year 2019 were 9.7% lower year-over-year and amounted to €391.9 million. This change is associated, among other things, with the initial application of IFRS 16 and the related shift between other operating expenses and amortization and depreciation.

**INCOME** Other income increased by €3.8 million and stood at €73.2 million. Other income mainly comprises currency exchange rate gains, income from services and income from the reversal of provisions.

**FINANCIAL RESULT** The negative financial result in the reporting year 2019 amounted to €16.8 million; all in all, this was €4.2 million higher than in the previous year. Interest expenses from financial liabilities amount to €10.6 million; this includes €3.6 million in interest expense from the initial application of accounting standard IFRS 16.

**TAXES** Earnings before income taxes were €118.8 million; this is €6.0 million lower than the prior-year value of €124.9 million. Income tax expense totals to €42.1 million for the financial year under report. The tax rate increased from 31.9% to 35.4%. The increase in income tax expenses is mainly attributable to greater losses for which no tax assets were recognized.

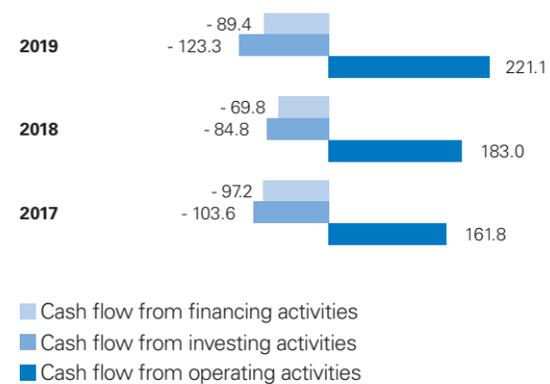
**CONSOLIDATED NET EARNINGS** Consolidated net earnings decreased by 9.8% and went from €85.1 million to a total of €76.8 million.

## Financial Position

TÜV Rheinland's financing activities are designed in such a way that sufficient liquidity is available at all times and all payment obligations can be fulfilled. In this context, the ongoing effective management of currency risk and interest-rate optimization was further enhanced in the 2019 financial year. One reason for this was, among other things, the long-term and sustained coverage of pension obligations, which totaled to €786.9 million as of December 31, 2019, thus representing 37.1% of total assets.

What follows is the trend in cash flow from operating activities as well as from investing and financing activities (see also "TÜV Rheinland at a Glance," page 31).

Cash flow  
in € millions



**CASH FLOW FROM OPERATING ACTIVITIES** During the financial year under report, the positive cash flow from operating activities, at €221.1 million, exceeded the previous year's value of €183.0, representing an increase of €38.1 million. Consolidated net income of €76.8 million was €8.3 million below the previous year's figure. This is offset, however, by €139.1 million in non-cash amortization and depreciation (previous year: €75.3 million). Furthermore, initial application of IFRS 16, with separate recognition of the repayments of leasing liabilities in financing activities, led to improved cash flow from operating activities year-over-year that totaled to 56.6 million. In addition, the acquisition of Certio in October 2019 made a positive contribution to the cash flow from operating activities. On the other hand, the increase in net working capital to 7.1% (previous year: 6.6%) had a negative impact on cash flow from operating activities.

**CASH FLOW FROM INVESTING ACTIVITIES** The negative cash flow from investing activities increased by €38.5 million year-over-year. €34.9 million in investments in financial assets and payments for acquisitions totaling €42.4 million were the cause of the increased capital expenditures in 2019. Payments of just €1.9 million were made for company acquisitions in the past financial year. Investments in property, plant and equipment and intangible assets in the reporting year amounted to €70.0 million, a total that is €21.0 million below the previous year's figure.

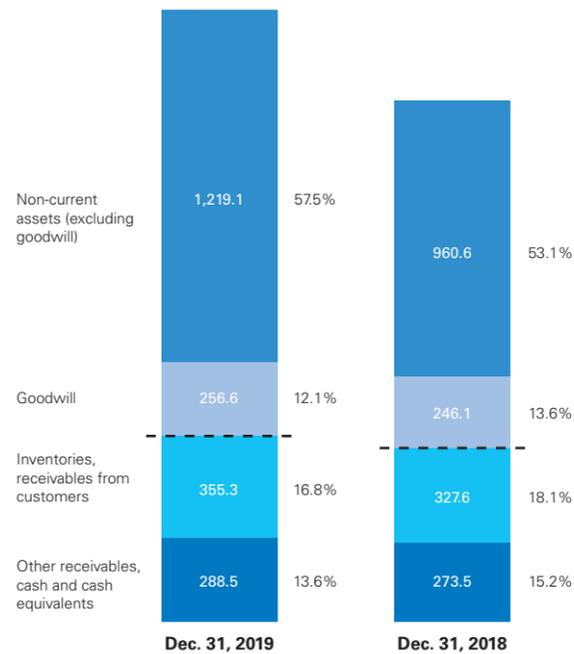
**CASH FLOW FROM FINANCING ACTIVITIES** The negative cash flow from financing activities totals to €89.4 million in the financial year under report, representing an increase of €19.6 million over the previous year. The increase is chiefly the result of €56.6 million in repayments of leasing liabilities within the meaning of IFRS 16, which are offset by lower repayments of bank liabilities compared to the previous year. The distribution of the dividend of €15.0 million to the shareholder also weighed on the cash flow from financing activities.

**CASH AND CASH EQUIVALENTS** As of the balance sheet date, cash and cash equivalents amounted to €200.1 million, a decrease of €19.3 million year-over-year. Restrictions affecting the availability of capital total to €107.7 million as of the balance sheet date of December 31, 2019.

To ensure its ongoing solvency, the TÜV Rheinland AG Group maintains extensive current and non-current lines of credit of €298.0 million. A total of €175.1 million of this amount was used as of December 31, 2019 (previous year: €180.3 million).

## Net Assets

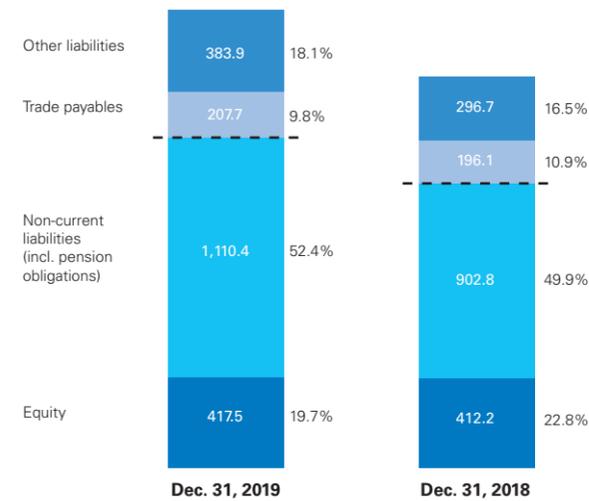
TÜV Rheinland Group's assets at a glance:



**NON-CURRENT ASSETS** Total assets were €311.7 million or 17.2% higher in the 2019 financial year and totaled to €2,119.5 million (previous year: €1,807.8 million). Non-current assets (excluding goodwill) increased by €258.5 million and stood at €1,219.1 million; the significant increase is attributable to the recognition of right-of-use assets in connection with IFRS 16. As a result of initial application of IFRS 16 as of January 1, 2019, right-of-use assets totaling €199.0 million were recognized in property, plant and equipment; of this amount, €181.0 million is attributable to lease obligations on land and buildings. During the ongoing 2019 financial year, additions to right-of-use assets totaling €44.9 million were recorded; this was offset by €54.6 million in current amortization and depreciation. Goodwill amounted to €256.6 million as of the balance sheet date of December 31, 2019 (previous year: €246.1 million), and accounted for 67.2% of intangible assets. The year-over-year change of €7.8 million in goodwill was mainly the result of company acquisitions. Total intangible assets increased by €59.8 million in connection with acquisitions.

**CURRENT ASSETS** Current assets increased by a total of 7.1% as of the balance sheet date of December 31, 2019, as a result of a higher level of trade receivables of €27.7 million and higher income tax receivables of €6.0 million. The contractual assets within trade receivables amounted to €78.5 million (previous year: €76.2 million), which is at the previous year's level. Cash and cash equivalents as of December 31, 2019, totaled to €200.1 million, which is 8.8% below the previous year's figure. The decrease in cash and cash equivalents is mainly due to disbursements related to acquisitions, in particular Certio in October 2019. The TÜV Rheinland AG Group paid a total of €45.4 million to acquire all shares in Certio.

TÜV Rheinland Group's liabilities at a glance:



**EQUITY** Equity increased by €5.3 million to a total of €417.5 million. Positive consolidated net income of €76.8 million is offset by a dividend distribution of €15.0 million to the shareholder TÜV Rheinland Berlin Brandenburg Pfalz e.V. and actuarial losses of €40.3 million from the valuation of pension obligations (previous year: €5.6 million). The equity ratio fell from 22.8% in the 2018 financial year to 19.7% in the current reporting year.

## Investments

The volume of investments during the 2019 financial year, not including corporate acquisitions, totaled to €70.0 million.

The TÜV Rheinland Group already increased its focus on its innovative capacity in 2018 and invested a total of €24.4 million in future and digitalization topics (such as wireless, cybersecurity or autonomous driving). In the 2019 financial year, the path taken continued with an investment volume of €15.1 million. Noteworthy in this connection are the expansion and strengthening of IT infrastructure and the acquisition of highly specialized testing software and technology. The One SAP on HANA project merits particular mention in this connection. One of the largest IT projects in recent decades is currently under way with the transition to the new application platform SAP S/4 HANA with the new in-memory database HANA.

**NON-CURRENT LIABILITIES** Within non-current liabilities, pension provisions rose from the prior-year value of €725.7 million to €786.9 million in the current financial year. Pension provisions thus account for 37.1% of total assets. Pension provisions are offset by an actuarial reserve quota in the form of reinsurance policies totaling €309.6 million. In addition to the 8.4% increase in pension liabilities, corresponding lease liabilities were recognized as of January 1, 2019, in connection with the accounting for right-of-use assets in compliance with IFRS 16. As of the balance sheet date of December 31, 2019, there were lease liabilities totaling €186.3 million, of which €137.5 million must be classified as non-current. The change in pension provisions and the initial recognition of lease liabilities are mainly responsible for the 23.0% year-over-year increase in non-current liabilities. Non-current liabilities to banks total to €119.5 million and decreased by €12.5 million year-over-year as a result of repayments.

**CURRENT LIABILITIES** Current liabilities increased by €98.6 million year-over-year. The increase is mainly the result of initial recognition of current lease liabilities in connection with IFRS 16, in the amount of €48.8 million as of the balance sheet date of December 31, 2019, increased trade payables totaling €11.6 million, higher current liabilities to banks of €6.2 million, a €4.1 million increase in income tax liabilities over the previous year and a €27.9 million increase in other liabilities.

In the future, all data will be kept in the main memory on a server. This permits real-time processing and more powerful evaluation of large amounts of data (big data). It also takes advantage of the opportunity to unify the global SAP landscape at TÜV Rheinland. Currently, the SAP landscape is physically concentrated in Cologne, but in terms of processes it is mapped in four different SAP clients. These are now being merged. In addition, both customer and supplier data, as well as the various country-specific charts of accounts in finance and accounting, are harmonized to create a global, uniform chart of accounts. Implementation of One SAP on HANA is an important prerequisite for the use of new technologies. What is known as "Wave 1" (the merger of two clients) was already successfully implemented during the 2019 financial year. The SAP S/4 HANA project will be completed during the 2020 financial year. The investment volume for

the HANA project totaled to €5.5 million during the reporting year.

In addition, the global Wireless Strategy 2020 comprises the worldwide provision of radio technology to the testing network. €11.5 million was invested for this purpose in the past financial year. With these investments, the TÜV Rheinland AG Group is further strengthening its position in the briskly expanding global IoT market.

In addition, €4.3 million was invested in the PRODUCTS Business Stream to implement a Digital Customer Platform (ComPASS).

The performance of the IT infrastructure was additionally strengthened, particularly through investments in improved hardware, targeted increases in server capacity and higher-performing telecommunications equipment.

In the MOBILITY Business Stream, there were also investments of €4.8 million in expanding and improving the level of equipment in the network of motor-vehicle testing authorities.

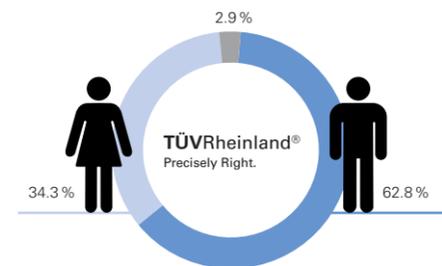
## Employees

As of the end of the year 2019, a total of 21,302 employees (full-time) or 22,093 employees (headcount) are employed at TÜV Rheinland AG Group. The average number of (full-time) employees in the reporting year is 21,441 employees; in a year-over-year comparison, this represents an increase of 991 employees or 4.8%.

Total staff (average)  
FTE



While 62.8% of the employees of TÜV Rheinland AG Group are male, the share of women is 34.3%. Due to legal restrictions, no gender information is provided for 2.9% of employees.



The average workforce size abroad stands at 12,359; this corresponds to a share of around 57.6%. The number of employees abroad increased year-over-year by 704 employees or 6.0%. The average number of employees in Germany increased from 8,795 to 9,082 during the financial year under report (+3.2%).

The change in the number of employees in Germany is mainly due to an increase in staffing in the central functions and in the MOBILITY and INDUSTRIAL SERVICES & CYBERSECURITY Business Streams. Spain (through the acquisition of Certio) and China are particular contributors to the increase in the numbers of employees abroad. This is offset by a decline in the ranks of employees in Central/Eastern Europe.

### Information in connection with the law mandating equal participation by men and women in management positions in the private sector and in civil service

Diversity is a focus in the sustainability strategy of TÜV Rheinland. In concrete terms, this means increasing the share of women in management positions within the Group to 15.0% in 2020 and to 20.0% of top management bodies internationally. We achieved both targets during the reporting year. The share of women in management positions is 16.0% (previous year: 16.6%), and 33.3% of the members of top management bodies internationally are women.

A quota of 25.0% was set for the proportion of women on the Supervisory Board of TÜV Rheinland AG by 2020. With 4 out of 16 posts filled by women, this

quota is met in 2019. The Supervisory Board has specified 20.0% as the proportion of women in the Executive Board at TÜV Rheinland AG. After the appointment of a new female member of the board in 2018, a quota of 25.0% and thus the target of 2020 has currently been achieved.

The target for the company's top level of management is 24.0% and must be reached by December 31, 2020. There is no second level of management set up at TÜV Rheinland AG.

Targets have been defined for the five German subsidiaries subject to quotas under the law mandating equal participation by men and women in management positions. These are set forth on the website: [www.tuv.com](http://www.tuv.com).

## Risk Management System and Corporate Governance

For a globally active company such as TÜV Rheinland AG, a comprehensive internal control system (ICS) – in relation to IT-assisted business processes and paired with effective and efficient risk management – is an indispensable control element which defines the framework for management and monitoring. The ICS is mainly intended to ensure compliance with statutory requirements, TÜV Rheinland-specific guidelines, and its corporate objectives. The primary goal of risk management is for the Executive Board to take appropriate measures to identify and evaluate, early on, the emergence of risk in the companies, so that appropriate precautionary, control and hedging measures, along with proactive countermeasures, can be initiated. A detailed description in the quality management system and explicit treatment in the management framework manual define the risk management process of the TÜV Rheinland Group. In addition, risks are shown as process characteristics in the sense of quality-management documents (Standard Operating Procedure (SOP)) in the Group-wide quality management system "EtQ." These documents are available around the world on the company's intranet. In addition, for a long time TÜV Rheinland AG has had an interdisciplinary risk unit in place consisting of the functions Audit, Finance & Accounting, Legal & Compliance, Quality Management, Human Resources, Accreditation & Certification and Insurance.

In keeping with international standards, the Corporate Sector Supervision and Transparency Act (KonTraG) requires the Executive Board to take suitable measures to ensure that developments which might pose a threat to the company's continued existence are made identifiable at an early stage. This requirement is taken into account by an effective ICS and by TÜV Rheinland's early risk warning system installed in the companies and Business Fields. In addition, internal Group Audit reviews the ICS of the global TÜV Rheinland companies based on a risk-oriented audit approach and internationally recognized audit standards. In addition, information derived from quarterly risk reporting by the Executive Vice Presidents is subject to detailed analysis in connection with the regions involved. Significant risks are also reported to the Executive Board on an ad hoc basis. Based on the information obtained, all of this information is then aggregated into a risk report, taking the matrix structure into account. This report is then appraised from portfolio and Group viewpoints. Risk determination is based on the areas of risk that are specific to TÜV Rheinland. These areas comprise the categories market/customer, processes, employees, finances, accreditations/standards/regulatory framework and miscellaneous. Risk quantification is based on the anticipated impact on earnings as well as the likelihood of the risk's occurrence. Additionally, the naming of planned countermeasures also represents a central component of the risk management process.

Dealing with risks is also a part of the ongoing reporting process. Reporting follows the requirements of the matrix structure and, in addition to regularly updating the economic outlook, also takes business-specific early indicators into account. This forms an essential foundation for recognizing risks as well as introducing and consistently pursuing specific efforts to avert possible damage to TÜV Rheinland. In the case of transactions that may have a significant impact on the performance of a Business Stream or Business Field, an approval process established worldwide provides transparency and reduces risk.

Risk management thus forms an integral part of the Group's standard planning, reporting, and control processes and is incorporated into the information and communication system at TÜV Rheinland AG. It is continuously enhanced and adapted to changing framework conditions. Risk management is therefore suitable for identifying risks at an early stage that pose a threat to the Group's continued existence and for taking appropriate countermeasures.

### Value Management and Business-Related Environmental and Social Factors

The TÜV Rheinland AG Group is committed to conducting itself in accordance with the principles of the UN Global Compact and the world group for testing, inspection and certification service providers, the TIC Council. Specifically, this entails explicit consideration of human rights, labor standards, the concerns of environmental protection and the fight against corruption as well as the implementation of these in practice.

TÜV Rheinland systematically continued its activities in regard to social responsibility and sustainability during the 2019 financial year. TÜV Rheinland manages the topics of "Corporate Social Responsibility (CSR)" and compliance on the basis of sustainability management and a compliance management system. The Sustainability Strategy 2020, which is linked to the corporate strategy, forms the substantive framework here; with its five areas – governance, sustainable human resource management, efficient energy and re-

The TÜV Rheinland Group abides by the basic principles of good corporate governance, which place a focus on the legal and practical framework of managing and monitoring the company. In particular, the Group utilizes a professional compliance management system that is designed with prevention in mind and sets the relevant framework for TÜV Rheinland. Specifically, this framework includes the Code of Conduct, a compliance guideline, a guideline for avoiding conflicts of interest and corruption, a guideline for donations and sponsoring, and an external helpline for matters concerning compliance. An active worldwide network of compliance officers has been established who are available to our employees as competent points of contact.

TÜV Rheinland is convinced that proper corporate governance is of great importance to its long-term success and that the implementation of and adherence to the corresponding guidelines play a key role in permanently strengthening the trust placed in the Group by all interest groups.

source consumption, social commitment, and service responsibility – it helps strengthen the key factors for success, thereby helping achieve the goal of becoming the world's best sustainable and independent service company in the field of testing, inspection, certification, consulting and training. The targets set for TÜV Rheinland in the areas of compliance, energy consumption, emissions, diversity, workplace health and safety, and society were at the root of the substantive continuation of the program for CSR and sustainability again in 2019. In addition, during the reporting year, the process of a materiality analysis was started, which essentially consists of recording and analyzing the requirements of internal and external stakeholder groups for TÜV Rheinland and a validation by the Executive Board of the key sustainability issues in which the analysis results. The materiality analysis provides the basis for the development of a new sustainability strategy beyond 2020.

## Opportunities and Risks

In connection with risk management, special attention is paid to opportunities and risks that are not explicit elements of planning. Important aspects result from TÜV Rheinland's global orientation and primarily relate to customers and markets as well as to legal and political framework conditions.

As part of our strategic planning, we regularly identify and evaluate the opportunities and risks that arise in our numerous Business Fields and act accordingly. Below we describe our main opportunities and risks. Unless otherwise stated, the opportunities and risks relate to all of our Business Streams.

As the sequence in which the opportunities are presented reflects the current assessment of the relative magnitude of the particular opportunities for TÜV Rheinland, this offers an indication of the current importance of these opportunities for us. The opportunities described are not necessarily the only ones that present themselves to us. Furthermore, our assessment of the opportunities is subject to change as the TÜV Rheinland Group, our markets and technologies continue to evolve. It is also possible that some of the opportunities we see today will never materialize.

**OPPORTUNITIES** TÜV Rheinland sees its opportunities in service innovations, in international growth, in the political and regulatory environment and in M&A activities.

**SERVICE INNOVATIONS** Opportunities remain linked primarily to service innovations in the individual Business Streams and Fields, for example through automation and digitalization. TÜV Rheinland drives innovation by investing in new technologies to develop sustainable solutions for our customers while strengthening our own competitiveness at the same time. The acquisition of Adomea, for instance, along with the associated expertise in the automated assessment of vehicle damage, represents a major step toward automation and digitalization. One of our goals is to be an innovative corporate group that constantly offers new service technologies that we expect will meet future demands that arise out of trends in demographic change, digitalization and globalization. The expansion of our digital customer platform will improve the availability of our customers' digital products and systems, thus increasing their productivity and efficiency. As part of our strategic orientation, TR+, we intend to access new markets and customers through targeted marketing and sales strategies in our operating companies. With this in mind, we are pooling our resources

and capabilities in view of these growth areas and continuing to develop them further. Investments in new laboratories, in energy and environmental services and in digital data security will continue unchanged from previous years. The institutionalized, close coordination between business-specific and regional expertise results in additional opportunities – for example, in identifying new fields of activity as well as the effective and efficient handling of cross-border projects. Furthermore, reducing complexity and increasing standardization in all Business Streams open up areas of potential. In addition to optimizations in sales and administration, this includes pooling operations across national borders and the use of innovative IT applications according to customer wishes. The opportunities presented by digitalization or Industry 4.0 are presented in the "Market-Specific Development" section (page 36 ff.).

**INTERNATIONAL GROWTH** Through sales initiatives and customer-oriented support, we continuously strive to expand our services in established markets. In addition, we are opening up new markets in the effort to gain a higher market share and generate higher profits. We also see great potential in the increased acquisition of major orders in international markets, such as the provision of support with infrastructure projects. The Greater China region remains a focused market for us, where the continuously expanded presence and a continuous diversification of the range of services we offer will continue.

**POLITICAL AND REGULATORY ENVIRONMENT** We see opportunities for improvement in the geopolitical environment that could quickly contribute to a more positive investment climate in industry, thereby boosting demand for our testing services. State-funded initiatives, such as in the area of infrastructure or digitalization, can also generate potential demand.

**M&A ACTIVITIES** As TÜV Rheinland, we continuously monitor our current and potential markets in view of opportunities for strategic mergers, acquisitions, shareholdings and partnerships we can leverage to complement our organic growth. Activities such as these can help us strengthen our position in our current markets, tap into new or undersupplied markets, or supplement our portfolio of services in strategic areas. For example, the strategic acquisition of Certio ITV, S.L.U., a Spanish firm for traffic safety and mobility, with a network of twelve testing centers in Catalonia and Menorca, further expanded our market presence. The previous presence of TÜV Rheinland in Catalonia with services from the fields of INDUSTRIAL SERVICES &

CYBERSECURITY and ACADEMY & LIFE CARE is now complemented by the Mobility business. This acquisition contributes to the growth strategy of our mobility business and strengthens our existing network of testing centers in Spain.

In the following, we describe risks that might adversely affect our business situation, net assets, financial position and results of operations and our reputation. The sequence in which the risks are presented within the four categories reflects the current assessment of the relative magnitude of the particular risks for TÜV Rheinland; this offers an indication of the current importance of these risks for us. Additional risks still unknown to us, or risks that we still consider insignificant, may also negatively impact our business activities and goals. Unless otherwise stated, the following risks relate to all of the TÜV Rheinland companies.

**STRATEGIC RISKS** We see increasing uncertainties in relation to the global economic outlook. Despite the recent easing of the trade dispute between the US and China, the main risk to the global economic cycle lies in a further escalation of the trade dispute between these two countries. The latest agreement between the United Kingdom and the European Union on a revised withdrawal agreement reduced the risk of a no-deal BREXIT. If the risk of a no-deal BREXIT should increase again, the mounting uncertainty for businesses, especially in the European Union (EU) and the United Kingdom, would reduce investment and thus impact demand for our testing services. A sustained period of reluctance to make investment decisions and award new contracts could have a negative effect on our testing business. Another business risk undoubtedly results from an abrupt slowdown in Chinese economic growth. The “coronavirus” that has spread worldwide in recent weeks and months affects the global economy and us as TÜV Rheinland (see, among other things, the forecast on page 55 ff.).

We also identify risks associated with significant changes made to the company’s structures, guidelines or management in the effort to improve our speed, agility or corporate culture. These risks include increased costs, missed financial or performance targets, loss of qualified personnel, loss of synergies and loss of trust on the part of our customers. We see risks that we may not be flexible enough to adapt our organization and manufacturing landscape to respond quickly to changing market conditions. Necessary restructuring might not be implemented to the planned extent and within the timeframe envisioned (e.g. due to local co-determination legislation); this could limit expected improvements on the cost side and lead to a loss of qualified personnel. At the same time, disputes with

local works councils can contribute to negative sentiment. We minimize risks such as these by planning any future measures and monitoring their implementation in detail, maintaining strict cost management and conducting ongoing discussions with all stakeholders.

Late issuance of accreditation, or its possible withdrawal, poses a risk for us as well. As the dam breach in Brazil demonstrated, focusing risk-prevention measures on the quality of services must be a central part of the company’s strategy. The point, not least, is to prevent negative repercussions for the reputation of the TÜV brand. In addition to this, in various markets, there is also the challenge of finding skilled workers in numbers sufficient to enable further innovation and growth or qualifying personnel while avoiding high rates of turnover. Particular mention should be made here of the continued difficulty of the search for occupational physicians in Germany and specialized engineers.

**FINANCIAL RISKS** The financial risks at TÜV Rheinland are divided into foreign-currency, interest-rate, translation and liquidity risks.

**FOREIGN-CURRENCY RISK** TÜV Rheinland is exposed to risks arising from changes in the rate of foreign exchange in the event that a TÜV Rheinland company enters into transactions with international contractual partners, or if loans are concluded within the Group or dividends are collected that result in future cash flows in foreign currencies that do not correspond to the functional currency of the respective TÜV Rheinland operating company. The foreign-currency risk is considered to be low, to a large extent, as the individual Group companies carry out their operating activities predominantly in their functional currency. The operating companies are not permitted to raise or invest funds in foreign currencies for speculative purposes. Intra-Group financing or investments by the TÜV Rheinland companies are preferably carried out in the respective functional currency or on a currency-hedged basis. Sensitivity analyses are always performed on the reporting date in the effort to identify possible risks at an early stage. In trade receivables and liabilities, an appreciation of the euro by 10% against all currencies as of the end of the reporting period would have only a minor effect on the result for the year and on equity capital.

**INTEREST-RATE RISK** Interest-rate risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate due to changes in the market interest rate. The risk occurs whenever the conditions around interest rates differ from those involving finan-

cial assets and liabilities. There is no doubt that there is a risk of interest rate changes in the pension obligations, which constitute the largest item in the consolidated balance sheet. We perform comprehensive, Group-wide management of interest-rate risks, where necessary with the use of derivative financial instruments, in the effort to manage the company’s interest-rate risk, interest income and interest expense. In the absence of country-specific regulations to the contrary, intra-Group financing takes the form of loans or intra-Group, fixed-interest clearing accounts. As of the reporting date, derivative financial instruments are of rather subordinate importance in terms of their volume and risk potential; a shift in the yield curve of +100 (-100) base points would change the market value of the interest-rate swaps by €+0.3 million (€-0.4 million).

**TRANSLATION RISK** Many TÜV Rheinland companies are located outside the eurozone. Because the euro is the reporting currency at TÜV Rheinland, TÜV Rheinland converts the financial statements of these companies into euros for the preparation of the consolidated financial statements. To take translation-related foreign-currency risks into account in risk management, it is generally assumed that investments in foreign companies are long term and that the results will be continuously reinvested. The effects of exchange-rate fluctuations in translating net asset positions into euros are recognized in the equity item of the consolidated financial statements of TÜV Rheinland.

**LIQUIDITY RISK** The liquidity risk for the company is that it will not be able to meet its financial obligations. As TÜV Rheinland, we follow a well-considered financing policy that focuses on a balanced financing portfolio, a diversified maturity profile and a comfortable liquidity cushion. We limit liquidity risk by implementing effective management of net current assets and cash and cash equivalents, through agreed lines of credit with highly rated financial institutions, and through a long-term promissory-note loan. In addition, we continuously monitor the financing opportunities on financial markets and observe trends in the availability and costs of the financing opportunities. An essential objective in this regard is to safeguard the financial flexibility of TÜV Rheinland while limiting repayment risks. Within the TÜV Rheinland Group, financing is provided through cash pooling and in-house banking.

**COMPLIANCE RISKS** As TÜV Rheinland, our global business is subject to different service- and country-specific regulations, laws and policies that influence our business activities and processes. We monitor the political and regulatory situation in all of our key

markets in order to anticipate potential problem areas with the aim of rapidly adapting our business activities and processes to changing conditions. Nevertheless, changes in regulations, laws and policies may adversely affect our business activities and processes, as well as our net assets, financial position and results of operations. TÜV Rheinland is and may continue to be confronted with different legal disputes or proceedings in different jurisdictions; ultimately, risks may arise both from the company’s own business activities and from external factors; in the case of breast implants of the French company Poly Implant Prothèse (PIP), for example, TÜV Rheinland is mentioned as the notified body in connection with conformity assessment procedures conducted pursuant to the European Medical Devices Directive. PIP continuously deceived the notified body TÜV Rheinland LGA Products GmbH (TRLP) by using, in some cases, a silicone gel for the production of the implants which was not approved for this purpose and was not covered by the certification by TRLP.

To date, the German courts have consistently confirmed that TRLP fulfilled the duties of a notified body responsibly and in compliance with all laws and legal norms applicable in Europe. In one case, the German Federal Court of Justice [Bundesgerichtshof – BGH] referred questions concerning the interpretation of the Medical Devices Directive to the European Court of Justice (ECJ) for a preliminary ruling. In its judgment of February 16, 2017, the ECJ essentially confirmed the legal position of TÜV Rheinland and found that a Notified Body does not have a general obligation to carry out unannounced inspections, to examine products and/or to view a manufacturer’s business records. Only if there are indications that a medical device does not meet the requirements set out in the Directive must the Notified Body follow up upon these indications. In the case of PIP, to date the German courts have always found that the Notified Body had not been presented with such evidence. On the basis of the ECJ’s replies, in its judgment of June 22, 2017, the German Federal Court of Justice [BGH] finally rejected the appeal. The judgment of the BGH is final. As a result, a number of other German courts of first and second instance have issued rulings in favor of TRLP.

TÜV Rheinland’s legal view was also declared correct in a judgment of the appellate court in Aix-en-Provence, France, handed down in 2015. The appellate court found that TRLP fulfilled its duties as the notified body in line with the applicable laws and norms and that the notified body had no indications of a lack of conformity. Other courts in France have repeatedly taken divergent decisions in the first instance, granting compensation claims to plaintiffs. TÜV Rheinland appealed against these decisions handed down by the

courts of first instance. The matter was considered for the first time by the top French civil court in 2018: In six decisions issued on October 10, 2018, the Court of Appeal in Aix-en-Provence held that the grounds for the 2015 decision were incorrect or inadequately justified in three respects, including one asserted by TÜV Rheinland and concerning the inadmissibility of a number of actions that had been brought. The French Supreme Civil Court referred the case to the Court of Appeals in Paris, which will rule on the plaintiffs' claims in the six proceedings, once all parties have re-submitted their arguments and evidence. TÜV Rheinland is confident that the previous line of the case law by the Court of Appeals in Aix-en-Provence will also be confirmed before the other courts of first and second interest dealing with the matter in France.

**OVERALL ASSESSMENT** Due to the integration of risk management into the management information system of TÜV Rheinland, risk is controlled by appropriate weighting consistently in all Business Streams and companies as well as at the Group level. Targeted countermeasures are undertaken comprehensively at an early stage to minimize risks. As the dam breach in Brazil demonstrated, focusing risk-prevention measures on the quality of services must be a central part of the company's strategy. The point, not least, is to prevent negative repercussions for the reputation of the TÜV brand. This applies not only to market, customer and competition issues but also to internal processes in particular, such as systematic integration following M&A transactions. Continuous tracking of measures and updating of risk reports in the course of the year are obligatory. The Executive Board has installed the risk management unit including the functions of Audit, Finance & Accounting, Legal & Compliance, Quality Management, Human Resources, Accreditation & Certification, and Insurance. Its task is to analyze and evaluate risks. In summary, it can be stated that, because all of the risks mentioned above can have an impact on the company's objectives and, accordingly, on the TR+ corporate strategy, these risks are continuously analyzed and assessed by the Executive Board with the help of the risk staff.

The impacts of the coronavirus create an overall risk situation for the TÜV Rheinland Group that is graver than it was a year prior. The Group addressed a potential liquidity risk with selective reductions in expenditures and the raising of new funds. At the moment, the TÜV Rheinland Group is financially well positioned to face this crisis. An important key figure in the context of the capital management of the TÜV Rheinland Group is the net financial position. This com-

pares cash and cash equivalents, which amount to €200.1 million as of the balance sheet date, and current financial assets against financial liabilities and totals to €26.0 million as of December 31, 2019. There are also firm commitments for lines of credit for TÜV Rheinland AG; these lines of credit have not yet been utilized. Programs of state support – reduced hours, for instance – are also being considered in the effort to take effective countermeasures against the effects of the coronavirus pandemic. Because the further course of the crisis is not foreseeable, a final risk assessment is not possible at this time. Nevertheless, at this point in time, there are no risks that could jeopardize the continuation of the business activities of the TÜV Rheinland AG Group as a going concern.

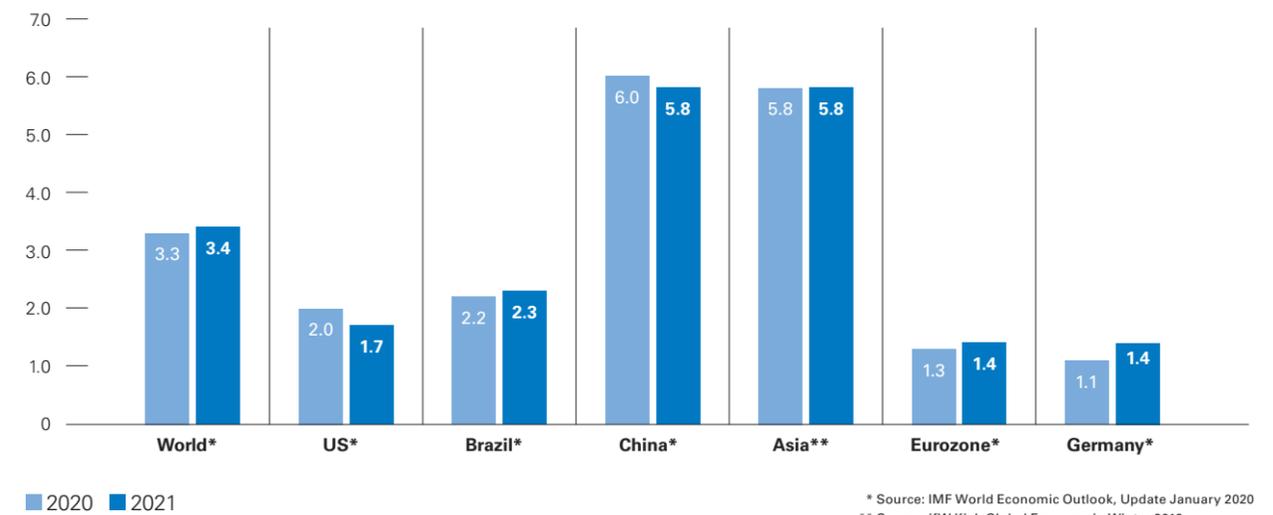
According to the forecasts of the IMF World Economic Outlook current as of January 9, 2020, the global economy is projected not to lose momentum in 2020 and 2021, but growth in production will remain subdued. Compared to 2019 (2.9%), the economic experts at the International Monetary Fund expect global gross domestic product to increase by 3.3% in 2020. This forecast is based on an improved market situation in conjunction with a stronger industry sector, a slight upturn in world trade and an easing of monetary policy. The positive news about US-China trade relations and the avoidance of a no-deal BREXIT also buttress a confident outlook. Last year, however, the estimate for this period actually stood at 3.6%. This downgrade reflects, on the one hand, negative effects in some of the emerging markets, in India in particular, and, on the other hand, it derives from increasing social unrest.

Beyond this, the downside risks remain clearly perceptible. Because this outlook does not yet account for the impacts of the current coronavirus crisis, it is subject to considerable uncertainty. The OECD, for instance, estimates that the spread of the virus could cut global economic growth in half compared to 2019. As of March 23, 2020, the International Monetary Fund even expects a global recession that will be at least as severe as the downturn experienced during the financial crisis more than a decade ago, and that this will be followed by a recovery in 2021. Further risks concern global trade disputes and climate change, which in the past has already led to environmental disasters of increasing frequency and intensity. Geopolitical tensions between the US and Iran that could affect global oil supply and weaken corporate investment also present a hazard.

As of January 9, 2020, growth in the advanced economies is projected to stabilize at 1.6% in 2020. Economic momentum in the US will continue to weaken in 2020

## Outlook

Global economic trend: Forecast through 2021  
(in %)



(2.0%) and 2021 (1.7 %). This is due to uncertainties in trade policy, the expiration of fiscal stimulus measures and the associated return to a neutral budgetary position. Growth in the Eurozone is expected to increase slightly in 2020, to 1.3%. Improvement in external demand is expected to lead to a strengthening of growth. With regard to Germany, given the decline in production and the diminished business prospects for companies, the question that arises is whether the economic downturn will lead to a recession. The economy is expected to recover in the course of 2020, however, with GDP set to increase by 0.6% year-over-year to 1.1% in 2020.

The coronavirus crisis means that the economic situation and the further outlook are significantly worse in the spring forecast as of March 19, 2020. Accordingly, IfW Kiel has updated its economic calculations under an assumption of two scenarios. One involves a "lockdown" of the German economy until the end of April, while the other assumes a "lockdown" through the end of July, followed by an economic recovery back to the level it previously held. Consequently, German gross domestic product will fall by 4.5% this year, assuming that the current stress situation continues through the end of April before gradually relaxing beginning in May. If the recovery does not commence until three months later, in August, German GDP is expected to fall by 8.7%.

For China, as of January 9, 2020, a further slight decline in growth is forecast for the following years. The planned partial withdrawal of previous customs duties and the pause in further increases in customs duties in connection with trade disputes with the US are positive signals, but these are overshadowed by the risks of the conflict and the need to strengthen domestic financial regulation in that country. In early 2020, Asia as a region was already harder hit by the coronavirus crisis than other regions of the world were at the time; the economic impact will be particularly pronounced in this region as well. The estimate is therefore highly uncertain. In Brazil, the adoption of the pension reform and the tapering-off of supply disruptions in the mining sector are providing a positive outlook. In the Middle East, the OPEC decision in December 2019 to extend funding cuts caused a slightly dampened outlook.

## Future Development of the TÜV Rheinland Group

The future development of the TÜV Rheinland Group is based on the TR+ strategic plan approved by the Executive Board in October 2019 and noted in support by the Supervisory Board in December 2019. It should be noted that the following expectations for the financial year 2020 with regard to the development of the TÜV Rheinland Group may differ from actual results. Partial targets have been derived from the strategic planning that extends to 2024; these have been incorporated into the forecast for 2020. Global economic development was analyzed, evaluated and taken into account when setting expectations for 2020. Below, briefly summarized, are the economic assumptions that had to be taken into account.

**GERMANY** Both positive and negative economic developments emerged in the closing months of the 2019 financial year. Retail and production data were positive. On the other hand, foreign trade and overall industrial orders were weak, the latter stemming mainly from an unusually small number of major orders. For the region of Germany, the TÜV Rheinland Group forecasts revenue growth of around 5% in the 2020 financial year, along with improved overall earnings. The increasing spread of the coronavirus during the first several months of the 2020 financial year weighs heavily on the German economy. The virus will result in lost production, reduced hours and unemployment for the German economy and place the state budget under considerable strain. For the TÜV Rheinland Group, the steps taken by the German federal and state governments are already resulting in significant declines in the ACADEMY & LIFE CARE Business Stream, where no more classroom instruction is offered, and in the MOBILITY Business Stream, where driver's license examinations in particular can no longer be administered as a result of the ban on contact. If, during the next few days or weeks, the numbers of infections continue to rise or if curfews are even imposed, further restrictions on our business activities must be expected.

**EUROPE** The slowdown in economic momentum in Europe last year was stronger than expected. The reason for this was, among other things, the heterogeneity of developments in the large European countries: in Germany, Spain, France, Italy and the United Kingdom. We expect growth to remain positive for the remaining area of the European Union, with a slight increase compared to 2019. The impact of the UK exit is assessed as minor for our business. The effects of the coronavirus can be clearly felt in Europe, too. In Europe, Spain and Italy rank among the countries hardest hit by the coronavirus pandemic in terms of the figures on infections and deaths. The number of in-

fections in France is also rapidly rising, with the economic consequences for Europe already being felt. Particularly in the countries of Spain and France, the TÜV Rheinland Group is strongly represented in the Periodical Technical Inspections business, but these inspections currently cannot be performed due to the current curfews.

**US** Economic development in the US is also viewed as weak for the coming 2020 financial year. The trade dispute between China and the US, which resulted in a reduction or non-increase in customs sanctions during the first phase of the negotiations, will not significantly affect development at the TÜV Rheinland Group forecast for 2020. The coronavirus pandemic is bringing public life to a standstill in the US as well. In the US, too, we are already seeing laboratory closures in various states; consequently, this region is also experiencing a decline in revenue and a negative impact on earnings.

**CHINA** The US-China agreement signed in January 2020 was a first step toward de-escalation in the trade dispute between the two global powers. The underlying conflict between the world's two largest economies remains unresolved, however, and is expected to resume no later than following the US elections on November 3, 2020. As a result of uncertainties surrounding long-term conditions for foreign trade, including the somewhat cautious course of economic policy in China, we at the TÜV Rheinland Group see the momentum for growth in 2020 as more restrained. The coronavirus erupted in China, but infection rates there now appear to be trending downward slightly. The curfew imposed in late February 2020 brought the Chinese economy to a halt. While it is still too soon to speak of "normalization" in China, China is slowly returning to normal everyday life. The People's Republic is an important sales market for German companies, and particularly for the testing services of the TÜV Rheinland Group. Today, China accounts for approximately 17.0% of Group revenue for the TÜV Rheinland Group. Already during the first two months of the 2020 financial year, the TÜV Rheinland AG Group recorded a €7.0-million decline in revenue for the Greater China region. Effective countermeasures by Chinese management minimized the impact on earnings during the first two months.

**EXCHANGE RATES** Changes in the exchange rates of major currencies remain a macroeconomic premise for the globally operating TÜV Rheinland Group in the 2020 financial year, one that we have taken into account to the best of our judgment in the forecast for 2020.

Viewed in global terms, prior to the coronavirus pandemic, we had targeted organic revenue growth of around 2% for the 2020 financial year. Foreign companies already account for more than 46.6% of Group revenue and will continue to expand their revenue share in 2020. Due to significant expenses for the further optimization of the existing organization and for the Group's various digitalization initiatives, prior to the coronavirus pandemic, we expected an EBIT margin of 6.0%-6.5% in 2020. As presented above for the various regions, the initial impact of the coronavirus pandemic on the trend in business for the entire TÜV Rheinland Group grew evident during the first several months of the 2020 financial year. A precise calculation of the economic impacts of the coronavirus pandemic is currently not possible. The overall extent of the impact of the virus for the 2020 financial year is largely a function of how long the current lockdown lasts, and of the subsequent question of how long it takes to return to the kinds of conditions seen before the lockdown, and whether a certain catch-up effect will occur afterwards. Under what from today's perspective must be considered a positive scenario, with a lockdown through the end of April 2020, we expect the TÜV Rheinland Group to experience a significant impact on revenue and earnings. The concrete impact on earnings also depends on the effectiveness of countermeasures and government support.

Of the twelve policies within our TR+ Group Strategy, four core policies in particular are fundamentally important to us as the TÜV Rheinland Group, as they buttress our central policies for the focus on sustainable, profitable growth. Simplicity, scalability, digitalization and quality are the focal points of this focus. Sustainable profitability and independence are indispensable to us as TÜV Rheinland Group, in our role as an efficient and digital provider of services worldwide. With regard to the five Business Streams at TÜV Rheinland, we expected the following development prior to the coronavirus pandemic:

**INDUSTRIAL SERVICES & CYBERSECURITY** In this Business Stream, based on the solid trend in Germany and driven by an upturn in demand for our services in South America and an expected double-digit rate of growth in Greater China, we expect continued clear growth at the previous year's level. Although macroeconomic developments are weakening in many relevant global markets for 2020, we see our position strengthened by initial successes in our optimization measures and capacity building in Germany on the revenue and earnings side. Thanks to closer dovetailing of our existing customers and projects with cyber-

security services, we expect increasing revenues in the Functional Safety and Cybersecurity Business Field for Germany and the Middle East. The regions of North and South America will focus on further stabilization and expansion of revenues. There is currently no indication of renewed, increased price pressure due to developments in the price of oil for existing and new major projects in this environment.

**MOBILITY** At TÜV Rheinland Group, we expect revenue growth in the upper-single-digit percentage range for the 2020 financial year. Particular contributions to this trend are seen in the Business Fields of Periodical Technical Inspection, Engineering & Homologation, and in further regional expansion in the Rail area. Due to the expenses incurred in the 2019 financial year in the areas of network expansion, infrastructure modernization and product development, we expect a significant increase in earnings in this Business Stream. The acquisition of Certio in Catalonia will make a significant positive contribution to earnings, with all efforts in the remaining Business Field of general inspections in Spain set to generate a return to a positive trend in margin. Furthermore, the acquisition of Adomea and the associated expertise in the automated recording of vehicle damage will contribute to increasing efficiency in the Car Services & Appraisal Business Field. The Business Stream will use a project to optimize management levels and management margins in the effort to make the cost structure competitive in the long term.

**PRODUCTS** All of the Business Fields in this Business Stream are expected to grow again in the 2020 financial year. This holds true for all of the regions. In addition to systematically building capacity, price adjustments will also lead to a significant improvement in margin in the Medical Business Field. With global introduction of the new CompPASS project-management software, we will achieve efficiency improvements, particularly in 2021 and the years thereafter. These are based not only on a uniform management system for projects but also on adaptation to globally standardized and harmonized processes. Once again, our efforts in the 2020 financial year will be focused on the digitalization, automation and consolidation of our laboratory locations. With external assistance, this Business Stream will implement an intense and focused program for structural and cost adjustment; this will to a clear and sustainable improvement in profitability in the years that follow.

**ACADEMY & LIFE CARE** In this Business Stream, we expect continued growth in sales volume worldwide in 2020. The focus for growth will remain on the areas of personnel certification, formats in digital learning and occupational health and safety services in Germany. In Saudi Arabia, on the other hand, we expect reduced numbers of students, leading to a significant reduction in revenues and just a small, positive margin. The revenue and earnings gap in which this results will be more than offset by positive developments in other regions, where marketing and visibility topics and active sales are being promoted to achieve corresponding growth there. An objective we will pursue parallel to this is that of strengthening our market position in selected regions and themes through inorganic growth.

**SYSTEMS** In this Business Stream, we intend to continue the positive trend of recent years for the year 2020 while consistently pursuing the growth strategy formulated for all Business Fields. In the Certification of Management Systems Business Field, growth potentials remain in the core portfolio (i.e. ISO 9001, ISO 14001, ISO 45001), but particularly in our strategic service segments in the automotive, food and feed industries as well as in auditing based on IT standards. There are also opportunities to be had through inorganic growth, particularly in the larger and high-growth economies. The focus in 2020 for growth in the Customized Services Business Field will remain on the Supply Chain Audits segment. Other strategic service segments are audit and inspection services in the Sport & Entertainment, Service Quality Automotive, eCommerce and Tourism areas. In the Government Inspections & International Trade Business Field, the very successful inspection business will be further expanded by establishing new government contracts and strengthening sales in exporting countries. Similar to the Products Stream, this Business Stream will implement a stringent cost-cutting program and make structural adjustments. Sport & Entertainment, Service Quality Automotive, eCommerce and Tourism areas. In the Government Inspections & International Trade Business Field, the very successful inspection business will be further expanded by establishing new government contracts and strengthening sales in exporting countries. Similar to the Products Stream, this Business Stream will implement a stringent cost-cutting program and make structural adjustments.

We expect the coronavirus pandemic to have a negative impact on the trend in business of the individual Business Streams. A precise estimate of the economic impacts of the coronavirus pandemic on the respective Business Streams is not possible at this point in time.

In sum, without taking the effects of the coronavirus pandemic into account, the TÜV Rheinland AG Executive Board anticipates a positive overall trend in revenue and earnings, spanning all of the Business Streams, for the 2020 financial year. To achieve a positive 2020 financial year under the current circumstances, we will continue to focus on our core markets and the future-focused sectors of the economy.

The outlook for the 2020 financial year as described in this report is subject to change in light of further developments in connection with the current coronavirus outbreak.

Cologne, Germany, March 30, 2020

### TÜV Rheinland Aktiengesellschaft The Executive Board

**Dr.-Ing. Michael Fübi**  
(Chief Executive Officer)

**Vincent Giesue Furnari**  
(Chief Financial Officer)

**Ralf Scheller**  
(Chief Operating Officer)

**Ruth Werhahn**  
(Human Resources, Law and Labor Relations Director)

## Consolidated Balance Sheet

| € thousands                                       | Dec. 31, 2019    | Dec. 31, 2018    |
|---|------------------|------------------|
| <b>ASSETS</b>                                     |                  |                  |
| Intangible assets                                 | 382,060          | 316,395          |
| Property, plant and equipment                     | 645,637          | 476,616          |
| Investments accounted for using the equity method | 2,902            | 2,712            |
| Other financial assets                            | 312,058          | 293,594          |
| Other assets                                      | 32,158           | 28,856           |
| Deferred tax assets                               | 100,885          | 88,577           |
| <b>Non-current assets</b>                         | <b>1,475,700</b> | <b>1,206,750</b> |
| Inventories                                       | 3,308            | 3,239            |
| Trade receivables                                 | 352,004          | 324,324          |
| Income tax receivables                            | 14,059           | 8,023            |
| Other receivables and other current assets        | 71,450           | 45,962           |
| Cash and cash equivalents                         | 200,135          | 219,470          |
| Assets classified as held for sale                | 2,816            | 0                |
| <b>Current assets</b>                             | <b>643,772</b>   | <b>601,017</b>   |
| <b>TOTAL ASSETS</b>                               | <b>2,119,472</b> | <b>1,807,767</b> |
| <b>EQUITY AND LIABILITIES</b>                     |                  |                  |
| Issued capital                                    | 35,000           | 35,000           |
| Capital reserves                                  | 23,802           | 23,802           |
| Other reserves                                    | 330,353          | 326,972          |
| Non-controlling interests                         | 28,369           | 26,380           |
| <b>Equity</b>                                     | <b>417,524</b>   | <b>412,154</b>   |
| Provisions for pensions and similar obligations   | 786,852          | 725,733          |
| Other provisions                                  | 25,325           | 19,149           |
| Liabilities to banks                              | 119,536          | 132,004          |
| Other liabilities                                 | 154,573          | 12,896           |
| Deferred tax liabilities                          | 24,246           | 13,008           |
| <b>Non-current liabilities</b>                    | <b>1,110,532</b> | <b>902,791</b>   |
| Provisions  | 93,363           | 91,612           |
| Income tax liabilities                            | 17,511           | 13,417           |
| Trade payables                                    | 207,673          | 196,109          |
| Liabilities to banks                              | 54,544           | 48,322           |
| Other liabilities                                 | 218,325          | 143,363          |
| <b>Current liabilities</b>                        | <b>591,417</b>   | <b>492,822</b>   |
| <b>TOTAL ASSETS</b>                               | <b>2,119,472</b> | <b>1,807,767</b> |

## Consolidated Statement of Comprehensive Income

| € thousands   | 2019             | 2018             |
|---|------------------|------------------|
| <b>Revenue</b>  | <b>2,085,009</b> | <b>1,998,121</b> |
| Inventory changes   | 94               | - 26             |
| Cost of purchased services  | - 317,765        | - 311,982        |
| <b>Total output</b>   | <b>1,767,338</b> | <b>1,686,112</b> |
| Personnel expenses  | - 1,173,862      | - 1,108,725      |
| Amortization of intangible assets and depreciation of property, plant and equipment | - 139,140        | - 75,281         |
| Other expenses  | - 391,944        | - 433,990        |
| Other income  | 73,217           | 69,392           |
| <b>Operating result (EBIT)</b>  | <b>135,609</b>   | <b>137,507</b>   |
| Interest income   | 7,978            | 7,066            |
| Interest expenses   | - 23,642         | - 18,171         |
| Other financial result  | - 1,115          | - 1,528          |
| <b>Financial result</b>   | <b>- 16,779</b>  | <b>- 12,633</b>  |
| <b>Earnings before income taxes</b>   | <b>118,830</b>   | <b>124,874</b>   |
| Income taxes  | - 42,054         | - 39,782         |
| <b>Consolidated net income</b>  | <b>76,777</b>    | <b>85,092</b>    |
| Thereof attributable to:  |                  |                  |
| TÜV Rheinland Aktiengesellschaft equity holders                                     | 65,322           | 76,126           |
| Non-controlling interests   | 11,454           | 8,966            |
| <b>Earnings per share (in €), undiluted and diluted</b>                             | <b>1,866</b>     | <b>2,175</b>     |

## Consolidated Cash Flow Statement

| € thousands  | 2019            | 2018            |
|--|-----------------|-----------------|
| <b>Consolidated net income</b>   | <b>76,777</b>   | <b>85,092</b>   |
| Amortization, depreciation, and impairment/Reversal of impairment of intangible assets and property, plant and equipment | 139,139         | 75,281          |
| Impairment/Reversal of impairment of financial assets  | - 1             | 0               |
| Change in non-current provisions   | 8,749           | - 13,961        |
| Change in deferred tax assets and deferred tax liabilities   | 17,327          | - 1,164         |
| Profit/Loss from the disposal of intangible assets and property, plant and equipment                                     | - 321           | 769             |
| Other non-cash income/expenses   | 81              | 1,447           |
| Change in inventories, receivables, and other assets   | - 50,082        | 6,514           |
| Change in liabilities and current provisions   | 29,445          | 28,995          |
| <b>Cash flow from operating activities</b>   | <b>221,114</b>  | <b>182,972</b>  |
| Payments for investments in  |                 |                 |
| Intangible assets and property, plant, and equipment   | - 70,008        | - 91,030        |
| Financial assets   | - 34,924        | - 18,749        |
| Shares in fully consolidated companies (less cash and cash equivalents taken over)                                       | - 42,439        | - 1,868         |
| Receipts from disposal of  |                 |                 |
| Intangible assets and property, plant, and equipment   | 7,369           | 10,474          |
| Financial assets   | 16,722          | 16,353          |
| <b>Cash flow from investing activities</b>   | <b>-123,280</b> | <b>- 84,821</b> |
| Payments to shareholders of TÜV Rheinland Aktiengesellschaft   | - 15,000        | - 15,000        |
| Payments to non-controlling shareholders   | - 8,190         | - 9,424         |
| Receipts from bank borrowings  | 13,714          | 4,500           |
| Payments from lending from banks   | - 23,308        | - 49,908        |
| Payments from repayments of leasing liabilities  | - 56,620        | 0               |
| <b>Cash flow from financing activities</b>   | <b>- 89,404</b> | <b>- 69,832</b> |
| <b>Change in cash and cash equivalents</b>   | <b>8,430</b>    | <b>28,320</b>   |
| Change in cash and cash equivalents related to currency translation and consolidation                                    | - 27,765        | - 2,776         |
| Cash and cash equivalents at beginning of period   | 219,470         | 193,926         |
| <b>Cash and cash equivalents at end of period</b>  | <b>200,135</b>  | <b>219,470</b>  |

## Independent Auditor's Report

The auditor, PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft, has audited the consolidated financial statements prepared by us – consisting of the Consolidated Balance Sheet as of December 31, 2019, the Consolidated Statement of Comprehensive Income, the Consolidated Statement of Changes in Equity and the Consolidated Cash Flows Statement for the financial year from January 1 to December 31, 2019, together with the Notes to the Consolidated Financial Statements, including a summary of significant accounting policies. The Group Management Report of TÜV Rheinland Aktiengesellschaft for the financial year from January 1 to December 31, 2019, was also audited. The content of our statement on corporate governance pursuant to Section 289f (4) of the German Commercial Code (disclosures on the women's quota) was not reviewed by the auditor.

Following the final results of the audit, we were issued an unqualified audit opinion.

# Limited Assurance Report of the Independent Auditor regarding Sustainability Information<sup>1</sup>

To the Executive Board of TÜV Rheinland AG, Cologne

We have been engaged to perform an independent limited assurance engagement on selected qualitative and quantitative sustainability disclosures in the chapter “CSR Report -Corporate Social Responsibility” in the Corporate Report 2019 (further: “Report”) for the period from January 1 to December 31, 2019 of TÜV Rheinland AG, Cologne (further: “TÜV Rheinland” or “Company”). It was not part of our engagement to review service related information, references to external information sources, expert opinions and future-related statements in the Report.

## Management’s Responsibility for the Report

The legal representatives of TÜV Rheinland are responsible for the preparation of the Report in accordance with the principles and standard disclosures of the Standards of the Global Reporting Initiative, in combination with internal guidelines, as described in the Report (further: “Reporting Criteria”).

The responsibility includes the selection and application of appropriate methods to prepare the Report and the use of assumptions and estimates for individual qualitative and quantitative sustainability disclosures which are reasonable under the circumstances. Furthermore, this responsibility includes designing, implementing and maintaining systems and processes relevant for the preparation of the Report in a way that is free of – intended or unintended – material misstatements.

## Independence and quality assurance on the part of the auditing firm

We are independent from the company in accordance with the requirements of independence and quality assurance set out in legal provisions and professional pronouncements and have fulfilled our additional professional obligations in accordance with these requirements. Our audit firm applies the legal provisions and profes-

sional pronouncements for quality assurance, in particular the Professional Code for German Public Auditors and Chartered Accountants (in Germany) and the quality assurance standard of the German Institute of Public Auditors (Institut der Wirtschaftsprüfer, IDW) regarding quality assurance requirements in audit practice (IDW QS 1).

## Practitioner’s Responsibility

Our responsibility is to express a conclusion based on our work performed on the information above within a limited assurance engagement.

We conducted our work in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): “Assurance Engagements other than Audits or Reviews of Historical Financial Information” and the International Standard on Assurance Engagements (ISAE) 3410: “Assurance Engagements on Greenhouse Gas Statements” of the International Auditing and Assurance Standards Board (IAASB). These standards require that we plan and perform the assurance engagement to obtain limited assurance whether any matters have come to our attention that cause us to believe that the information above for the period from January 1 to December 31, 2019, has not been prepared, in all material respects in accordance with the aforementioned Reporting Criteria. In a limited assurance engagement the evidence gathering procedures are more limited than in a reasonable assurance engagement and therefore significantly less assurance is obtained than in a reasonable assurance engagement. The choice of audit activities is subject to the auditor’s own judgement.

Within the scope of our work, we performed amongst others the following procedures:

- Inquiries of personnel on group level who are responsible for the materiality analysis in order to gain an understanding of the processes for determining material sustainability topics and respective reporting boundaries for TÜV Rheinland

- A risk analysis, including a media search, to identify relevant sustainability aspects for TÜV Rheinland in the reporting period
- Evaluation of the design and implementation of the systems and processes for the collection, processing and control of qualitative and quantitative sustainability disclosures included in the scope of this engagement, including the consolidation of the data
- Inquiries of personnel on group level responsible for providing the data and information, carrying out internal control procedures and consolidating the data and information
- Evaluation of selected internal and external documents
- An analytical review of the data and trend explanations submitted by all subsidiaries for consolidation at group level
- Assessment of local data collection and reporting processes and reliability of reported data via a sampling survey at the corporate headquarters in Cologne (Germany)
- An evaluation of the overall presentation of the selected qualitative and quantitative sustainability disclosures included in the scope of this engagement

## Conclusion

Based on our limited assurance engagement, nothing has come to our attention that causes us to believe that the selected qualitative and quantitative sustainability disclosures in the chapter “CSR Report -Corporate Social Responsibility” of TÜV Rheinland AG for the period from January 1 to December 31, 2019, published in the Corporate Report, are in all material respects not prepared in accordance with the Reporting Criteria.

## Restriction of use/AAB clause

This report is issued for purposes of the Executive Board of TÜV Rheinland AG, Cologne, only. We assume no responsibility with regard to any third parties.

Our assignment for the Executive Board of TÜV Rheinland AG, Cologne, and professional liability is governed

by the General Engagement Terms for Wirtschaftsprüfer and Wirtschaftsprüfungsgesellschaften (Allgemeine Auftragsbedingungen für Wirtschaftsprüfer und Wirtschaftsprüfungsgesellschaften) in the version dated January 1, 2017 ([https://www.kpmg.de/bescheinigungen/lib/aab\\_english.pdf](https://www.kpmg.de/bescheinigungen/lib/aab_english.pdf)). By reading and using the information contained in this assurance report, each recipient confirms notice of provisions of the General Engagement Terms (including the limitation of our liability for negligence to EUR 4 million as stipulated in No. 9) and accepts the validity of the General Engagement Terms with respect to us.

Frankfurt am Main, April 6, 2020

KPMG AG  
Wirtschaftsprüfungsgesellschaft  
[Original German version signed by:]

|   |   |
|---|---|
| <b>Glückner</b><br>Wirtschaftsprüfer<br>[German Public Auditor] | <b>Brokof</b><br>Wirtschaftsprüferin<br>[German Public Auditor] |
|---|---|

<sup>1</sup> Translation of the independent assurance report, authoritative in German language

## About this Report

In 2019, the TÜV Rheinland Corporate Report once again contains the Financial Report and the Sustainability Report. The Corporate Report is based on the internationally recognized IFRS and Global Reporting Initiative (GRI) reporting standards, the principles of the Global Compact, as well as the anti-corruption guidelines of the UN and Transparency International, and encompasses the consolidated companies that are also included in the consolidated financial statements.

The present TÜV Rheinland Sustainability Report was compiled in accordance with the GRI Standards: Core option. The GRI Content Index lists which GRI guideline criteria were used in TÜV Rheinland's 2019 Corporate Report. Our reporting activities are also carried out in accordance with the COP Advanced Level of the UN Global Compact.

The most recent previous Corporate Report was published in April 2018. The Corporate Report will continue to be published on an annual basis in the future.

Compared to the Corporate Reports from years past, a number of reductions have been made this year: Information about general developments and disclosures about the TÜV Rheinland Group are provided in this year's brochure "TÜV Rheinland compact" (see [www.tuv.com/corporatereport](http://www.tuv.com/corporatereport)) instead of as part of the Corporate Report. In addition, because reporting within the Sustainability Report is focused even more on the material topics defined for TÜV Rheinland, the text presented in the individual sections (in particular the section on 'Employees') is shorter as well.

### Methodology used in the Report

The reporting period is the 2019 financial year. If, at the time of publication, certain data for the year 2019 have not yet been presented (editorial deadline: March 30, 2020), comparable annual figures for 2018 will be used.

### Environmental indicators

#### German companies:

Nearly 90 locations were included in the reporting scope during the reporting year, accounting for approx. 68 percent of the employees in 2019. The data collected were then projected for the entire workforce in Germany, and the figures were rounded up or down. Headcount-based figures were applied for this purpose. Other bases for calculation are stated separately. Several figures were newly aggregated and calculated with average figures for the year. Although some details are lost in the process, it permits reliable long-term comparisons and goals to be formulated. Estimates and assumptions are identified as such.

#### Foreign subsidiaries:

To achieve global coverage of key figures relevant to environmental impact, data were collected from all the TÜV Rheinland regions. Each of the foreign subsidiaries with an environmental management system and/or more than 50 employees was considered at the company level. This resulted in data collection that allowed us to cover at least 58 percent (water consumption) for our foreign subsidiaries. With regard to key environmental figures (such as air travel and electricity consumption), the figures cover 67 percent and 82 percent of employees, respectively. The data collected were then projected for the entire workforce of the foreign subsidiaries, and the figures were rounded up or down accordingly. In this context, the annual average FTE (full-time equivalent) value was used. Other bases for calculation are stated separately.

### Workforce figures

Unless indicated as headcount figures, the disclosures concerning employee structure refer to FTE (full-time equivalents). Both types of disclosure represent closing-date disclosures (December 31, 2019), unless otherwise stated. The data collected cover around 99 percent of the total workforce. When collecting information about workforce age and nationality, the Group region of North America is excluded, as this information is not available for that region.

The chart of days spent in training and further education shows data reported for 2019 which was registered within the Group through February 4, 2020. E-learning sessions are not included in this figure.

## GRI Content Index

| GRI Standard and description            |   | Page reference in the Corporate Report and Web   | Comments   |
|---|---|--|--|
| GRI 100 Universal Standards             |   |  |  |
| GRI 101: Foundation GRI 101: Foundation |   | 66   |  |
| GRI 102: General Disclosures            |   |  |  |
| <b>Organizational Profile</b>           |   |  |  |
| 102-01                                  | Name of the organization  |  | TÜV Rheinland AG   |
|   |   | 33 – 34<br>TÜV Rheinland compact<br><a href="http://www.tuv.com/corporatereport">www.tuv.com/corporatereport</a> ,<br><a href="http://www.tuv.com &gt; About us">www.tuv.com &gt; About us</a> |  |
| 102-02                                  | Activities, brands, products and services   |  |  |
| 102-03                                  | Location of organization's headquarters   |  | Am Grauen Stein, 51105 Cologne, Germany  |
| 102-04                                  | Location of operations  | 38<br><a href="http://www.tuv.com &gt; About us &gt; Facts and Figures">www.tuv.com &gt; About us &gt; Facts and Figures</a>   |  |
| 102-05                                  | Nature of ownership and legal form  | 74 – 75  |  |
| 102-06                                  | Markets served  | 35 – 37<br><a href="http://www.tuv.com &gt; About us &gt; Facts and Figures">www.tuv.com &gt; About us &gt; Facts and Figures</a>  |  |
| 102-07                                  | Scale of the organization   | 11, 45 – 46<br>TÜV Rheinland compact<br><a href="http://www.tuv.com/sustainability &gt; CSR &amp; sustainability">www.tuv.com/sustainability &gt; CSR &amp; sustainability</a>                 | The workforce figures are not subject to seasonal variations. 84% of our workforce comprises permanent employees. 66% of those permanent employees are male. 57% of the employees with fixed-term employment contracts in each region is as follows: D – 90.4%; WE – 95.8%; CEE – 99.9%; AP – 98.3%; GC – 46.2%; NA – 100%; SA – 100%; IMEA – 93.9%. 94.4% of men and 81.3% of women in the Group work on a full-time basis. |
| 102-08                                  | Information on employees and other workers  | 11, 14 – 16, 66  | A complete description of the supply chain is available in Corporate Report 2016, page 34.   |
| 102-09                                  | Description of the supply chain   | 9  |  |
| 102-10                                  | Significant changes to the organization's size, structure, ownership              | 40 – 45  |  |
| 102-11                                  | Precautionary Principle or approach   | 7, 26, 49 – 54   |  |
| 102-12                                  | Participation in and endorsement of external charters, principles and initiatives | 2, 5, 50<br>TÜV Rheinland compact<br><a href="http://www.tuv.com/corporatereport">www.tuv.com/corporatereport</a>  |  |
| 102-13                                  | Membership or associations  | 2, 5, 6  |  |
| <b>Strategy</b>                         |   |  |  |
| 102-14                                  | Statement from senior decision-maker  | 1  |  |

| GRI Standard and description   | Page reference in the Corporate Report and Web  | Comments   |
|--|---|--|
| 102-15 Key impacts, risks and opportunities  | 2, 4 – 6, 17 – 22, 26 – 28, 51 – 54   |  |
| <b>Ethics and integrity</b>  |   |  |
| 102-16 Values, principles, standards, and norms of behavior                          | 2, 7 – 8, 49 – 54, TÜV Rheinland compact, <a href="http://www.tuv.com/corporatereport">www.tuv.com/corporatereport</a>  |  |
| <b>Management</b>  |   |  |
| 102-18 Governance structure of the organization                                      | 14 – 16, 74 – 75  |  |
| <b>Stakeholder engagement</b>  |   |  |
| 102-40 List of stakeholder groups  | 3   |  |
| 102-41 Employees covered by collective bargaining agreements                         |   | The compensation for about 74% (per-capita disclosures as of December 31, 2019) of our employees in Germany (excluding temporary employees, interns, employees in limited part-time employment, retirees) is subject to a collective bargaining agreement. |
| 102-42 Basis for identification of stakeholder groups                                | 3, 26   |  |
| 102-43 Engagement of stakeholder groups  | 2 – 6, 26   |  |
| 102-44 Key topics and concerns raised  | 3, 26   |  |
| <b>Reporting practice</b>  |   |  |
| 102-45 All entities included in the organization's consolidated financial statements | <a href="http://www.tuv.com/sustainability">www.tuv.com/sustainability</a> > <a href="#">CSR &amp; sustainability</a>   |  |
| 102-46 Process for defining report content   | 2 – 6   | For guidance in defining the report content, we relied on the key areas of activity of the Sustainability Strategy 2020, which is based on a stakeholder survey.   |
| 102-47 List of material topics   | 4 – 6   |  |
| 102-48 Effects of any re-statements of information                                   | 66  |  |
| 102-49 Changes in the scope, boundary or measurement methods                         | 66  |  |
| 102-50 Reporting period  | 66  |  |
| 102-51 Date of most recent previous report   | 66  |  |
| 102-52 Reporting cycle   | 66  |  |
| 102-53 Contact point   | <a href="http://www.tuv.com/sustainability">www.tuv.com/sustainability</a> > <a href="#">CSR &amp; Sustainability</a> > <a href="#">Contacts</a> > <a href="#">CSR &amp; Sustainability</a> |  |
| 102-54 Claims of reporting in accordance with the GRI Standards                      | 66  |  |
| 102-55 GRI Content Index   | 67 – 73   |  |
| 102-56 External assurance of the report  | 64 – 65   |  |
| <b>GRI 103: Management Approach 2016</b>   |   |  |
| 103-1 Explanation of the material topics and their boundaries                        | 5, 6  |  |
| 103-2 The management approach and its components                                     | 2, 4 – 5, 7 – 10, 11, 13 – 14, 16 – 17, 19, 23, 26 – 27   | The references relate to the management approaches to CSR, governance, employees, environment, society and service responsibility  |

| GRI Standard and description   | Page reference in the Corporate Report and Web          | Comments  |
|--|---|---|
| 103-3 Evaluation of the management approach                                      | 2, 4 – 5, 7 – 10, 11, 13 – 14, 16 – 17, 19, 23, 26 – 27 | The references relate to the management approaches to CSR, governance, employees, environment and service responsibility.                         |
| <b>GRI 200 Economics</b>   |   |   |
| <b>GRI 201: Economic Performance</b>   |   |   |
| 201-1 Direct economic value generated and distributed                            | 23 – 25, 31 – 32, 40 – 49, 60                           |   |
| 201-3 Coverage of the organization's defined-benefit plan obligations            | 45, 61  |   |
| <b>GRI 202: Market Presence</b>  |   |   |
| <b>GRI 203: Indirect Economic Impacts</b>  |   |   |
| 203-2 Significant indirect economic impacts, including the extent of impacts     | 2 – 3, 6  |   |
| <b>GRI 204: Procurement Practices 2016</b>                                       |   |   |
| <b>GRI 205: Anti-corruption</b>  |   |   |
| 205-1 Business units analyzed for risks related to corruption                    | 8 – 9   |   |
| 205-2 Percentage of employees trained in anti-corruption policies and procedures | 8   |   |
| 205-3 Incidents of corruption and actions taken                                  |   | Due to the relative informative value, there is no separate preparation and recording of compliance-related violations with regard to corruption. |
| <b>GRI 206: Anti-competitive Behavior</b>  |   |   |
| 206-1 Legal actions for anti-competitive behavior                                |   | To our knowledge, there were no significant legal actions for anti-competitive behavior during the reporting year.                                |

| GRI Standard and description  |  | Page reference in the Corporate Report and Web | Comments   |
|---|--|--|--|
| <b>GRI 300 Environment</b>  |  |  |  |
| <b>GRI 301: Materials</b>   |  |  |  |
| 301-1   | Materials used   | 20 – 22  |  |
| <b>GRI 302: Energy</b>  |  |  |  |
| 302-1   | Energy consumption within the organization                       | 19 – 22  | We do not indicate any differentiation between renewable and non-renewable sources. The conversion factors used in the calculations derive from different sources, including thinkstep.  |
| 302-3   | Energy intensity   | 19 – 21  |  |
| 302-4   | Reduction of energy consumption                                  | 19 – 22  | The following sources of energy were taken into consideration: Electricity, fuels for cars (diesel, gasoline) and aircraft (kerosene), natural gas, heating oil, wood pellets, district heating.   |
| <b>GRI 303: Water</b>   |  |  |  |
| 303-1   | Total water withdrawal   | 19, 21   | Specific information on water sources is not available. However, we assume that the total volume of water used by TÜV Rheinland AG was drawn from the water system of the local water supplier and therefore cannot be classified more specifically.<br><br>As a service provider our business activities do not harm the environment any more than other urban development areas. |
| <b>GRI 304: Biodiversity</b>  |  |  |  |
| The GWP factors used for 305-1 to 305-5 come from: <a href="http://ow.ly/ZgdPG">http://ow.ly/ZgdPG</a> . Our business activities produce only CO <sub>2</sub> emissions but no other relevant greenhouse gas emissions. |  |  |  |
| <b>GRI 305: Emissions</b>   |  |  |  |
| 305-1   | Direct greenhouse gas emissions – Scope 1                        | 22   | Direct greenhouse gas emissions according to Scope 1 amounted to 3,734 t CO <sub>2</sub> in the reporting year. Breakdown of Scope 1 emissions: a) from natural gas (global): 2,982 t CO <sub>2</sub> ; b) from heating oil (global): 752 t CO <sub>2</sub> .  |
| 305-2   | Indirect greenhouse gas emissions – Scope 2                      | 22   | Indirect greenhouse gas emissions according to Scope 2 amounted to 49,921 t CO <sub>2</sub> in the reporting year, thereof from electricity (global): 46,594 t CO <sub>2</sub> and from district heating (global): 3,327 t CO <sub>2</sub> .   |
| 305-3   | Other indirect greenhouse gas emissions – Scope 3                | 22   | Indirect greenhouse gas emissions according to Scope 3 amounted to 34,834 t CO <sub>2</sub> in the reporting year.   |
| 305-4   | Intensity of greenhouse gas emissions                            | 19 – 22  |  |
| 305-5   | Reduction of greenhouse gas emissions                            | 19 – 22  | Reductions were made in Scope 1 (direct) and 2 (indirect).<br><br>When compared with classical industrial companies, we only produce negligible quantities of wastewater and waste in the provision of our services; that waste and wastewater is properly removed and disposed of.  |
| <b>GRI 306: Effluents and Waste</b>   |  |  |  |
| <b>GRI 307: Environmental Compliance</b>  |  |  |  |
| 307-1   | Fines for non-compliance with environmental laws and regulations |  | To our knowledge, there were no such significant breaches and resulting fines across the entire Group in the reporting year.   |

| GRI Standard and description                      |  | Page reference in the Corporate Report and Web | Comments  |
|---|--|--|---|
| <b>GRI 308: Supplier Environmental Assessment</b> |  |  |   |
| <b>GRI 400 Social</b>                             |  |  |   |
| <b>GRI 401: Employment</b>                        |  |  |   |
| 401-1   | Employee turnover  | 13   | Regional turnover rates: WEU – 14.1 %; CEE – 18.0 %; AP – 14.6 %; GCN – 15.1 %; NAM – 28.8 %; SAM – 48.8 %; IMA – 26.2 %.   |
| <b>GRI 402: Labor/Management Relations</b>        |  |  |   |
| 402-1   | Minimum notice periods regarding operational changes       |  | Pursuant to statutory regulations (§§ 111, 112 German Labor-Management Relations Act [BetrVG]), in Germany the responsible works council is fully informed on a timely basis about planned operational changes which might result in significant disadvantages for the workforce or for significant parts of the workforce, and the works council is consulted regarding the planned operational changes.   |
| <b>GRI 403: Occupational Health and Safety</b>    |  |  |   |
| 403-1   | Workforce representation in health and safety committees   |  | We monitor the effectiveness of our occupational safety measures through, among other things, a network of business unit-related safety committees in Germany and abroad through safety committees at the corporate subsidiary level. All of our employees in Germany are represented by these safety committees.<br>In the reporting year, the safety committees were amended by topics regarding environmental protection. Committee meetings were usually held once per quarter. The effectiveness is checked by Inspections and audits as well as monthly HSE Calls at regional and global level. |
| 403-2   | Injuries, occupational diseases and work-related accidents | 18   | There were no reports of occupational diseases in the Group during the reporting year. Records do not differentiate between men and women.  |
| <b>GRI 404: Training and Education</b>            |  |  |   |
| 404-1   | Training and education                                     | 13   | All of our employees have access to training and continuing education. Differentiation between men and women or between employee categories is of no relevance.<br>In addition, days of training and education outside of Germany are not systematically recorded. For that reason, the average number of training and education hours per employee Groupwide cannot be determined.   |

| GRI Standard and description  | Page reference in the Corporate Report and Web   | Comments   |
|---|--|--|
|   |  | During the financial year under report, management feedback was performed for all employees who work in the service functions. The rate of participation was around 79%.   |
|   |  | Our employees worldwide have the opportunity to discuss their career development and collaboration in a structured employee review with their supervisor – sometimes complemented by a target agreement/ performance assessment review. Because the system landscape in which completed employee appraisals are entered is diverse, we cannot maintain records on an international level of the proportion of employees who have taken part in these appraisals. |
| 404-3 Regular performance and career development reviews              | <a href="http://www.tuv.com">www.tuv.com</a><br>> Careers ><br>> Professionals ><br>> Development & Career |  |
| <b>GRI 405: Diversity and Equal Opportunity</b>                       |  |  |
| 405-1 Composition of governance bodies and total workforce            | 14 – 15, 74 – 75   | Three members of the Executive Board are male, one female. All members of the Executive Board are German. One member is between 30 and 50 years old, and three members are over 50 years of age.   |
| 405-2 Equal remuneration for women and men                            |  | At TÜV Rheinland, an employee's wage is oriented to the employee's work activities, qualifications, and professional experience.   |
| <b>GRI 406: Non-Discrimination</b>                                    |  |  |
| 406-1 Incidents of discrimination and corrective actions taken        |  | During the reporting year, an action for discrimination was brought against a TÜV Rheinland company in Germany. The proceedings ended with the termination of the employment relationship by means of a settlement. The settlement explicitly stated that there are no claims for reimbursement on grounds of discrimination/bullying. The person who brought the complaint is now employed in another TÜV Rheinland company.                                    |
| <b>GRI 407: Freedom of Association and Collective Bargaining 2016</b> |  |  |
|   |  | With regards to labor standards we adhere to the applicable legal requirements, and the topic is an integral part of our internal guidelines.  |
| <b>GRI 408: Child Labor 2016</b>                                      |  |  |
|   |  | Based on the knowledge available to date, human rights issues are relevant for only a small portion of our business activities. Nevertheless, we adhere to the applicable legal requirements, and the topic is an integral part of our internal guidelines.  |
| <b>GRI 409: Forced or Compulsory Labor</b>                            |  |  |
|   |  | Based on the knowledge available to date, human rights issues are relevant for only a small portion of our business activities. Nevertheless, we adhere to the applicable legal requirements, and the topic is an integral part of our internal guidelines.  |
| <b>GRI 410: Security Practices 2016</b>                               |  |  |

| GRI Standard and description  | Page reference in the Corporate Report and Web             | Comments   |
|---|--|--|
| <b>GRI 411: Rights of Indigenous Peoples 2016</b>                                     |  |  |
|   |  | Based on the knowledge available to date, human rights issues are relevant for only a small portion of our business activities. Nevertheless, we adhere to the applicable legal requirements, and the topic is an integral part of our internal guidelines.  |
| <b>GRI 412: Human Rights Assessment</b>   |  |  |
| <b>GRI 413: Local Communities</b>   |  |  |
|   |  | To date, we have not conducted any impact analyses or environmental impact.  |
| <b>GRI 414: Supplier Social Assessment</b>  |  |  |
| <b>GRI 415: Public Policy</b>   |  |  |
| 415-1 Political contributions   |  | As a service provider, purchasing products is of minor significance. For that reason, supplier management was assessed as less relevant.   |
| <b>GRI 416: Customer Health and Safety</b>  |  |  |
| 416-1 Product and service categories for which health and safety impacts are assessed |  | According to our donation and sponsoring guidelines, political parties may not be supported without the prior written authorization of the Executive Board. Corporate GO Compliance must be informed about political contributions. We are unaware of any contributions made to political parties during the reporting year.           |
|   |  | Analyzing products and services with regard to their effects on health, safety, and the environment is TÜV Rheinland's core area of expertise. An overview of our services can be found at <a href="http://www.tuv.com">www.tuv.com</a>  |
| <b>GRI 417: Marketing and Labeling</b>  |  |  |
| <b>GRI 418: Customer Privacy and Data Protection</b>                                  |  |  |
| 418-1 Complaints regarding customer data privacy                                      | <a href="http://www.certipedia.com">www.certipedia.com</a> | We are not aware of any significant violations during the reporting year. Our companies have no specific requirements for the labeling of products or services. There is a catalog for our test marks, however, that provides transparency about the underlying testing services.  |
| <b>GRI 419: Socioeconomic Compliance</b>  |  |  |
| 419-1 Non-compliance with laws and regulations in the social and economic area        |  | There were no legitimate complaints relevant to breaches of customer privacy or losses of customer data during the period under review. Our Group quality management system includes a data privacy management system. In that context, the first Group companies are already certified according to ISO 27001 (information security). |
|   |  | We are not aware of any significant fines or other sanctions for non-compliance with social and economic laws and/or regulations during the reporting year.  |

## Organization of TÜV Rheinland

The Group is organized in the form of a matrix with its five global Business Streams and regionally in eight regions.



**Industrial Services & Cybersecurity**  
Petr Láhner



**Mobility**  
Dr. Matthias Schubert



**Products**  
Holger Kunz



**Academy & Life Care**  
Markus Dohm



**Systems**  
Michael Wepler

The responsibility for results lies with the global heads of the Business Streams. The regional heads are the top representatives of TÜV Rheinland in the respective regions and coordinate activities there which concern all Business Streams. The heads of the Business Streams and of the regions prepare the content of important decisions of the Executive Board together; they reach agreement in the Group Executive Council, the top operative management team of TÜV Rheinland AG under the Executive Board. The operational parent company is TÜV Rheinland AG, the shares of which are entirely in the possession of TÜV Rheinland Berlin Brandenburg Pfalz e.V. In accordance with Germany's right of co-determination, employees are represented by staff representatives on the Supervisory and Management Boards.



**Germany**  
Dr.-Ing. Michael Fübi



**Western Europe / Central Eastern Europe**  
Kirsten Raapke



**Asia Pacific / India, Middle East, Africa**  
Andreas Höfer



**Greater China**  
Yushun Wong



**North America / South America**  
Kimmo Fuller