



CONSOLIDATED NON-FINANCIAL REPORT

C

STRABAG
SOCIETAS EUROPAEA

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ABOUT THIS CONSOLIDATED NON-FINANCIAL REPORT

Compliance with GRI standards: core option has been met

As a large corporation¹, STRABAG SE falls under the reporting obligation of the Sustainability and Diversity Improvement Act (NaDiVeG) that took effect in Austria on 6 December 2016. For the 2017 financial year, in keeping with Sec 267a of the Austrian Commercial Code (UGB), STRABAG for the first time produced a Consolidated Non-Financial Report outside the management report that comprises the non-financial reporting of all subsidiaries of the STRABAG Group. The report covers those topics prescribed by NaDiVeG, such as the environment, social and employee affairs, respect for human rights, and the fight against corruption and bribery.

The structure of this Consolidated Non-Financial Report is determined, on the one hand, by the system of our strategic approach, which specifies the chapter structure in accordance with the strategic fields. These chapters – Economic Responsibility, Environmental Responsibility, Corporate Citizenship, People & Workplace, Business Compliance – largely correspond to the legally prescribed themes. On the other hand, the structure of the Consolidated Non-Financial Report is also in line with the requirements of the **GRI Sustainability Reporting Standards**. This

report was drafted in compliance with the core option of the GRI standards. Nearly all material issues that were identified in the stakeholder dialogue and the GRI materiality analysis, and their management approaches, are presented in this Consolidated Non-Financial Report. More information about GRI, the materiality analysis and the stakeholder dialogue is available in the chapters “About this Report” and “Strategy” in this Annual Report.

For STRABAG, it is important to consider the impact of the activities in its core business through the integration of responsibility into the corporate strategy. Our business model comprises all areas of the construction industry and covers the entire construction value chain. We bring together people, materials and machinery at the right place and at the right time in order to realise even complex construction projects – on schedule, of the highest quality and at the best price. Detailed information about our services as well as our brands and subsidiaries can be found in the Annual Report as well as under www.strabag.com > Activities and www.strabag.com > STRABAG SE > Our Brands.

¹ Large limited companies that are public-interest entities and have more than 500 employees on an annual average.

EMPLOYMENT CONDITIONS

Around the world, approximately 73,000 people are putting their expertise and skill into practice at our more than 700 workplace and construction sites. Our employees work with combined effort and commitment to complete their projects on time and in the desired quality. For this

task to succeed day after day, STRABAG, in its function as employer, must ensure fair and equitable employment conditions by guaranteeing work safety and health, promoting the equal treatment of women and men, and observing human rights at all locations.

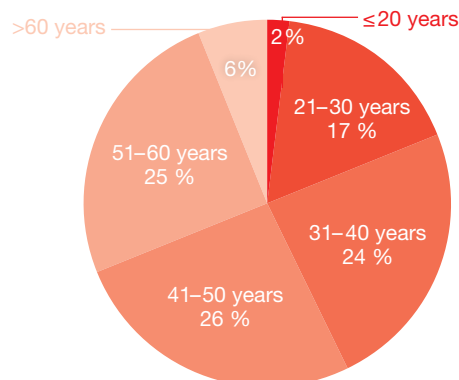
Figures¹

NUMBER OF EMPLOYEES IN 2017 BY SEGMENT AND COUNTRY

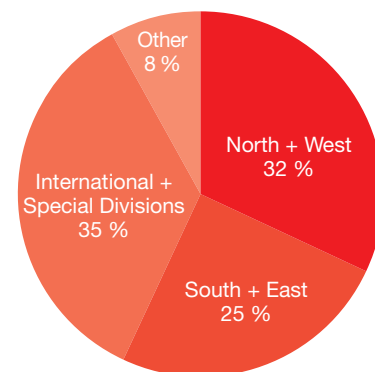
	North + West	South + East	International + Special Divisions	Other	Group
Germany	17,731	444	9,060	2,482	29,717
Austria	100	6,871	2,432	1,171	10,574
Americas	46	0	5,150	2	5,198
Poland	3,659	6	467	619	4,751
Middle East	87	7	3,766	0	3,860
Czech Republic	56	2,500	730	373	3,659
Hungary	11	1,649	799	285	2,744
Slovakia	0	1,319	378	217	1,914
Romania	69	899	218	175	1,361
Rest of Europe	236	676	329	25	1,266
Africa	61	2	1,059	0	1,122
Switzerland	78	822	40	127	1,067
Serbia	0	869	36	131	1,036
Russia	0	648	127	109	884
Croatia	0	695	52	111	858
Asia	0	12	734	0	746
Benelux	516	13	49	56	634
Sweden	365	0	16	27	408
Denmark	348	0	6	0	354
Bulgaria	0	263	22	61	346
Slovenia	0	186	13	14	213
Italy	3	35	135	19	192
Total	23,366	17,916	25,618	6,004	72,904

Balanced age structure

EMPLOYEE AGE STRUCTURE 2017

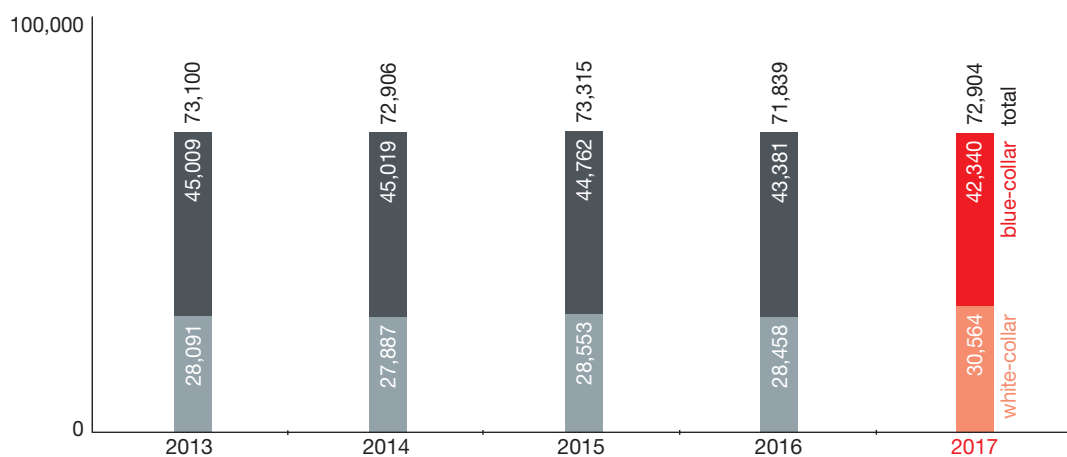


EMPLOYEES BY SEGMENT 2017

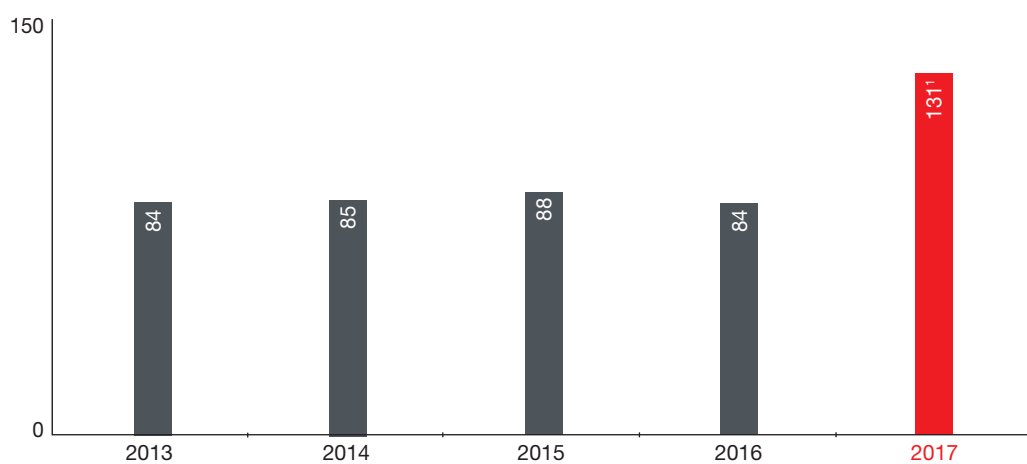


¹ Unless otherwise indicated, the figures refer to full-time equivalents (FTE).

DEVELOPMENT OF EMPLOYEE FIGURE

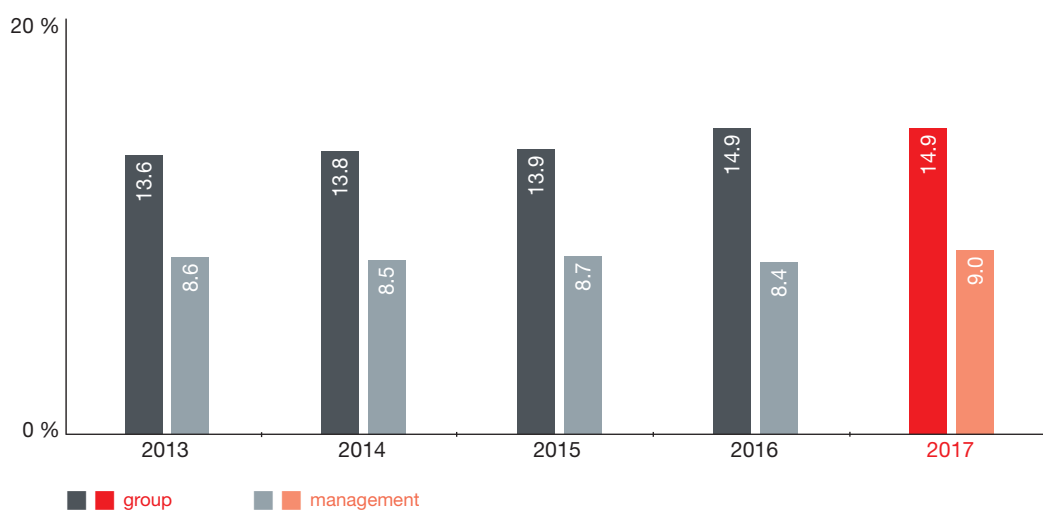


NUMBER OF NATIONALITIES WITHIN THE GROUP



For more about the promotion of women in the group, see the Consolidated Corporate Governance Report

PERCENTAGE OF WOMEN IN THE GROUP AND IN MANAGEMENT



¹ The increase in 2017 results, among other things, from the first inclusion of employee data from Chile and the Middle East.

DETAILED EMPLOYMENT INFORMATION

GRI standards 2016

Disclosure number Reporting requirements

Disclosures for 2017

102-8	a. Total number of employees by employment contract (permanent and temporary), by gender.	Total permanent: 64,998 (89 %) Total temporary: 7,906 (11 %) Women permanent: 9,692 (89 %) Women temporary: 1,194 (11 %) Men permanent: 55,306 (89 %) Men temporary: 6,712 (11 %)
	b. Total number of employees by employment contract (permanent and temporary), by region.	Germany permanent: 27,489 (93 %) Austria permanent: 10,505 (99 %) CEE ¹ permanent: 15,626 (88 %) Rest of Europe permanent: 3,635 (93 %) Rest of world permanent: 7,743 (71 %) Germany temporary: 2,228 (7 %) Austria temporary: 69 (1 %) CEE ¹ temporary: 2,140 (12 %) Rest of Europe temporary: 286 (7 %) Rest of world temporary: 3,183 (29 %)
	c. Total number of employees by employment type (full-time and part-time), by gender.	Total full-time: 68,653 (94 %) Total part-time: 4,251 (6 %) Women full-time: 8,026 (74 %) Women part-time: 2,860 (26 %) Men full-time: 60,627 (98 %) Men part-time: 1,391 (2 %)
	d. Whether a significant portion of the organisation's activities are performed by workers who are not employees.	Only in individual cases are portions of the organisation's activities performed by workers who are not employees.
	e. Any significant variations in the numbers reported in Disclosures 102-8-a, 102-8-b, and 102-8-c.	No significant variations in the number of employees could be determined.
	f. An explanation of how the data have been compiled, including any assumptions made.	The information required for the GRI disclosures was taken from the HR master data of the ERP system at the group headquarters as well as from group organisational entities with other ERP systems through standardised monthly reporting.
102-41	Percentage of total employees covered by collective bargaining agreements.	94 % The national requirements are kept at all subsidiaries.

1 CEE = Central and Eastern Europe

GRI standards 2016

Disclosure number Reporting requirements

Disclosures for 2017

401-1	New employee hires and employee turnover	See following table
	a. Total number and rate of new employee hires during the reporting period, by age group, gender and region.	
	b. Total number and rate of employee turnover during the reporting period, by age group, gender and region.	

NEW HIRES IN 2017¹

	Age group									Total	Employee hire rate %
	< 30 years			30–50 years			> 50 years				
	M	W	Total	M	W	Total	M	W	Total		
Germany	358	91	449	604	89	693	224	16	240	1,382	4.9
Austria	382	66	448	331	85	416	71	16	87	951	9.1
CEE	213	44	257	466	67	533	124	9	133	923	5.5
Rest of Europe	72	16	88	116	21	137	41	6	47	272	7.0
Rest of world	340	20	360	954	35	989	219	6	225	1,574	14.6
Total	1,365	237	1,602	2,471	297	2,768	679	53	732	5,102	7.3

DEPARTURES 2017¹

	Age group									Total	Employee departure rate %
	< 30 years			30–50 years			> 50 years				
	M	W	Total	M	W	Total	M	W	Total		
Germany	164	28	192	353	59	412	367	46	413	1,017	3.6
Austria	148	28	176	190	77	267	113	21	134	577	5.5
CEE	143	24	167	454	79	533	217	25	242	942	5.6
Rest of Europe	46	7	53	127	22	149	87	6	93	295	7.6
Rest of world	75	6	81	180	15	195	69	4	73	349	3.2
Total	576	93	669	1,304	252	1,556	853	102	955	3,180	4.5

Work safety

The accident risk is higher in the building and construction trade than in other branches of industry. Unique risks result, for example, because workers have to climb ladders and scaffolding and are subjected to extreme temperatures, UV radiation, noise, vibrations and dust. Construction work also involves a certain amount of physical exertion, such as lifting heavy loads. Accident prevention initiatives and an increased awareness for work safety on the part of the companies, however, have contributed to a downward trend in the number of accidents in

the construction sector. According to BG BAU, the German occupational insurance association for the construction trade, the accident rate in Germany per 1,000 employees fell from 66.60 cases in 2007 to 55.29 in 2016.²

As one of the largest employers in the construction trade in Europe, we are aware of the importance of work safety. And, as demonstrated by the high priority given the issue from both stakeholders and management, expanding work safety is in everyone's interest.

¹ Excluding temporary employments

² BG Bau, Zahl der Arbeitsunfälle leicht gestiegen, retrieved 20 December 2017 from <http://www.bgbau.de/presse/pressemitteilungen/bg-bau-pressemitteilungen-2017/zahl-der-arbeitsunfaelle-leicht-gestiegen-bg-bau-regt-betriebliche-erklarungen-an> (as of 20 December 2017)

RULES AND RESPONSIBILITY AREAS

Since 2017, a special coordinator has been in charge of the **group-wide** organisation of issues of “Health, Safety and the Environment” (HSE). Additionally, a HSE committee was established to **manage interdisciplinary issues** such as work safety communication and e-learning courses as well as the use of digital aids to assess, process and avoid unsafe situations and near-accidents on construction sites. On a regional level, the work safety experts conduct regular site inspections. Approximately 70 work

safety experts can be found at our construction sites and production facilities in Germany; in Austria there are about 20. As a rule, at least one person is responsible for HSE in each subdivision throughout the group. This number is adapted in relation to the number and size of construction sites in a country or region. To keep the risks related to employee safety and health under control, we have in place a work safety and health management system certified to OHSAS 18001 and/or SCC.

OBJECTIVES AND INDICATORS

Our goal is the continuous reduction of accident risks on our construction sites. We intend to reach this goal through training and further education, inspections with managers and construction site staff, analyses of (near-)accidents, and prevention measures. Two indicators help us to measure if an objective has been reached:

The **lost-time accident rate** – calculated as the number of working hours lost to accidents versus productive working hours – stood at 0.24 %

in the group in 2017, with 0.36 % among blue-collar and 0.05 % among white-collar workers (2016: 0.25 % in the group, 0.36 % blue-collar, 0.07 % white-collar). The **accident incident rate**¹ – calculated as the number of accidents at work per 1 million productive working hours – was overall comparable to that of last year with 17.4 in the group, 25.5 among blue-collar workers and 4.8 among white-collar workers (2016: 17.6 in the group, 25.0 blue-collar, 5.2 white-collar).

LOST-TIME ACCIDENT RATE

	2013	2014	2015	2016	2017
Blue-collar	n. a.	n. a.	0.34	0.36	0.36
White-collar	n. a.	n. a.	0.07	0.07	0.05
Total	n. a.	n. a.	0.24	0.25	0.24

ACCIDENT INCIDENT RATE¹

	2013	2014	2015	2016	2017
Blue-collar	n. a.	n. a.	24.5	25.0	25.5
White-collar	n. a.	n. a.	5.6	5.2	4.8
Total	n. a.	n. a.	17.6	17.6	17.4

PROJECTS AND INITIATIVES

The following projects were pursued and initiatives set in the 2017 financial year:

- The construction site inspections together with the occupational medical services were continued.
- An app was developed that allows managers to efficiently and transparently document their construction site inspections. Following successful trial in 2017, the app will be rolled out in Germany, Austria and Switzerland in 2018.

The work safety experts will also be included in the process of evaluating subcontractors with the task of assessing these companies' performance in terms of work safety. This step will be implemented starting with very large projects.

- In 2016, the transportation infrastructures segment launched a campaign to reduce the number of accidents resulting from trips, slips and falls (TSF accidents). In 2017, the programme was extended to building construction

¹ The figures include accidents at work (excluding accidents occurring on the way to or from work as well as occupational illness) with lost time of at least one calendar day, counted from the day after the accident incident.

and civil engineering. In Germany, the number of TSF accidents fell only slightly; the lost time

due to such accidents, however, was down by 10 %.

Health protection

Maintaining the health and productivity of our employees is a central concern for us and inevitable for the long-term success of the company. Health is not merely the “absence of disease” (source: WHO). Health is a state of individual well-being and subjectively felt productivity.

The general public usually associates construction sector work with hard physical labour. But psychological stress can also be an issue. In 2016, psychological stress for the first time surpassed all other factors as the main reason for

lost time due to illness across all sectors in Germany.¹ In the construction sector, the main documented stress factors are time and price pressure, unwanted interruptions during work, and long working hours.² Strengthening psycho-social health through stress prevention and stress management therefore is one of our most important fields of action in workplace health management. Our measures, initiatives and projects always aim at the preventive reduction of work-related health disorders and occupational illness on the construction site and in the office.

RULES AND RESPONSIBILITY AREAS

The legal provisions for work safety and health protection form the basis for us as a minimum requirement. Apart from this, we have set ourselves the goal of systematically, specifically and sustainably promoting the health of our employees and to firmly anchor **workplace health management (WHM)** within the group. We therefore began to implement WHM by building on measures from the areas of work safety, health protection and ongoing activities of workplace health promotion. In the meantime, WHM has been rolled out across nine countries (Germany, Austria, Switzerland, Poland, Czech Republic,

Slovakia, Croatia, Hungary, Serbia). Romania and Slovenia are already lined up for 2018. Managed at the group level, the matter is coordinated in the individual countries by national WHM coordinators and systematically expanded by a national WHM committee of the most important disseminators (management, employee representatives, human resource department, work safety) within each country. The measures at the individual business locations are implemented and spread by the WHM coordinators with the help of dedicated healthcare volunteers and on-site teams.

WHM rolled out in nine countries

OBJECTIVES AND INDICATORS

It is our objective to maintain the health and productivity of our employees. The aim of the measures is to improve the working conditions and strengthen the personal workplace resources of all employees and members of the management. We use the **lost-time illness rate**³ to

observe our progress in reaching this goal. It stood at 5.1 % in the group, with 6.6 % among blue-collar and 3.6 % among white-collar workers (2016: 5.1 % in the group, 6.7 % blue-collar, 3.6 % white-collar).

¹ DAK, Psychische Erkrankungen: Höchststand bei Ausfalltagen, retrieved 20 November 2017 from <https://www.dak.de/dak/bundes-themen/psychische-erkrankungen-hoehchststand-bei-ausfalltagen-1873100.html>

² Psychische Belastung von Bauleitern, Bayerisches Landesamt für Gesundheit und Lebensmittelsicherheit, 2006

³ Ratio of sick leave days to working days

LOST-TIME ILLNESS RATE

	2013	2014	2015	2016	2017
Blue-collar	4.9	4.9	5.0	5.1	6.6
White-collar	6.5	6.5	6.5	6.7	3.6
Total	3.3	3.2	3.6	3.6	5.1

PROJECTS AND INITIATIVES

The cooperation between WHM and work safety (in Austria in collaboration with the occupational medical services) foresees, among other things, the organisation of “health days” at business locations and construction sites. Prevention measures, including hearing and vision exams, pulmonary function tests, spinal screenings, and custom health campaigns, expand the offer for our blue-collar workers. WHM also offers a broad range of targeted measures for our office locations. Besides eye, stress and preventive examinations, the offer includes different health courses such as back training, lectures and workshops related to the main issues of exercise, nutrition and stress prevention.

In 2017, a survey was conducted among the blue-collar employees in Germany, Switzerland, Hungary, Croatia, Serbia, Poland, the Czech Republic and Slovakia on the subject of psychological stress at the workplace. Following the presentation of the results to the responsible subdivision and business unit managers, suitable measures are being derived and implemented as a next step. In Germany, the most important stress factors mentioned by our blue-collar workers were, as expected, the influences of heat, cold and damp, as well as time pressure or weekend and night shifts. Factors relating to the weather can be addressed only to a certain degree, but efforts are being made to counter the other factors through the use of mobile break areas. To further reduce and minimise stress,

supervisors and employees also engage in a constructive dialogue to jointly work out solutions.

Management employees play an especially important role in presenting a company culture of health promotion. The two-day seminar “Success through Healthy Leadership” teaches our management employees how they can individually strengthen their own resources and how to implement healthy leadership. The seminar has already been rolled out in three countries; in 2017, it was attended by 121 employees at the subdivision and business unit management level. Our non-management employees also have a wide range of health-promotion measures available to them. The “Fit4Work” seminar that has been offered since 2015 explains how an individual health strategy can counter challenges such as lack of exercise, an unbalanced and unhealthy diet, and habituated stress patterns. To date, 511 employees have defined their personal strategy for more wellness at the workplace.

Due to the participation in an EU-sponsored project, the national WHM committee in Croatia and all participants were awarded the “health-friendly company” certification in 2017. Financial support from an EU health fund made it possible to implement specific measures for white-collar and blue-collar workers, including health days and lectures on the subject of sport, nutrition and addiction.

Employment and social fund

In order to help employees who are experiencing **financial difficulties** through **no fault of their own**, e.g. as a result of accidents, illness, natural disasters, etc., the STRABAG Group set up a private foundation called the “Arbeits- und Sozialfonds” (“Employment and Social Fund”) more than ten years ago. When it was established, the foundation was endowed with about € 3.60 million, an amount which by the year 2013 had been raised to about € 10.20 million in response to the rising number of employees. The application for financial assistance can be

submitted by the affected employees, by their supervisors or by an employee representative.

Applications are reviewed by the foundation’s board before a socially appropriate decision is made. The board is chaired by an employee representative and consists of four employer and four employee representatives. Financial assistance is granted primarily in the form of monthly payments for an employee’s dependent children, but may also take the form of one-off payments for a specific purpose.

Human rights

By providing construction services in structurally weak regions, we are making an important contribution to infrastructure expansion and job creation in those places. Some of our projects are located in countries that have received international criticism for their human rights situation. Due to the different standards regarding the protection of human rights in the various

countries in which we do business, and because of the complexity of the supply and value chains, the protection of human rights requires intense effort on our part. Human rights include, among other things, the prohibition of discrimination in respect of employment and occupation, the prohibition of slavery and human trafficking, and the prohibition of child labour.

RULES AND RESPONSIBILITY AREAS

The STRABAG SE Code of Conduct precisely establishes the system of values to which the STRABAG Group and all its employees are committed; it forms an integral part of the employment documents for all group employees. STRABAG SE also expects its stakeholders (especially suppliers and subcontractors) to act in accordance with the Code of Conduct.

In the Code of Conduct, STRABAG SE expressly commits to equal opportunities regardless of race, nationality, gender, sexual orientation, religion, disability or age and to a working environment free from discrimination, harassment or reprisals. Rejecting illegal forms of employment is not just an internal group principle; the observation of this principle is also mandatory for all business partners and compliance is to be reviewed within the legal possibilities. In case of violation, a contract may not be concluded or must be terminated. The management is responsible for compliance with this rule.

Potential human rights violations, such as discrimination at the workplace, can be reported via our whistleblowing system to the stated ombudspersons. Employees, as well as subcontractors and other third parties, have the possibility to anonymously pass on relevant information by phone or by e-mail. The current list of all contact persons for the whistleblowing system can be found on the STRABAG website at www.strabag.com > Strategy > Strategic Approach > Business Compliance. We actively call upon anyone with relevant information to come forward, so we can identify misconduct quickly, respond appropriately and avoid any possible damage. In the event of violations of the legal regulations or of the conduct guidelines applicable within the company, the company will take the requisite disciplinary and legal (labour law) measures.

OBJECTIVES AND INDICATORS

The creation and maintenance of employment conditions that are in compliance with the International Labour Organisation's Declaration on Fundamental Principles and Rights at Work and with the United Nations' Universal Declaration of Human Rights are an essential goal of the STRABAG Group's value system. Particularly relevant here are:

- the prohibition of discrimination in respect of employment and occupation
- the prohibition of slavery and human trafficking
- the prohibition of child labour

The following indicators are used to measure if an objective has been reached:

- number of cases of discrimination discovered in the financial year (cases of discrimination are assigned to the year in which they were conclusively discovered): 1
- status of the cases and measures taken: consensual solution following several interventions by the ombudsperson

In the past financial year, the ombudspersons were contacted a total of eleven times. Most of the matters could be resolved soon after the initial contact. Only one case, concerning an internal personnel change, required specific attention and was solved consensually following several interventions by the responsible ombudswoman.

For more information about the whistleblowing system, see the chapter "Business Compliance"

PROJECTS AND INITIATIVES

The “Principles of employment conditions and human rights” were added to the Code of Conduct as a complementary annex. All employees were informed of and asked to observe and comply with these principles, which were also incorporated into the existing general terms and conditions or comparable agreements. Additionally, a statement pursuant to the UK Modern Slavery Act was published on the website at www.strabag.com.

In the 2017 financial year, the group ombudspersons jointly elaborated and implemented a “Guideline for the ombudship” at STRABAG as part of the group-wide whistleblowing system to ensure that the reports are handled equally, systematically and as professionally as possible. The guideline includes, among other things, defined categories for future reporting.

The subject of diversity and of equal treatment of women and men is dealt with in the Consolidated Corporate Governance Report.

STRATEGIC HUMAN RESOURCE DEVELOPMENT

The construction sector is a human-resource-intensive industry in which the commitment shown by our workers has a significant influence on business success – not least because, in light of shortages of skilled personnel and

seasonal bottlenecks, they represent a critical factor. The STRABAG Group's response is consistent strategic human resource planning and the continuous training and development of its employees.

Rules and responsibility areas

Human Resource Development (HRD) is a group-wide organisational entity tasked with providing the best possible support to all parts of the STRABAG SE Group in all matters of human resource development. For a successful human resource development strategy, HRD elaborates guidelines and standards for the search, selection, qualification, promotion and development of leadership and employees.

The responsibilities and tasks are governed by a group directive for the HRD employees. Their tasks include:

- Human resource marketing
- Recruitment and integration
- Leadership and employee coaching
- Qualification and training
- Talent management
- Occupational health management

Objectives and indicators

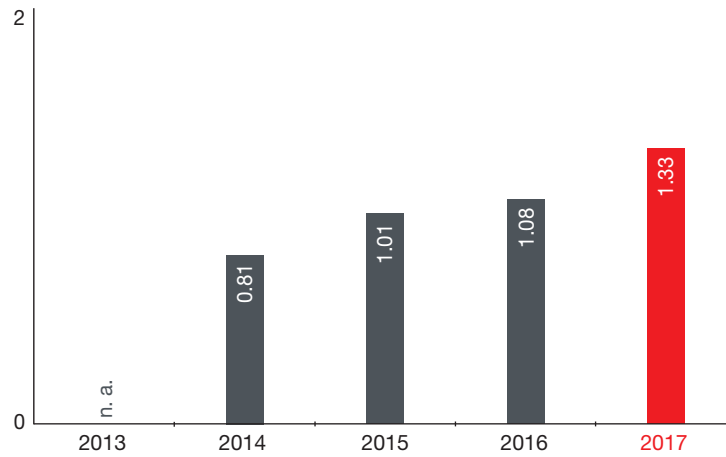
To counter the lack of skilled labour, we aim to promote and optimise the needs-oriented professional and personal development and qualification of our employees. In this way, we can guarantee our clients the on-time, professional realisation of their projects.

Training needs for our white-collar workers are ascertained mainly during the appraisal interviews. This essential instrument, which is to be conducted by supervisors at least once yearly, is an opportunity for mutual feedback,

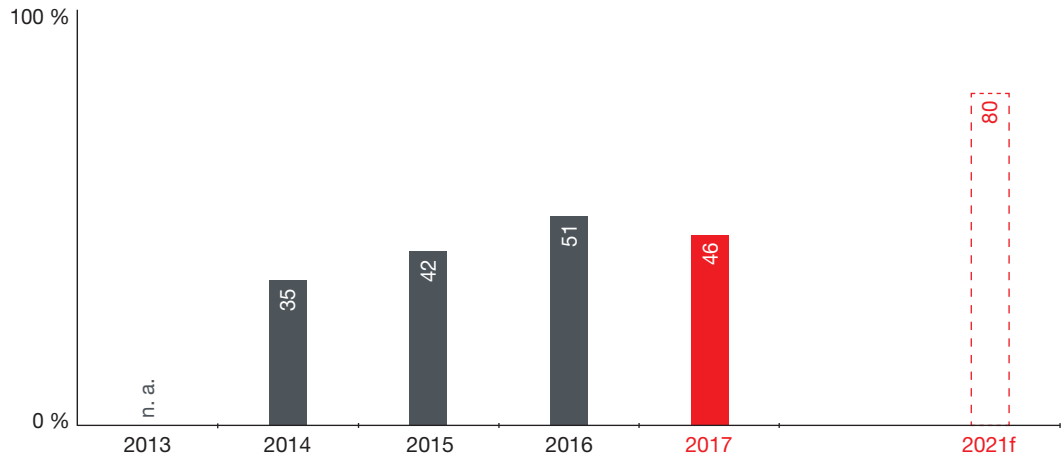
goal-setting and performance appraisal. The following indicators are used to measure if the objective has been reached:

In 2017, structured employee appraisal interviews were held with 46 % (2016: 51 %) of all white-collar employees in the group. We are aiming for 80 % by the year 2021. The training needs that were identified in the interviews were covered in the form of seminars. In the reporting period, there were 1.33 seminar days per employee (2016: 1.08).

SEMINAR DAYS PER EMPLOYEE



NUMBER OF APPRAISAL INTERVIEWS HELD AND RECORDED IN THE REPORTING PERIOD VERSUS NUMBER OF EMPLOYEES



Projects and initiatives

Measures and projects relating to the above-mentioned tasks are implemented on a continuous basis:

HUMAN RESOURCE MARKETING

We want to position the group as an attractive employer on the labour market to make a sustained contribution to covering the future demand for skilled experts and leadership employees. For this reason, we put a lot of our energy into addressing the target groups. Our focus is on school-age students as much as on university students and recent graduates. In order to reach prospective employees, our human resource marketing activities include participating in job fairs, presenting our company at

educational institutions, organising company tours, offering internships and work placement, and sponsoring bachelor and master theses. We also are proud of our successful partnerships with more than 170 educational institutions in 2017. Additionally, we have our own profiles on social media platforms, such as Facebook, LinkedIn, Xing and YouTube, in order to be more accessible for interested persons. Our Facebook page has so far been liked by nearly 30,000 people.

We can gauge the success of our efforts by looking at different **employer rankings**. The magazine FOCUS, in cooperation with kununu, the largest employer rating site in the German-speaking countries, ranked us among Germany's best employers in 2017. The ranking was based on an analysis by the market research institute Statista of more than 100,000 employee ratings

as part of the largest survey of this kind to date. In the construction sector, our company made it into the top three. We were also analysed by the social media market research institute BuzzValue, which published the ratings of the social media presence of the Austrian construction industry in the magazine Bau und Immobilien Report (5/2017). STRABAG ranked in first place by far.

RECRUITMENT AND INTEGRATION

The recruitment and subsequent integration of human resources is designed to systematically, professionally and quickly cover the human

resource demand at the individual organisational entities with qualified new employees.

LEADERSHIP AND EMPLOYEE COACHING

HR consultants are the first points of contact for all human resource development and certain decentral human resource administration tasks at the divisions. They advise employees about career opportunities within the group or coordinate with the employee supervisors to recommend training for their further development. For management-level employees, we have developed a

special training and further education offer as part of our management development programme, consisting of a mix of classroom workshops, web-based training and content for self-organised learning. All offers can be individually combined and are available in German and in English. The offer is updated annually and is constantly being expanded.

QUALIFICATION AND TRAINING

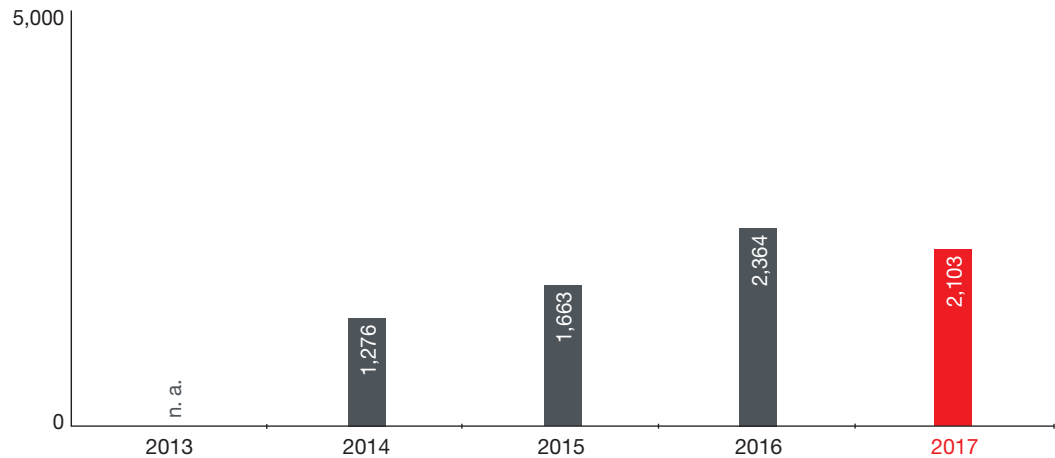
The Group Academy offers internal training options for blue-collar and white-collar workers in the group. The planning and systematic use of training and educational measures is the responsibility of the respective organisational entity. Together with their supervisors, employees can choose from among the various qualification offerings.

offered in 2017 (2016: 2,364) and attended by 23,933 employees (2016: 21,104). More than 25,000 persons successfully completed an e-learning course on subjects ranging from cybercrime to work safety.

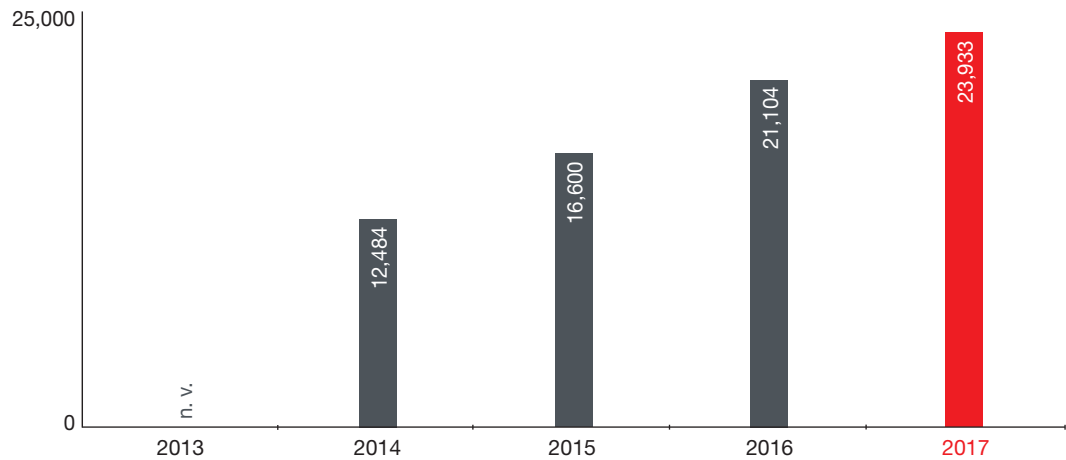
At the Group Academy, employees can find **specially developed training offers** in the categories of technology, law, business management, IT, personality and leadership. The trainers are internal and external experts who pass on their expertise to the participants. 2,103 training and further education seminars were

All employees have the possibility to make proposals for new training offers using the internal knowledge management tool. Beyond the appraisal interview, they and their managers, depending on their position, also receive recommendations for a selection of seminar options. The Group Academy offers regular modular **qualifications** to reinforce and deepen the training of people in key positions.

NUMBER OF SEMINARS



NUMBER OF PARTICIPANTS



To counter the shortage of skilled labour, STRABAG invests a lot of time and money in the training and education of its **apprentices and trainees**¹. For dedicated young people who have completed an apprenticeship, the door to a career at STRABAG is wide open.

Our main apprenticeship careers in **Austria** are bricklayer, ground engineering specialist, formwork carpenter and paver. But we also offer training as construction plant mechanic, electrical engineering technician, facilities and building technician, mechatronics technician, metal technician, sheet metal worker as well as plasterer and drywall finisher to complement our team. In Austria, STRABAG continually offers apprenticeship placements at around 50 locations nationwide. A special feature of STRABAG's offer is the possibility for apprentices of the main trades to attend the group's own apprentice academy "BASIC-ADVANCED" during the winter months. At two locations in Austria, specially trained STRABAG forepersons and site managers

work with our apprentices to reinforce their practical and theoretical knowledge. The success of our apprenticeship programme was demonstrated by the STRABAG team at the 44th World Skills 2017 in Abu Dhabi. Two of our very own apprentices took home the World Champion title in the category of Concrete Construction – proof, along with perfect training, hard work and dedication, that our apprentices rank among the best skilled workers in the world.

In **Germany**, STRABAG and its construction equipment subsidiary STRABAG BMTI are pursuing the selective training of young talents at the group training workshop in Bebra. The focus here is on the commercial and technical fields. In Bebra, our apprentice road workers, ground engineering workers and construction equipment operators enjoy top quality vocational training and individual attention. The aim is to secure an efficient knowledge transfer under aspects of quality and time away from the daily working routine.

¹ Due to the differences in training systems from country to country, only the situation in the core markets of Austria and Germany can be presented here.

Increase of apprentice and trainee numbers planned

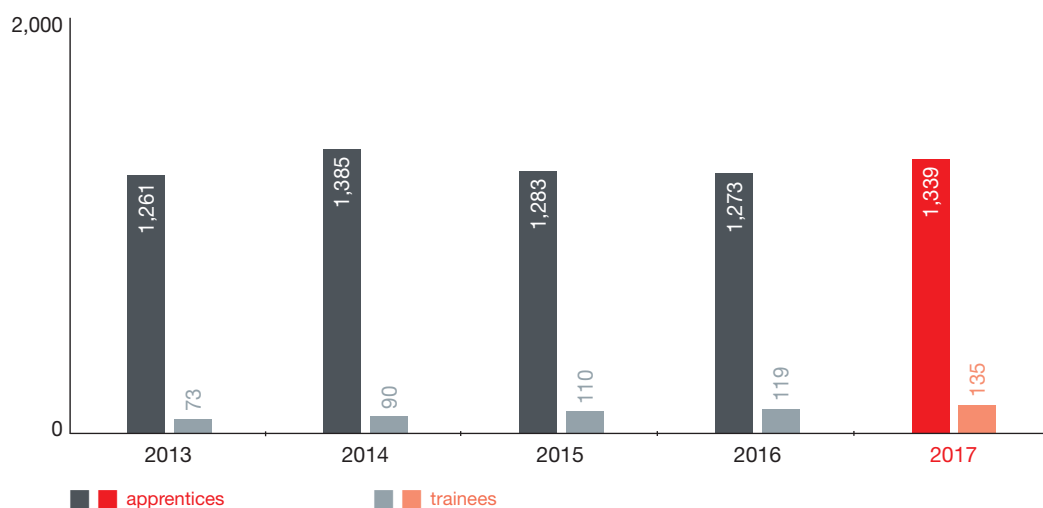
135 trainees at work for us

In Germany, Austria and Switzerland, a total of 470 (2016: 424) blue-collar apprentices were taken on in 2017. A significant increase of the apprentice and trainee numbers is expected in Germany and in Austria in the years to come. More information about the apprentice professions and work placement positions is available at karriere.strabag.com.

It is our aim to recognise, promote and develop young talents. In the competition for the best

employees, STRABAG therefore offers a practical familiarisation programme for graduates with little professional experience holding selected Bachelor/Master degrees from universities and universities of applied sciences. The aim of the trainee programmes is to best prepare the graduates for the requirements of their future position in the group. As at 31 December 2017, the STRABAG Group had 106 technical and 29 commercial **trainees** working for it, thereof 92 men and 43 women.

NUMBER OF APPRENTICES AND TRAINEES



Trainees have their own personal schedule as a way of addressing individual wishes and needs and to offer flexible entry times. The commercial trainee programme lasts between eleven and 13 months, the technical programme varies between twelve and 15 months and both programmes include a period of three months abroad. At the beginning of the programme, trainees meet with a mentor to design the trainee schedule according to the specific professional and personal requirements of the target position. This experienced mentor is available to the trainee throughout the entire training period. Regular feedback interviews help focus on the trainee's

individual development. With instruction from experienced specialists and management employees, the trainees pass through different organisational divisions and are introduced to various areas of business and responsibility. Both the commercial as well as the technical programme include mandatory sessions, for example on the construction site. Specific training activities are used to develop the applicant's personal and professional skills. An individual training schedule is developed for each trainee. In 2017, our trainee programme was again recognised as career-enhancing and fair by the job exchange Absolvanta.

TALENT MANAGEMENT

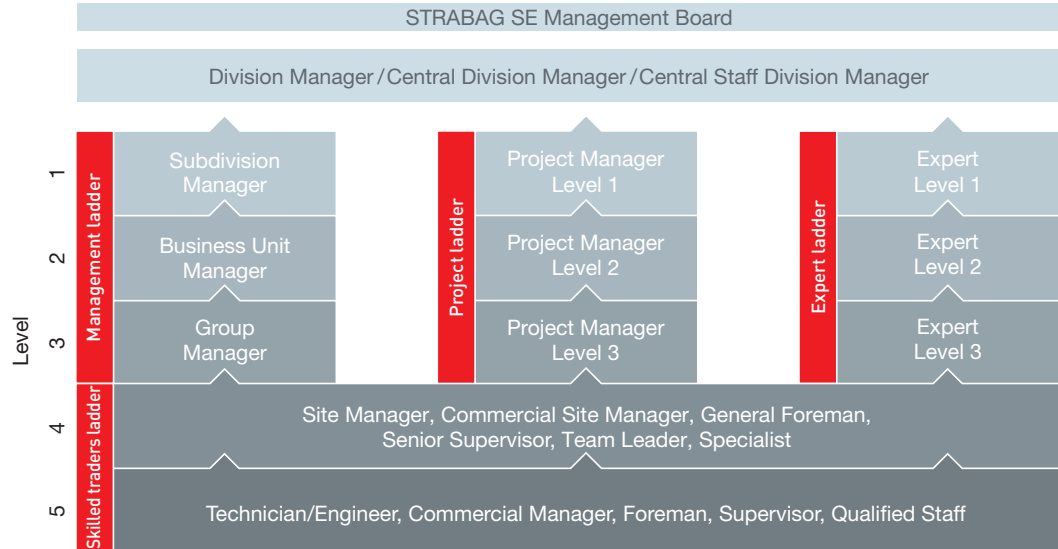
The purpose of talent management is to recognise, develop and bind high-performers and high-potential employees in the interest of filling (key) positions with young talent possessing the best possible qualifications from within our own ranks. Based on our career model, internal parameters are applied to identify high-potential employees, provide them with individual support, and deploy them in the right positions. Besides the management ladder, which focuses

on general management tasks, two other career paths are available: The expert careers are characterised by a high degree of technical expertise in a specialty field. Project managers can fall back on their years of experience in the field of project management and are responsible for complex construction projects. Individual activities such as a development centre, special training programmes or job rotation schemes are offered to help develop the recognised potential. The

goal-oriented recognition and promotion of high-potential employees creates a stronger bond to the group and, in the long term, helps to secure

quality, continuity and performance within the group.

CAREER MODELS



BUSINESS COMPLIANCE

The avoidance of corruption and anti-competitive behaviour has become an important management responsibility in recent years. The potential damage that a company may incur because of corrupt or anti-competitive behaviour on the part of individual employees can at times reach drastic proportions.

The construction sector is not immune to corrupt or anti-competitive behaviour by individual persons. Complex accounting processes and the great number of contractual relationships during a construction project often make it difficult to fully resolve non-compliant behaviour.

Although STRABAG generates most of its revenue in countries with a very low risk of corruption, in places like Germany, Austria and Poland, the international nature of its business means that some activities are performed in countries

with a higher corruption risk, as measured, for example, by the Corruption Perceptions Index¹. Transparent behaviour to minimise risk is required in all regions, especially during contract award or during negotiations with partner companies and subcontractors.

STRABAG acted in 2008 by implementing a Compliance Management System (CMS) and has been continuously developing it ever since. The purpose of the CMS is to prevent violations of the law and any resulting material and immaterial damage, and to maintain the company's good reputation as a business partner, contractor and employer. With extensive measures for employees and leadership, we are working to promote compliant and ethical behaviour and to create a strong corporate culture based on partnership and trust.

Rules and responsibility areas

The STRABAG Compliance Management System is seen as a living system that must continuously improve and adapt to changing circumstances. The focus is especially on preventing cases of corruption, avoiding the violation of competition law and averting all forms of money laundering. The system consists of:

- the Code of Conduct,
- the Business Compliance Guidelines,
- the Business Compliance Guidelines for Business Partners, and
- the personnel structure of the STRABAG Business Compliance System.

The **Code of Conduct** establishes the fundamental ethical values of the company and contributes to the development of a common value system. The **Business Compliance Guidelines** for employees and the **Business Compliance Guidelines for Business Partners** summarise the rules to follow to avoid corruption and anti-competitive violations. Potential compliance violations, such as bribery, fraud or corruption, can be reported via our group-wide whistleblowing system to specially appointed ombudspersons. Employees, as well as subcontractors and other third parties, have the possibility to anonymously pass on relevant information by phone or by e-mail. The current list of all contact persons for the whistleblowing system can be found on the STRABAG website at www.strabag.com > Strategy > Strategic Approach > Business Compliance. We actively call upon anyone with relevant information to come forward, so we can identify misconduct quickly, respond appropriately and avoid any possible damage. In the event of violations of the legal regulations or of the conduct guidelines applicable within the company, the company will take the requisite disciplinary and legal (labour law) measures.

¹ Transparency International, Corruption Perceptions Index 2016, retrieved 30 January 2018 from https://www.transparency.org/news/feature/corruption_perceptions_index_2016#table

The **group business compliance coordinator** is the central point of contact for all business compliance matters and reports directly to the responsible member of the group's Management Board, in this case the CEO. Given the international organisation of our group, the compliance

coordinator is supported by **regional business compliance representatives**. The group business compliance coordinator is in constant contact with the regional business compliance representatives and the ombudspersons of the whistleblowing system.

Objectives and indicators

The overriding objective of the STRABAG Compliance Management System is the complete avoidance of non-compliant behaviour. Recognising the impossibility of fully reaching this goal, and understanding the difficulty of measuring the degree of goal attainment, it is necessary to define supporting goals leading to the main objective. The relevant indicators are monitored regularly and over the long term, as the effectiveness of measures to avoid compliance violations can only be meaningfully measured over longer periods of observation.

- **Training penetration rate at 31 December 2017**
(percentage of employees completing certain courses)
Target: 100 %
 - E-learning course “The Right Behaviour in Day-to-Day Business”,
initial training: 93 %
 - E-learning course “The Right Behaviour in Day-to-Day Business”,
refresher course: 96 %
 - Classroom course “Avoidance of Corruption and Anti-Competitive Violations”,
initial training: 96 %
 - Classroom course “Avoidance of Corruption and Anti-Competitive Violations”,
refresher course: 94 %
 - Classroom course “Competition Law”: 80 %

- **Number of employees trained in 2017**

- E-learning course “The Right Behaviour in Day-to-Day Business”
Target: 7,000 people/year over a three-year average
 - Initial training: 3,872
 - Refresher course: 7,850
 - Total: 11,722

- **Number of management employees trained in 2017**

- Classroom course “Avoidance of Corruption and Anti-Competitive Violations”
Target: 400 employees/year over a three-year average
 - Initial training: 308
 - Refresher course: 488
 - Total: 796

- Classroom course “Competition Law”
Target: 400 employees/year over a three-year average

- Initial training: 233

- **Number of compliance-supporting measures in the year: 5**

For details, see “Projects and initiatives”.

- **Number of business compliance violations discovered in the year**

(violations are assigned to the year in which they were conclusively discovered): 1

Projects and initiatives

The following different measures are being used to focus the business agenda more strongly on the subject of compliance:

Continuous training

We continuously train our employees in e-learning and classroom settings on how to fight corruption. An important requirement for attaining the overriding objective of avoiding compliance violations is for employees to be as informed as possible about appropriate behaviour in their daily business practices and, especially, about the negative consequences of inappropriate behaviour. The training of all relevant company employees (usually white-collar employees) in the principles of compliance is therefore a logical and necessary objective of the work of every compliance organisation. To increase their sensitivity to the subject of compliance, all employees must complete mandatory training measures and management employees must attend more in-depth training, also mandatory, at regular intervals.

The training activities are monitored using indicators such as training penetration rates or the number of employees trained in one year. Since 2013, the e-learning module “The Right Behaviour in Day-to-Day Business” has been carried out in all relevant group languages in all group countries. In addition to the course “Avoidance of Corruption and Anti-Competitive Violations”, special cartel law training was introduced for the management in 2015. All of the classroom courses on the avoidance of corruption and anti-competitive violations are given by external legal experts or by lecturers from the group’s

internal legal department. New members of management receive one day of initial training, while veteran employees must attend half-day refresher courses every three years.

The following compliance-supporting measures were implemented by us in 2017:

- We managed to **increase the staff** of the business compliance team.
- To improve the implementation of the Compliance Management System in the operating entities, we reorganised the system of **regional business compliance representatives**.
- The Management Board approved the realisation of an IT-supported **whistleblowing hotline** to standardise the process and to make it easier to report wrongdoing.
- We published a two-page **article** on whistleblowing in our **employee magazine** teams, to give all employees an understanding of the importance of a functioning whistleblowing system and to dispel any misgivings they may have had about reporting misconduct.
- We started work on a **Compliance Readiness Check** to evaluate the knowledge and implementation of the STRABAG Compliance Management System in the business units and central divisions as a foundation upon which to build further compliance-supporting measures.

RESOURCE MANAGEMENT

Economic growth and the global population increase are stimulating the construction and maintenance of buildings and infrastructure. This requires large volumes of raw materials, such as **sand, gravel and quarry stone**. In Germany alone, this amounts to about 550 million tonnes of mineral resources a year, which corresponds to around 85 % of all processed raw materials within the country.¹ This leads, directly and indirectly, to a higher burden on the environment that is also noticeable locally: extreme weather, floods, loss of soil fertility and a decline in biological diversity. But the extraction of raw materials isn't the only important issue for the construction sector; in the end, the materials that are put into construction end up in the environment in the form of emissions and waste as a result of maintenance or demolition works. Construction waste, including but not limited to building rubble, road excavation material and construction site waste, account for the largest share (60 %) of the overall waste volume.² For this reason, we are committed to the transition to a more resource-friendly and more sustainable level of recycling management.

The energy required during the construction and use of buildings is high: Buildings account for

about **40 % of the overall energy consumption** and produce around 36 % of the related greenhouse gas emissions in the European Union.³ At the same time, besides the transport sector, the potential for energy savings is the greatest in the construction industry. To help raise this potential, we are continuously working on the development of our comprehensive energy and fuel management, among other things.

But an increasing awareness among society and politics, as well as the changed environmental conditions due to climate change, have also already caused a shift in client demands. Our strategic focus, our innovative strength and our **Sustainable Building technology centre** help to prepare us for the growing demand for resource-friendly services and products and allow us to proactively offer the corresponding solutions. Integrating different disciplines over different lifecycle segments is our core competence as a general contractor. As such, we are familiar with the entire value creation process and are capable of thinking and planning across lifecycles. This gives us the possibility to perpetuate the philosophy of sustainability with the best possible technical solutions and the early interconnection of all involved.

Rules and responsibility areas

A group-wide energy and environmental policy lays the foundation for acting in a resource-friendly manner; opportunities and risks are

recognised early and the legal provisions are fulfilled.

MAJORITY OF ENVIRONMENTAL MANAGEMENT DESIGNED TO ISO 14001

Within the group, the subject of the environment is handled by the **Integrated Quality Management (IQM)** team. To properly address matters of the environment, an environmental management system certified to ISO 14001 has been introduced in nearly all group countries. The environmental management is headed by the group's environmental representative, who receives information as to developments – e.g. on environmentally relevant factors regarding

contracts and investments – from the regional experts for environmental protection. In this way, he can give the best possible advice to the Management Board of STRABAG SE when it comes to setting environmental protection targets and measures. The information recorded by the environmental management system includes waste disposal, waste water, hazardous materials and products used.

¹ VDI ZRE Publikationen: Kurzanalyse Nr. 2, Ressourceneffizienz der Tragwerke, 2014

² Umweltbundesamt, Stoffstrommanagement im Bauwesen, retrieved 20 December 2017 from <https://www.umweltbundesamt.de/themen/abfall-ressourcen/abfallwirtschaft/urban-mining/stoffstrommanagement-im-bauwesen#textpart-1>

³ United Nations Environment Programme: Buildings and climate change, 2007

Energy management certified to ISO 50001

Energy management at STRABAG is an instrument to determine energy consumption and to increase energy efficiency. The group-wide energy management system is headed by the **Energy Steering Committee**, which determines the strategic orientation of the energy management. On the basis of the group-wide energy data, the energy experts at the various group entities formulate recommendations to the

steering committee. Accordingly, operational targets are set for energy consumption, CO₂ emissions and relevant measures throughout the group. As of 2014, an energy management system certified to the international standard ISO 50001 is being introduced at various group entities. Thanks to the Energy Efficiency Act, it is possible to make use of the potential for cost savings and lower energy consumption.

Objectives and indicators

We are committed to compliance with the existing laws and regulations in order to avoid potential disadvantages for the group. It is our declared goal to keep the negative impact that our business activity has on the environment as low as possible. To do so, we give priority to those issues that promise the greatest potential for improvement and which we can directly influence through our own actions, such as the reduction of energy use and the continued development of processes and technologies for resource- and energy-efficient buildings.

Indicators:

- Percentage of recycled asphalt used in the production of asphalt mixture in Germany, Austria and Poland (combined share of group output: 70 %)
 - Germany: 32.7 % of total asphalt mixture production of 3,832,035 t
 - Poland: 29.8 % of total asphalt mixture production of 2,410,485 t
 - Austria: Insufficient data available for reporting

Objective: We aim to increase the recycling share and also follow client demands in the process.

- Energy consumption and CO₂ intensity in the relevant energy consumption categories in Germany, Austria, Switzerland and Poland (combined share of group output: greater than 70 %)

– Vehicle fleet (all vehicle categories): 7.8 litres/100 km and 0.2 kg CO₂/km

Objective: at least 1 % reduction per year

- Asphalt mixing plants: 94.3 kWh per tonne of asphalt mixture produced and 32.6 kg of CO₂ per tonne of asphalt mixture produced

Objective: The insufficient data that are available make it impossible to provide a target value in form of a percentage change. For this reason, we continue to cite absolute values.

- Construction equipment: Because of the insufficient data that are available, we are currently running pilot projects for the registration and monitoring of energy consumption and CO₂ intensity values for construction equipment.

Projects and initiatives

ENERGY MANAGEMENT PERFORMED SYSTEMATICALLY

STRABAG has had a systematic energy management in place since 2012 to identify savings potential and continuously raise energy efficiency. The cost savings that have been and remain to be achieved help us to increase our competitiveness. For economic and ecological

reasons, the topic of energy remains of great importance for the STRABAG Group. The **energy costs** for the companies within STRABAG SE's scope of consolidation increased to € 250.59 million in 2017 (2016: € 235.09 million). This increase is caused by various external influences.

The energy and CO₂ data for the group are systematically captured and analysed using **CarbonTracker**. The software was developed in-house and has been in use since 2012. On this basis, we are developing concepts to reduce the use of fossil energy sources and lower the resulting green-house gas emissions in the long term through more efficient conventional or innovative machines.

Group employees are sensitised to contribute to **increasing the energy efficiency**. This occurs, for example, through training courses in which the staff is informed on the issues of safety, environment and energy.

ENERGY USE WITHIN THE GROUP

Form of energy	Unit	2013	2014	2015	2016	2017
Electricity	MWh	497,943	433,164	443,009	451,073	488,241
Fuel	thousands of litres	252,718	230,926	222,261	206,308	210,700
Gas	heating value in MWh	585,857	505,371	531,201	453,395	498,030
Heating oil	thousands of litres	16,053	14,388	17,661	15,383	16,878
Pulverised lignite	tonnes	69,602	75,247	72,174	75,468	83,193

Fuel management as important building block of energy management

The group's most important energy source is **fuel**, which accounts for about 65 % of the total energy costs and therefore holds the greatest potential for savings for the group. In the 2017 financial year, we reassessed the efficiency potential of the passenger car and commercial vehicles fleet for the group's two largest markets, Germany and Austria. From today's point of view, there is a savings potential for fuel by

In the second quarter of 2017, we began introducing an electricity and gas data management system to perform load profile analyses at stationary plants and administration buildings. This will help us to recognise and reduce power peaks and excessive base loads (demand for default electricity supply).

The positive results of the energy management can be seen in the reduction of energy costs, the higher tax savings potential and the protection of the environment through lower emissions.

about 3 %. **FuelTracker**, which was developed on the basis of the CarbonTracker software, allows us to analyse the fuel use of the STRABAG passenger car and commercial vehicles fleet. To also analyse the fuel use of the construction machinery and equipment, a system is currently being developed to digitalise the consumption data. Results are expected by the middle of 2018.

Driving energy management: current national and EU legislation

In response to the **EU Energy Efficiency Directive**, among other things, STRABAG began introduction of an ISO 50001-certified energy management system in 2014 starting with the core countries of Austria and Germany. All companies in Austria that are at least 50 % owned by STRABAG SE are in possession of valid certification. Furthermore, energy efficiency measures are being implemented to lower the energy use by 0.6 % on the basis of the total annual energy use of these companies. In Germany, our largest market, the **Energy Services Act (EDL-G)** was amended in 2015. Since 2016, an ISO 50001-certified energy management system has been present in Germany. Other European countries have already implemented the EU Energy Efficiency Directive into national law and are calling for the total or partial introduction of an energy management system. A comprehensive system has also been established in

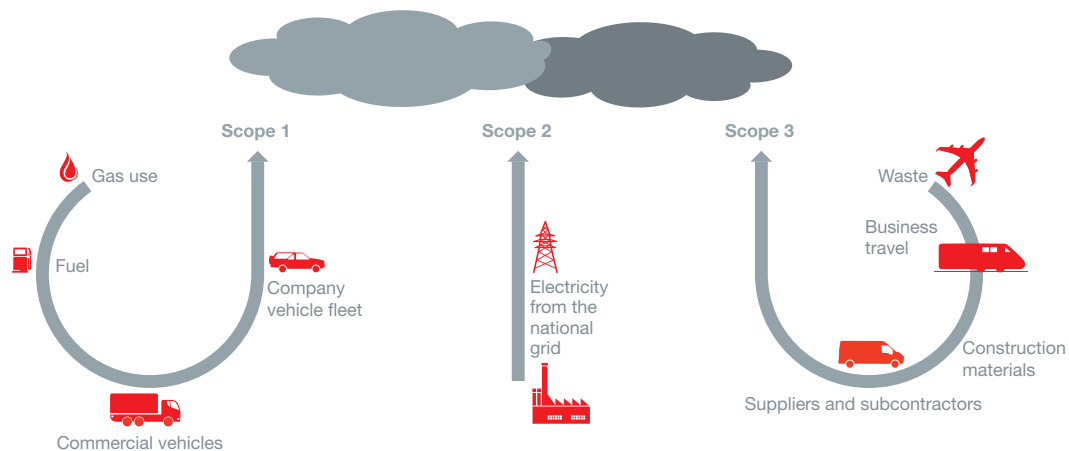
Hungary, Serbia, Croatia and Slovenia. In Denmark, STRABAG is performing external energy audits to comply with the requirements. The necessary measures in Poland, Slovakia and Sweden are centrally coordinated and arranged in the individual countries.

The carbon footprint for the 2017 financial year refers to the group's full scope of consolidation and includes the emissions caused in 67 countries. Within the group, a total of 1,111,616 t CO₂ were emitted in the year under report. In a year-on-year comparison, this corresponds to increase of 5 % or 55,018 t CO₂. The emissions are reported separately for Scopes 1 and 2 as defined by the Greenhouse Gas Protocol. More than half of the CO₂ emissions in the group result from the use of fuels, mainly diesel. This is followed by electricity and pulverised lignite with 20 % and 16 %, respectively. Germany,

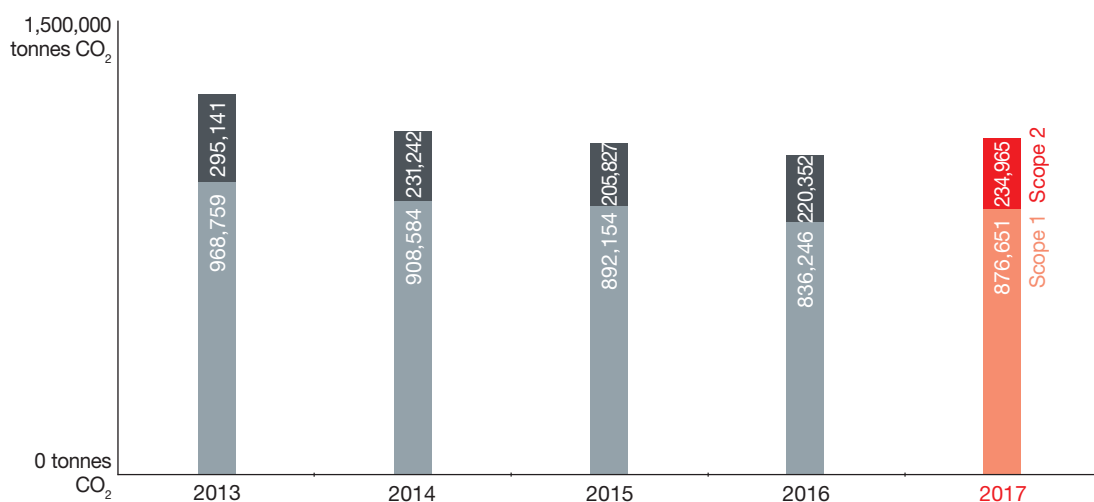
Poland, Austria and the Czech Republic are responsible for the greatest share of these emissions (66 %). With 73 %, these countries also

accounted for the greatest share of the group's output volume in 2017.

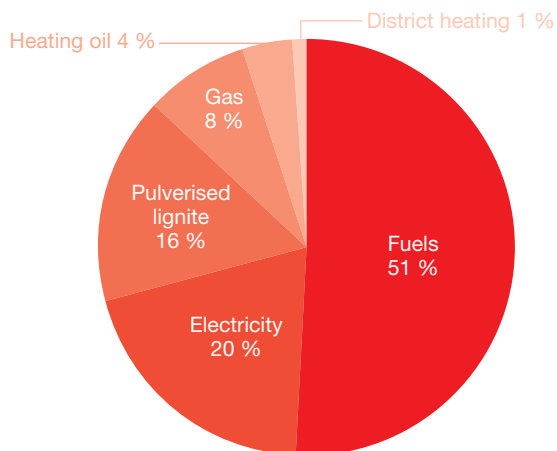
THREE SCOPES



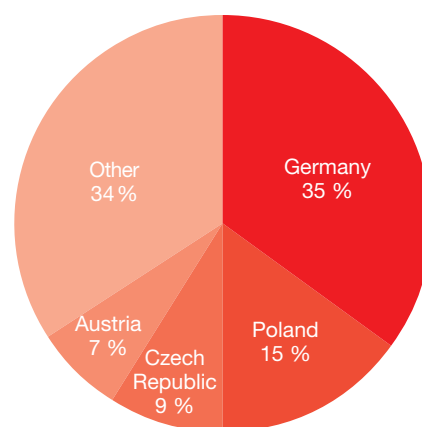
EMISSIONS OF THE STRABAG GROUP



CO₂-EMISSIONS BY ENERGY SOURCE 2017



CO₂-EMISSIONS BY COUNTRY 2017



RESOURCE-EFFICIENT MATERIAL USE THROUGH RECYCLING

MATERIALS USED

Material	Unit	2013	2014	2015	2016	2017
Stone/Gravel	thousands of tonnes	60,360	59,910	60,670	58,020	62,420
Asphalt	thousands of tonnes	13,110	13,840	13,690	13,660	14,000
Concrete	thousands of m ³	5,053	4,934	4,986	4,589	5,357

The construction sector plays a key role in the future development of efficient ways to use primary raw materials. STRABAG recognised this development years ago and has been increasing its resource efficiency through **optimised production processes** for concrete, cement and asphalt, on the one hand, and on the other hand, through the reprocessing and **recycling of construction materials**. In a European comparison, the recycling rates in two of our core countries – Austria and Germany – are already

quite high. Technological advances and stricter legislation help to promote this positive development. The transportation infrastructures segment holds especially high potential. The recycling of used materials reduces greenhouse gas emissions and saves valuable primary raw materials. Moreover, with a rate of 78 %, we cover most of our asphalt needs ourselves. This puts us in a position to optimise the production process as needed and to initiate measures to raise energy efficiency.

SUSTAINABLE BUILDING IN ACCORDANCE WITH ESTABLISHED CERTIFICATION SYSTEMS

Rising energy prices, the increasingly noticeable impact of climate change, and rapid urban growth present the construction industry with new challenges: buildings are no longer optimised only according to investment criteria – lifecycle costs, quality and resource efficiency are also becoming more important. Thinking and working in cycles results in economical, environmentally friendly, low-resource buildings which also meet the high demands for functionality and flexibility.

generate their own, during their period of use. We have the technical know-how and the necessary experience to design and construct sustainable buildings. In addition to consultation and execution, we also conduct audits of new and existing buildings in accordance with the established certification systems **DGNB, LEED, ÖGNI, and BREEAM**.

We also want to offer our own employees a chance to experience the health benefits and level of comfort which the users of sustainable buildings enjoy: Seven of our group buildings at five locations have been built either fully or in part by STRABAG and its subsidiaries with subsequent certification according to DGNB or ÖGNI criteria.

Seven group buildings with DGNB or ÖGNI certification

Taking a building's entire lifecycle into account, **energy demand is highest** during the **operating phase**. An important and growing business field for STRABAG therefore is to optimise buildings so they consume little or no energy, or even

STRABAG REAL ESTATE: DGNB BASIC CERTIFICATION IN GOLD FOR SUSTAINABLE OFFICE AND ADMINISTRATION BUILDINGS

STRABAG Real Estate GmbH (SRE) has opened up a new chapter in real estate certification. The company was awarded gold certification from the German Sustainable Building Council (DGNB) with the SRE Standard Multiple Certification covering all standard designs for the company's office and administration buildings. The certificate was presented by DGNB at Expo Real 2017 in Munich.

With the multiple certification, SRE has set a milestone in the certification practice for sustainable buildings. "The basic certificate from DGNB certifies STRABAG Real Estate as a true pioneer in sustainable building and is a clear statement for sustainability," says Christine Lemaitre, CEO of DGNB. "It shows that the company approaches the subject with the necessary seriousness – for both the environment and people."



The multiple certification comprises all standard designs for real estate developed by SRE. This means that, as a rule, all the company's office buildings already comply with the DGNB Gold Standard after the first design. The corresponding certification merely requires the application of additional, project-specific factors. This helps to streamline the certification process and to reduce the associated costs. SRE developed the application system for its standard in close cooperation with DGNB and the Sustainable Building Department at Ed. Züblin AG.

SOCIETAL ENGAGEMENT

Focus on cultural and social projects as well as on team sports

Our business activity – the business of building – directly shapes people’s living environment. The result is an interaction between construction and society: only in a successful society can we succeed. At STRABAG, we therefore feel obliged to contribute to the healthy development

of society as a whole. This means that we make contributions to maintain the social standards in Central Europe, to improve them in other countries, and that we support cultural projects as well as team sports to enhance team spirit.

Rules and responsibility areas

If and in which form we lend substantial support is decided by the STRABAG SE Management Board according to eligibility criteria such as:

- Can STRABAG, given the nature of its business, make a contribution to the project that companies in other industries could not?

- Is the project worth our long-term commitment?

- Does the project fit our strategy and our public image?

Objectives and indicators

We do not extend our social commitment indiscriminately, but instead support selected initiatives over the long term in order to make a lasting contribution. One of the indicators that measures

our commitment is the contribution we make to the core projects and initiatives mentioned below. In 2017, this amounted to € 4.70 million (2016: € 4.85 million).

Projects and initiatives

CONCORDIA SOCIAL PROJECTS



With STRABAG’s help, CONCORDIA supports people in need.

In the social sphere, we are especially committed to helping children and youth in Eastern and South-East Europe by giving them an opportunity for an education and the chance for a better future. This also helps to secure the future of our company in these markets. An important contribution is made to CONCORDIA:

CONCORDIA is an internationally active, independent charity organisation for children, youth, the elderly, and families in need. From its start in 1991 as a social project for street children in Bucharest, CONCORDIA has grown into an organisation which today helps around 9,000 children, youth and families in Romania, Bulgaria and the Republic of Moldova.

The organisation's most important goal is keeping families together. Many parents are forced to leave the country in search for work. Sometimes children are unable to stay with their families due to existential poverty. CONCORDIA's services therefore comprise family-like children's homes, foster care, social centres for youth in precarious situations, assisted living facilities for young adults and outreach work. Another focus is on educational projects: from educational assistance or music instruction to separate training facilities, for example for cooking/baking or the carpentry trade.

In the Republic of Moldova, CONCORDIA also attends to the needs of around 6,000 people who have to live in extreme poverty. All over the country, CONCORDIA's social centres and soup kitchens provide elderly people and children in

need with the essentials they require every day. STRABAG has been a partner of CONCORDIA for years, helping to build living facilities for (orphaned) children, setting up social centres and soup kitchens, and offering continuous support of the organisation's activities.

With STRABAG's support, CONCORDIA also provides assistance to children from low-income families in Austria and helps unaccompanied minor refugees take their first steps towards integration. Since 2016, an annual fundraising concert by Tyrolean Festival Erl on behalf of the CONCORDIA children's projects has been a regular part of the joint effort by STRABAG and CONCORDIA to help people in need.

More information: www.concordia.or.at

TYROLEAN FESTIVAL ERL

Tyrolean Festival Erl was founded in 1997 and has been held in the illustrious Passion Play town of Erl in Austria under the overall direction of Gustav Kuhn every year since 1998. STRABAG has been a supporting partner from the beginning. An attractive winter season programme was added to the summer programme in 2012 when performances became possible in the STRABAG-built festival theatre.

Tyrolean Festival Erl has become a respected fixture in the cultural life of Tyrol and internationally. The focus in the summer is on Wagner and Strauss as well as on a classical and romantic concert repertoire. In the winter, the unique acoustics in the new festival theatre do justice to the works of Mozart, Bach, Italian composers and belcanto.

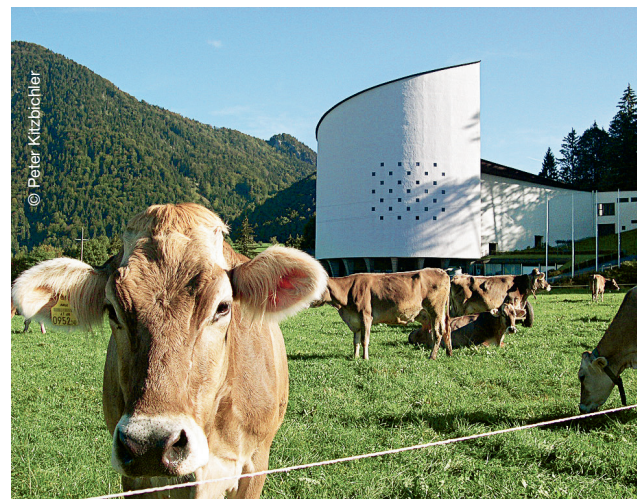
To guarantee the long-term viability of this important cultural venue, the "Tiroler Festspiele Erl Gemeinnützige Privatstiftung" was established in 2017 with STRABAG SE as one of the

ENSEMBLE:PORCIA

Ensemble:Porcia, one of Austria's oldest summer theatre festivals, can look back on 56 years of tradition in comedy at its historic venue of Porcia Castle in Spittal an der Drau in Carinthia. Each season, the ensemble arranges six new productions of great comedies for a programme that equals that of a midsized city theatre. The European idea is at the focus of the pieces chosen by director Angelica Ladurner: Every summer, the troupe performs a comedy from the repertoire of a European

language. 2017 was the year of German-language authors.

Performances are held not only in the courtyard of Porcia Castle, but also at the Salamanca Gallery in Spittal an der Drau. And from May through August, the Porcia Theatre Wagon tours through all of Carinthia. This season, it even called in at the STRABAG head office in Vienna. In addition to the 75 performances in front of about 17,000 spectators, a special attraction in



The festival and Passion Play theatre in Erl (Austria)

foundation's sponsors. 2017 also saw the 20th anniversary of the festival summer. In this year, more than 20,000 visitors came to enjoy the opera, concert and chamber music evenings.

More information: www.tiroler-festspiele.at

2017 was a joint performance with the 2016 Nestroy Audience Award winner Nikolaus Habjan and Musicbanda Franui at Porcia Castle.

More information: www.ensemble-porca.at

STRABAG KUNSTFORUM

STRABAG Kunstforum has long been in the service of arts patronage – as organiser of the STRABAG Artaward International, with the exhibitions at the STRABAG Artlounge and through the establishment and maintenance of the permanent collections at more than 60 offices throughout Europe. The STRABAG Artaward has been presented since 1994 in Austria and since 2009 as an international art sponsorship award for artists in the fields of painting and drawing. Winners receive the opportunity to present their works at an individual exhibition in the STRABAG Artlounge. STRABAG Kunstforum also gives artists access to the art studio at the STRABAG head office in Vienna as a place that promotes the creativity, artistic productivity and exchange within the art scene.

For the years 2015–2017, the award was open to artists from Austria, Switzerland, North Rhine-Westphalia (Germany) and the Benelux countries. The winner in 2017 was Julia Steiner, the first Swiss artist to win the award. Additional awards went to Natascha Schmitten, Denitsa Todorova, Stylianos Schicho and Daniel Karrer.



The Theatre Wagon even made it to the STRABAG head office in Vienna.

Besides the focus on young artists, individual exhibitions were also organised for established names from the art world such as Eduard Angeli and Ahmet Oran. All temporary exhibitions at the STRABAG headquarters as well as the permanent exhibition of Bruno Gironcoli at the Gironcoli-Kristall, Vienna, are open to employees and the general public during regular office hours. Admission is free.

With the 3,000 works of art comprising the STRABAG Artcollection, STRABAG Kunstforum aims to promote the dialogue between art and everyday life and to give artists a platform where they can continue their work. In 2017, STRABAG Kunstforum provided the art for the new location in Zirl (Austria) as well as the existing locations in Stuttgart (Germany) and Tech Gate Vienna (Austria).

More information: www.strabag-kunstforum.at



STRABAG Artcollection at the new location in Zirl, Tyrol



Award ceremony STRABAG Artaward International 2017

RISK AND OPPORTUNITY MANAGEMENT – PROJECT-RELATED RISK MANAGEMENT

Why manage risks and opportunities?

Don't focus only on the macroeconomic development, but also – and above all – scrutinise a construction company's risk management system.

The STRABAG Group encounters many different risks and opportunities in the course of its business activities. These risks are systematically identified and assessed using an active risk management system and actively managed through an appropriate risk management policy. This risk management policy is an integral part of the management system and describes a set of fixed principles and responsibilities for risk management and how to deal with the material risk categories.

When capital market participants or suppliers scrutinise a company in the construction sector, the forecasts for the macroeconomic development of the individual markets are usually of great importance to them. Of course, our business is influenced by economic growth and public spending; at least as important, however,

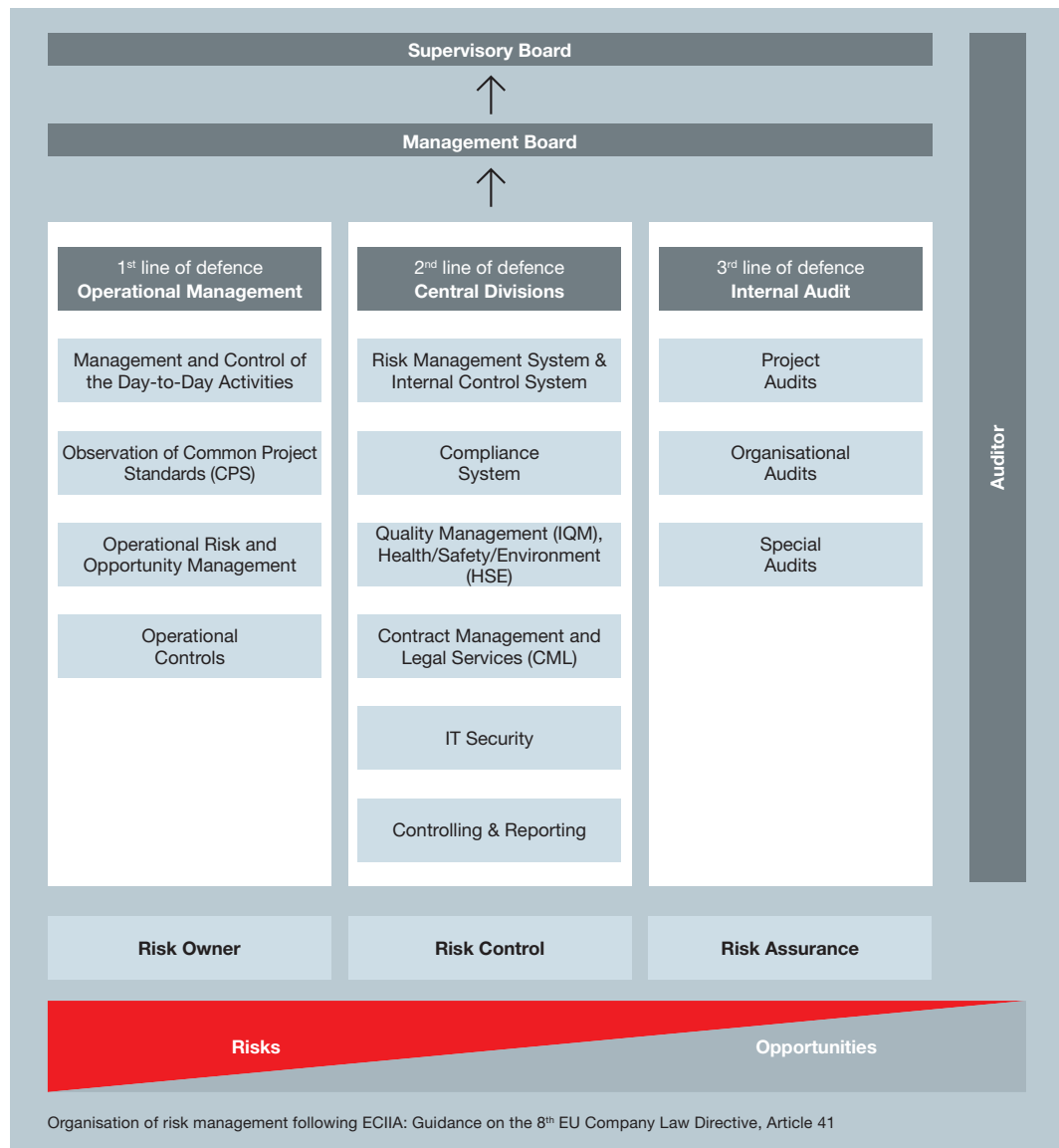
is a construction company's risk management. After all, the large number of unique projects translates into an increased risk potential. Keeping this under control requires a focused organisational structure with clearly defined responsibilities and effective instruments for an active risk and opportunity management. An end-to-end risk and opportunity management system also is a competitive advantage that is difficult for the competition to copy – it can only be established over the long term.

Managing risks and opportunities is part of the daily work at STRABAG. Additional information can therefore be found in the Management Report under "Risk management", "Financing/Treasury" and "Order backlog" or in the Consolidated Corporate Governance Report.

Rules and responsibility areas

To ensure a responsible and proactive approach to risks and opportunities, we integrated a comprehensive **risk management system (RMS)** with an **internal control system (ICS)** in our management system on the basis of the internationally recognised COSO Enterprise Risk Management Framework (COSO: Committee of Sponsoring Organizations of the Treadway Commission). Risk management is a **core activity of the management** with responsibility at the corresponding management level. The organisation

and responsibilities for the risk management are determined according to the three lines of defence approach supported by the European Confederation of Institutes of Internal Auditing (ECIIA). This end-to-end corporate governance model applies to all disciplines of risk management and establishes clear roles and responsibilities for risk management to ensure a functioning and efficient control and monitoring framework.



The **first line of defence** is the operational management, which has responsibility for identifying, analysing, assessing, managing and monitoring risks and opportunities. As **risk owner**, the operational management is responsible for establishing preventive measures to avoid or mitigate risks, for taking advantage of opportunities that arise in the day-to-day business and for ensuring that all activities coincide with the company objectives.

The **second line of defence** supports the operational management in **risk control** as well as in further developing the risk management system and the internal control system. This includes the central functions for risk management, compliance, quality management, health/safety/environment (HSE), IT security, and controlling and

reporting. The central divisions establish standards, methods and processes for the risk management along with related standards and guidelines, manage and monitor their implementation in the operational areas, report periodically to the company management and review the level of sophistication and further development of the management system.

The **third line of defence** comprises the internal audit department as an objective and independent audit and consulting entity for **risk assurance**. The internal audit department supports the company management, the operational management and the monitoring entities in early risk recognition and reviews the effectiveness of the measures established to minimise or avoid risk.

Complementing the above, the **financial auditor**, as part of its annual audit activities, assesses the effectiveness and efficacy of the risk management system and the internal control

system and so supports the ongoing monitoring of the efficiency of the three lines of defence. The essential success factors of our integrated governance system are explained below:

#1 – MANAGEMENT SYSTEM WITH ASSOCIATED POLICIES AND RULES

The management system of the STRABAG Group is described with the associated policies in the Management Manual and is documented with superordinate and subordinate rules. The rules

apply across the group and have been translated and communicated in all relevant group languages.

#2 – ORGANISATIONAL STRUCTURE WITH CENTRAL ENTITIES

The management of the risks and opportunities receives significant support from the group's organisational structure. The uniformity of the organisation creates economies of scale and results in efficient controlling and reporting. Under the roof of the parent company STRABAG SE, a number of legally independent subsidiaries are active in their respective national markets. The top level of organisation are the segments North + West, South + East, International + Special Divisions and Other (this segment comprises the central divisions and the central staff divisions), each of which is headed by at least one member of the Management Board.

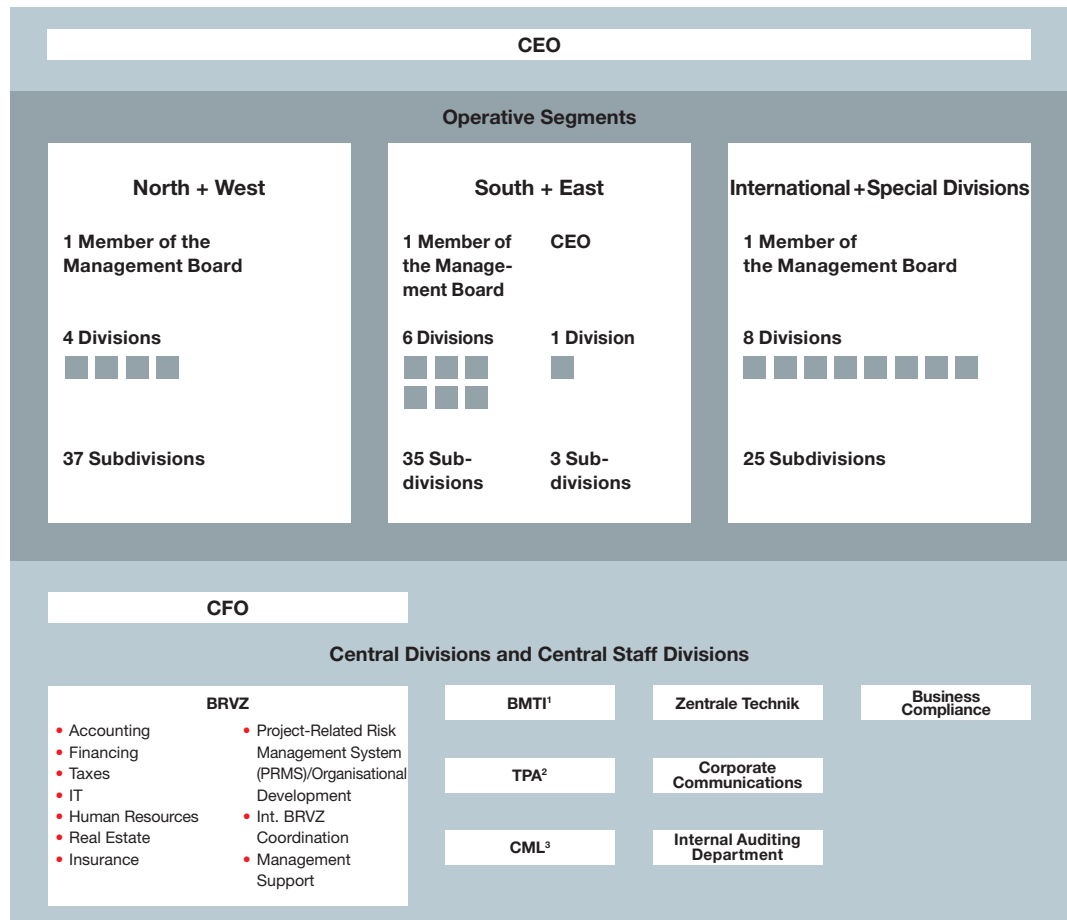
The STRABAG SE **Management Board** is the group's top management body. It is responsible for maintaining the group's financial balance and determines its strategic goals. The Management Board regularly discusses matters of corporate responsibility and sustainability. During the execution of these tasks, the Management Board is supported by the **divisions** as well as by the central divisions and central staff divisions (service companies).

The division managers coordinate and steer their subdivisions and report directly to the member of the Management Board responsible for their division. They manage their business independently and on their own responsibility within the framework of the group's business policy. It is their responsibility to reach the objectives laid out in the strategic and operational

planning and to realise the specified individual measures. The operating business is managed by the **subdivisions**, which in turn are organised into individual business units. They are responsible for the greatest possible success in their regional markets or business fields and are managed by the superordinate division managers.

The **central divisions** handle the group's internal services in areas such as accounting, financing, taxes, IT, human resources, real estate, insurance, project-related risk management system and organisational development, equipment and vehicle management, quality management, safety/health/environment and energy management, technical consultation, quality assurance, innovation management, prequalification, contract management and legal services. As competence centres, they support the operating units so these can concentrate on the core business and deliver their services to the clients in an efficient manner. The **central staff divisions** are responsible for internal audit and communications and report directly to the CEO.

While important decisions at the Management Board level are made during regular board meetings, the **four-eyes principle** applies at the levels below. For us, this dual management structure ensures efficient risk management and foresees that responsibility is largely assumed jointly by one technical and one commercial manager.



1 BMTI: equipment and vehicle management

Last updated: 1 February 2018

2 TPA: quality management, health/safety/environment and energy management, technical consultation, quality assurance, innovation management

3 CML: prequalification, contract management and legal services

#3 – PROJECT SELECTION AND INTERNAL PRICE COMMITTEES

Project-related risks often have their origin long before contract signing. In order to recognise significant risks and opportunities at an early stage, we select projects before participation in a prequalification or before the start of bid processing on the basis of defined criteria and disclosure thresholds. Especially with large projects, the management can set framework conditions

for the further bid processing and for the early inclusion of specialists from the group's central divisions and central staff divisions. When defined disclosure thresholds are exceeded, a bid, before it is submitted, must be closely reviewed and approved by internal **price committees** composed of members from various hierarchy levels depending on the project size.

“We have a self-developed management information system that helps us to apply the same standards in all regions in which we operate. That means clear criteria for the assessment of new projects, a standardised process for the submission of bids, and control systems that serve as filters to avoid loss-bringing projects.”

#4 – MANAGEMENT INFORMATION SYSTEM

Our management information system gives us an up-to-date overview of the financial status of all our projects with data that can be compared from country to country. In addition, evaluations are analysed by the respective management and members of the STRABAG SE Management Board at regular intervals.

Thomas Birtel, CEO of STRABAG SE

Objectives and indicators

A primary objective is the **long-term existence of our company**, which we strive to ensure by maintaining our focus on cost efficiency and the

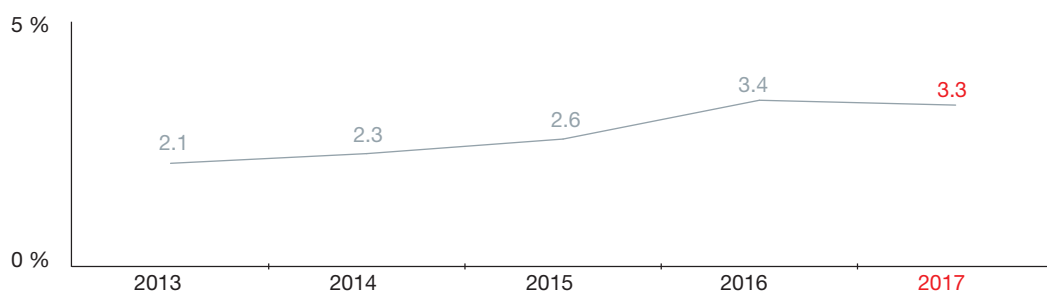
disciplined use of capital. To reach this overriding objective, we set ourselves the following specific goals:

REACH AND SUSTAIN THE DEFINED EBIT MARGIN TARGET

The **EBIT margin** is our **most important financial indicator**. The margin is especially crucial for our investors. Given our policy of paying out 30–50 % of the net income after minorities in the

form of a dividend, our investors are especially interested in seeing a sustained achievement of the EBIT margin target.

DEVELOPMENT OF EBIT MARGIN



Since 2016, we have made it our goal to confirm a sustainable EBIT margin (EBIT/revenue) of at least 3 %. In the 2017 financial year, with an EBIT margin of 3.3 %, we again succeeded in reaching our self-imposed target. The operating margin surpassed the level of the previous year, in which a non-operational one-off effect, which

had been disclosed at the time, from the sale of a shareholding related to the acquisition of the minority interest in subsidiary Ed. Züblin AG had resulted in an upwards distortion of the earnings figures. Adjusted for this effect, the 2016 EBIT margin stood at 3.2 % compared to an unadjusted margin of 3.4 %.

CONSTANTLY INCREASE THE EFFICIENCY OF THE PROJECT-RELATED RISK MANAGEMENT SYSTEM

To maintain the EBIT margin at the level attained, and raise it if possible, we must consistently and sustainably reduce the flop rate by constantly improving the efficiency of our project-related risk management. We have implemented a risk management system (RMS) with an integrated internal control system (ICS) across the group to help us in the early identification, accurate assessment, effective management, and transparent end-to-end monitoring of significant project-related risks and opportunities. We periodically review the efficiency and effectiveness of the systems, processes and controls for early recognition of all material risks and related countermeasures in order to deflect impending damage to the company and rule out any potential threat to its existence. Weak points that are identified in the process are transparently documented and immediately rectified.

For the monitoring of the overriding objective, several **indicators** are periodically measured and tracked on the basis of multi-year comparisons. These indicators include:

- Financial figures
- Project-related and organisational figures
- Economic and industry situation

- Market position and competition
- Client situation
- Services offered
- Management quality

However, the effectiveness and efficacy of the risk management system cannot be measured or assessed on the basis of an isolated observation of individual risk parameters. Many different indicators must be observed in the context of various influencing and correlating factors.

We are working on developing a more uniform, group-wide understanding of risk and a standardised, end-to-end method for the identification, categorisation, assessment and tracking of risks and opportunities. On this basis, the project-related documented risks and opportunities can be aggregated over the long term and the associated risk indicators can be ascertained. Using cause/effect analyses, we also evaluate the degree to which this allows us to derive correlations or dependencies that could serve as early-warning indicators to deliver important information for the management of risks and opportunities.

ENSURE COST EFFICIENCY AND DISCIPLINED USE OF CAPITAL

To sustain an EBIT margin of at least 3.0 % in the long term, it will not be necessary for the market – i.e. the macroeconomic environment – to improve. Besides our increased efforts to improve the project-related risk management, we are maintaining our focus on **cost efficiency and the disciplined use of capital**. This was at the centre of the work of the internal **STRABAG 2013ff task force** that over a four-year period visited the locations of all our organisational entities, viewed construction sites, and engaged in conversations with the local management. The aim now is to stabilise and consolidate the

efficiency improvements achieved by the work of the task force with regard to the organisational and strategic position of the group. Help and assistance in this regard should come from the **central division Project-Related Risk Management System/Organisational Development/International BRVZ Coordination** that was created in 2015. The main tasks of this team include the development of organisational indicators and benchmarks for efficiency improvement as well as the consultation and support in organisational development measures at individual company entities.

Projects and initiatives

Also see the “Strategy” section of the Annual Report

Based on the strategic principles for the management of risks and opportunities, the measures we are taking include the following:

MEASURES TO STRENGTHEN THE PROJECT-RELATED RISK MANAGEMENT SYSTEM

The STRABAG Group’s risk management system was improved through the following changes and enhancements in the 2017 financial year:

- Extension of the minimum standards for the procurement and execution of construction projects (common project standards) – these are an integral part of the management system and have group-wide validity – through rules and regulations specific to the respective business units and countries
- Further development of the decision-making foundations in the project initiation phase to support the decision-making process in final tender meetings or price committees
- Implementation of an evolved catalogue of possible causes, based on the common project standards, for the categorisation of material positive and negative earnings causes
- Further analysis of cause-and-effect relationships
- Improvement and extension of the data management for the gradual establishment of a knowledge database complemented by analysis and assessment options for the promotion of a needs-based exchange of experience among the project participants
- Improvement of system interfaces to avoid redundant data capture and to improve quality and transparency in data management and the determination of key performance indicators
- Improvement of the project data management in the areas of data structuring, archiving, functionalities and interfaces to support the decision-making processes during the project initiation phase
- Extension of the standardised reporting through project management tools for the early recognition of opportunities and errors (including comparison of target/actual quantities for main works)
- Development and introduction of an IT tool for the standardised, systemic end-to-end documentation and tracking of risks and opportunities
- Derivation of indicators and the development of efficient early-warning systems on the basis of the periodically analysed lessons learned and experiences in order to avoid errors or the repetition of errors
- Stabilisation of the efficiency improvements initiated by the STRABAG 2013ff task force through the development and complementation of suitable organisational indicators as a decision-making basis for sustained structural optimisations
- Planned merger of the reporting in a modular controlling portal

In the 2017 financial year, we also initiated the following long-term developments which are either in the evaluation and conception phase or are finding implementation in subprojects:

An essential prerequisite for the improvement of our project-related risk management system is the active contribution of all employees with a clear commitment to an open error culture. This is where our values of partnership, trust and respect, based on honesty, fairness and mutual appreciation, are of particular importance, as they form the foundation for a learning organisation.

Also see chapters
“Innovation” and
“Digitalisation”

DIGITALISATION TO PROVIDE NEW TOOLS FOR THE REDUCTION OF CONSTRUCTION RISKS

The new tools being used in **BIM.5D**[®] processes facilitate, among other things, regular consistency reviews of the construction designs, a model-based quantity, cost and performance assessment, and schedule planning, and, on this basis, an end-to-end rendering of the construction sequence with digitally linked processes and consistent data across the entire lifecycle of a building. This can help uncover and correct

errors at an early stage, thus minimising the risks in a construction project, the roots of which are often found in the design phase. The digitally retrievable data can then be used for different analyses (including building analyses and simulations, sustainability studies or building certification). The digital tools also promote an efficient and transparent working relationship with clients, designers and partner companies.

INNOVATION

STRABAG is a technology group for construction services. For a technology-focused company, it is essential to embrace innovation to remain competitive in the long term.

The trend towards **integrated end-to-end solutions** is increasingly taking hold in the construction sector as well. Clients want benefit, rather than things and individual functions. This results in complex changes. The function of buildings and transportation infrastructures is increasingly seen over the entire lifecycle – in terms of technology, profitability and environmental impact. Yet today **production costs** still **decide** over most contract awards. This price competition can be countered not only through increased efficiency but also by applying innovative solutions. Clients are increasingly looking at the operating and lifecycle costs; rarely, but more and more, an assessment of the environmental impact of the relevant construction-related processes is wanted. In the future, construction companies will be asked to build highly functioning buildings with maximum comfort, high health standards and low impact on the environment. The bid submission for and execution of the Axel Springer Campus in Berlin is a clear example of this development.

Policymakers are also recognising the role of the resource-intensive construction sector when it comes to tackling challenges such as **climate change** and **resource scarcity**. There is a considerable need for energy-efficient residential and non-residential buildings and, considering the increasing traffic volume, for modern transportation infrastructures. This finds expression in extensive national and European subsidy programmes and announces large investment volumes.

All of these demands fit in well with the basic understanding and the role of a **main contractor**. Whereas in the past contractors were usually invited to join the process at the construction stage – which is quite late in the game –, in the future they will participate earlier and more extensively during the design phase. But “Front-loaded Design”, which involves comprehensive planning early in the project’s lifecycle, also means that the people, information, means and materials necessary to carry out a project are made available promptly, fully and comprehensibly. This is why we offer our clients the STRABAG teamconcept contract scheme to commit all participants to the project as soon as possible.

The aim is to recognise the scope and, ideally, the implications of the changes. Because entrepreneurial success in the future will depend on the ability to recognise trends in time and to be prepared for this new complexity. Our innovation activity must therefore be steered strategically.

Initially, an organisation’s desire to innovate stands in conflict with the aim to successfully do business using tried-and-tested technologies, methods and products for as long as possible. Because innovation stands for a process leading to novelties. That requires changing routines, overcoming resistance and adapting the organisation. For innovations to become successful, they must be introduced into the organisation’s structure as prudently as possible and under consideration of the varied interests of the different stakeholder groups – including shareholders, clients and employees. Allowing a balanced **freedom to try out** new ideas makes it possible to better estimate and manage risks; moreover, such freedom is often instrumental for new solutions, it motivates employees and it is seen as especially attractive among job applicants.

Production costs usually still decide over award

Strategically steering innovation

Rules and responsibility areas

One **STRABAG SE Management Board member**, Peter Krammer, acts as a sponsor of innovation and digitalisation within the group. **Innovation managers** at the **divisions and central divisions** collect development proposals and approve their realisation in line with the strategic alignment of their business field. They are

supported by the **Innovation Management** team from Zentrale Technik on how to recognise relevant trends; on questions pertaining to the systematic development of new solutions, public funding or development partnerships; and on the internal and external rollout and reporting on the group-wide innovation activities.

Objectives and indicators

We want to develop new solutions (products, processes, systems and services), tap new business fields and be a forward-looking employer. The following indicators show us if we are on the right path to reach our objectives:

- Provision of research and development funding by the company: € ~11 million
Objective: maintain at least the previous year's level
- Number of subdivisions with at least one person responsible for innovation: 23 (out of 100 subdivisions total)
Objective: increase the ratio of innovation managers per subdivision to total number of subdivisions in the group next year

- STRABAG events on the topic of innovation (e.g. Innovation Day):
 - Number of participants: 339
 - Number of participating organisational units: 61
 Objective: maintain at least the previous year's level
- Publication of relevant development projects to inform of the group's innovation activities (Research, Development & Innovation brochure and via digital channels): 40
Objective: maintain at least the previous year's level

Projects and initiatives

On average, about **100 development projects annually** are carried out in the group which encompass the entire construction value chain: from the measurement of topographical data using drones to the analysis of traffic data by our subsidiary EFKON AG, from the development and adaptation of tools for model-based working methods for design and construction logistics to facility management, where we are working together with Microsoft on the use of the HoloLens data glasses.

Our annual **group brochure** Research, Development & Innovation features reports on the most important works and serves to network management, clients, investors and our employees.

Another networking tool is the STRABAG platform **connect**, which allows our employees to

exchange ideas and propose solutions quickly across organisational and geographic boundaries. An especially active community is the LEAN.Construction community (see below). The employees use the community to share improvements through the use of LEAN methods with other LEAN interested people.

Our second Innovation Day took place in Bratislava in 2017. The purpose of this internal fair-like event was to make the operating entities aware of recent innovations within the group. The Innovation Day was attended by more than 330 people from eight countries.

Since 2004, the group has been a proactive member of the European Network of Construction Companies for Research and Development (**ENCORD**) and the European Technology Construction Platform (**ECTP**).

You can download the brochure at www.strabag.com > Strategic Approach > Economic Responsibility.

STRABAG LEAN.Construction: Analyse. Understand. Improve. Build.



More than 200 employees support the construction teams during planning and on site to help execute the projects more easily and more efficiently. They do so by applying various LEAN.Construction methods. Here are some examples.

- **Pull planning** is used to establish the construction milestones as a team (including all internal and external project participants), starting from the date of completion and going all the way back to the very first task to be performed on the construction site. Potential scheduling conflicts are discussed in time and solved appropriately.
- The **STRAtakt paving planner** ensures even, continuous asphalt paving and avoids waiting times for the trucks.

DIGITALISATION

Digitalisation is currently one of the most important issues within the context of innovation at STRABAG. It is a megatrend that will change the traditional construction processes by allowing the fast, global **networking of things and machines** (Internet of Things) and **people**. Components that gather and send data can be built into nearly everything, even into construction materials, construction machinery and construction parts, to provide information during the construction of buildings or to send status updates during their operation. This makes it possible to monitor and optimise processes from almost anywhere – either from the office or on the construction site. Using model-based renderings that present the information in an extremely compact and easily understandable form, people will be able to work together in real time from different locations no matter where they are.

Self-learning algorithms will support the decision-making in ever more complex processes – decisions made not only by management but also by robots. Robots can already lay bricks, perform freeform welding operations and “print” structures, structural elements and construction parts using cementitious pastes. Still, they won’t be replacing human workers any time soon;

Robots will not replace people.

even in the future, people will continue to put their skills to good use on our construction sites. At the same time, we see the opportunity that digitalisation gives us to let machines perform routine tasks so that people can spend more time looking for creative solutions to specific problems.

For STRABAG, the trend towards digitalisation means that **all material business processes** – design, construction, production, operation and administration – must be **gradually adapted** to this new way of processing information. We want to introduce digitalisation in the design-and-build process because we want to remain competitive and viable as well as attractive as an employer and construction partner, and because we expect the networking of the construction participants to lead to increased quality and efficiency as well as better time and cost planning. This means that we must also look at the processes of our suppliers and examine possible intersections. In keeping with our corporate value of partnership, we have begun to offer BIM.5D® training at our external partner companies so that we can elaborate the standards of the future together.

Rules and responsibility areas

To supervise and continuously track the digitalisation processes, a **Steering Committee for Digitalisation** (SCD) was set up as a committee of the Management Board. The committee, whose members are the STRABAG SE Management Board members Christian Harder, Peter Krammer and Siegfried Wanker, meets regularly. The SCD is advised by Team Digitalisation STRABAG (TDS), which consists of one representative each from the operating business, from Zentrale Technik and from BRVZ-IT and who have direct responsibility with regard to digitalisation. The operating business is represented by a “head of digitalisation”, a position that was created in 2017.

Additionally, the new **group directive for a BPM Organisation** (business process management) regulates the management of those business processes requiring central IT support. Local BPM representatives were appointed to serve as speakers for their respective divisions. The BPM evaluation board set up within the BPM organisation, consisting of representatives from the operating business and the central divisions BRVZ-IT and Zentrale Technik, is responsible for the evaluation of the submitted project ideas and coordinates the preparation of the decision-making foundations for the SCD together with TDS.

Objectives and indicators

The STRABAG Group believes that end-to-end process optimisation is the best way to achieve comprehensive and sustainable digitalisation when designing and building construction projects. One focus is on a higher penetration of digital methods such as BIM.5D® (Building Information Modelling), another is on the development of more efficient and more collaborative ways of working with clients and partner companies with the support of suitable tools. To this end, we are investing in the **continuous qualification** of our existing employees and are strengthening our teams with the right specialists.

The indicators mentioned in the 2016 report, which are based on the volume of the construction output and on the number of projects, could not yet be fully determined for 2017. Their use will be re-evaluated. The renewed evaluation is also being performed in part because of changed responsibilities in the management of digitalisation and a possible future change in the management focuses.

Projects and initiatives

We continued to drive the development of BIM.5D® during the 2017 financial year. On the one hand, we gain experience when we apply our know-how of digital building in specific projects, such as the construction of an office building and a production hall for Siemens in Zug, Switzerland. On the other hand, we take part in research projects to help us apply BIM.5D® in all relevant construction phases if possible. The “eeEmbedded” project, for example, aims at using BIM methods already during the design phase. The focus here is on energy considerations and the integration of the planned building into the surroundings.

In transportation infrastructures, we are looking into the use of sensors to monitor the load-bearing behaviour of asphalt roads to better forecast the operating life of a road section. The sensors are currently deployed along the A2 motorway

in Germany in a project commissioned by the Federal Ministry of Transport and Digital Infrastructure. A new undertaking started in 2017 is the group project “BIM.5D® in Transportation Infrastructures 2020”, which over the next two years will trial the BIM approach to work out potential applications of the German Transport Ministry’s Roadmap for Digital Design and Construction.

In 2017, we expanded our training offer even further. In addition to the established BIM.5D® training at our two corporate locations in Stuttgart and Vienna, the subject has now been incorporated as a new module in the existing training series “Successful Construction Management”. For 2018, we are planning another series to train our future BIM.5D® managers. The objective for 2019 is the successful implementation of two complete training series.

You can find more information on these projects in our brochure [Research, Development and Innovation](#)

CLIENT SATISFACTION

Long-term, sustainable success is our goal. This is why the demands and **expectations** of our **clients** are at the heart of each and every project. “We create added value for our clients by our specialised entities integrating the most diverse services and assuming responsibility for them. We bring together people, materials and machinery at the right place and at the right time in order to realise even complex construction projects – on schedule, of the highest quality and at the best price.” In line with this central message of our vision, the issue of client satisfaction was given top priority in the stakeholder dialogue from both an internal and external perspective. Under our strategy, we assign client satisfaction to the strategic field of “Economic Responsibility”. Because **on-time delivery, quality and price** (or, more precisely, cost) are all decisive factors for the economic success of each individual project and of the entire company.

So there is good reason why reliability forms part of our guiding principles. From the prequalification and bidding process to contract awarding and repeat orders to **permanent client relationships**, the satisfaction of our clients always drives our image – which substantially increases our opportunities and is ultimately reflected in our order backlog. Risks – such as those arising from non-fulfilment of client expectations in terms of quality or legal and normative requirements – are systematically countered through the STRABAG management system with measures for **quality assurance, environmental protection** and project-specific **risk management**. In this way, we aim to prevent the negative impacts our business activities may have on the safety of users, on the environment and, consequently, on our reputation.

Rules and responsibility areas

As part of our efforts to increase client satisfaction, the management in the group entities, during the operational corporate planning and assessment, establishes, implements and evaluates specific targets, structures, tools and measures under consideration of the relevant

markets and business fields. The systematic measurement and evaluation of client satisfaction is laid out in the STRABAG Management Manual. The **central division TPA** oversees all coordination, reporting, and monitoring through the use of internal audits.

Objectives and indicators

The stated objective of the Management Board is to increase client satisfaction in order to win and maintain the highest possible share of regular clients. The clients' level of satisfaction with the construction projects is ascertained across the group and monitored using a specific index. A special project that was launched in 2017 by the TPA business unit Integrated Quality Management (IQM) is investigating which factors influence client satisfaction per client segment and (construction) project type. At the same time, suitable methods and indicators are to be determined for the measurement of client satisfaction with and without client surveys. The best practice processes within the group are being reviewed using scientific know-how from a research partnership with the Institute for Construction Management and Economics

at Graz University of Technology. The results will be available in the third quarter of 2018.

New possibilities were also tested with regard to the survey method. In 2017, a pilot project was carried out in Austria on the use of an online client survey tool. The results revealed that such an instrument can be an extension of the existing communication channels.

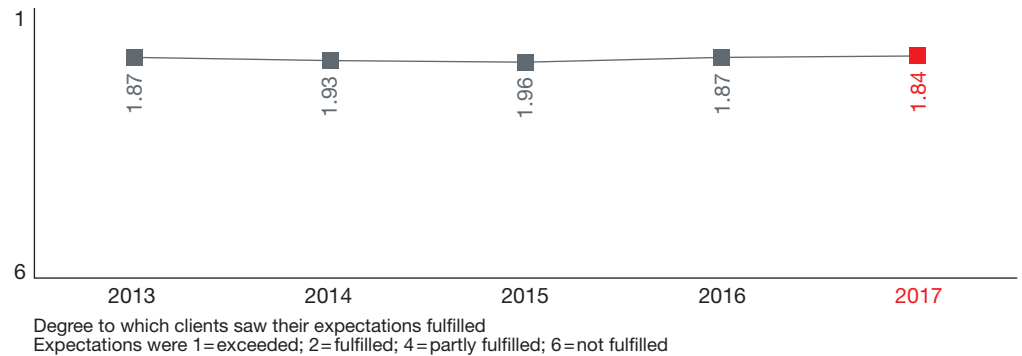
The measurement of client satisfaction via a **client survey** has been carried out for **construction projects using a uniform group standard** since 2005. A written questionnaire is sent to clients in all group countries, asking for their project-specific or contract-related evaluation of the following five aspects: response to faults and complaints; documentation and reporting;

competence of the site manager; competence of the foreperson; orderliness and cleanliness on the construction site. The operating entities can add specific questions to the survey or implement additional procedures for measuring client satisfaction. The evaluation of the questions specified by the group is performed by the independent central division TPA. The assessment

of the results and the extrapolation of objectives and measures is the responsibility of the operating entities during their annual planning and assessment process.

In the years 2013 through 2017, we were able to fulfill our clients' expectations:

RESULTS OF THE CLIENT SURVEY (ALL GROUP COUNTRIES)



Projects and initiatives

The teamconcept is a partnering model that has been in use successfully for many years at several group entities, allowing projects for both client and contractor to be completed more cost-effectively, qualitatively better and more rapidly. Ideally this will create a win-win situation for both sides in the plan, design, build and operate phases that is characterised by shared objectives and values, transparency, risk and opportunity management as well as joint project controlling.

We are continually using, networking and expanding the competencies available in the group to generate value not only for all project participants but also for the users of our buildings and to fulfil their requirements for the long term – for instance, through systematic innovation management and by actively preparing for

the future of construction. This includes the digitalisation offensive launched across the group as well as the roll-out of LEAN.Construction, supported by STRABAG SE Management Board member Siegfried Wanker. Corresponding initiatives are made by order of the group Management Board and managed by our business process management (BPM) committees.

The group academy offers personalised training, such as “Solution-oriented negotiation” or “teamconcept” for all employees with direct client contact. Important channels for communication and feedback, in addition to the direct client contact and client surveys, are: personal client service, key accounting, trade fair presence, publications in professional journals, representation on trade committees, websites and public relations.

Also see the chapter “Innovation”

Villach, 9 April 2018
The Management Board



Dr. Thomas Birtel



Mag. Christian Harder



Dipl.-Ing. Dr. Peter Krammer



Mag. Hannes Truntschnig



Dipl.-Ing. Siegfried Wanker