

**WACKER**

CREATING TOMMOROW'S SOLUTIONS

GLOBAL COMPACT

PROGRESS REPORT 2019

## 1 Statement of Continued Support (Message from the CEO)

Ladies and Gentlemen,

Sustainability has been firmly rooted in our business processes for many years. Sustainable development means balancing economic, ecological and social factors in everything we do. The fact that we have made sustainability one of our strategic goals emphasizes its importance. As an innovative chemical company, WACKER makes a vital contribution to improving the quality of life around the world. We want to continue developing and supplying solutions that meet our own expectations of adding value for our customers and shareholders, and growing sustainably.

The highly integrated material loops at its major sites in Burghausen, Nünchritz and Zhangjiagang are one of the WACKER's key competitive advantages. The basic principle of integrated production is to use the byproducts from one stage as starting materials for making other products. The auxiliaries required for this, such as silanes, are recycled in a closed loop. Waste heat from one process is utilized in other chemical processes. Integrated production not only cuts energy and resource consumption, but also improves the use of raw materials in the long term, and integrates environmental protection into our processes.

At WACKER, the future goes hand in hand with digitalization. Through digitalization, we will satisfy customer needs even better. It spans the entire value chain, from product development and manufacturing through to customer service. That is why, in 2017, we launched "WACKER digital," a program for advancing the digital transformation at all stages of the value chain.

We have highly skilled employees, whose hard work and dedication were a key factor in WACKER's successful performance last year. I sincerely thank them on behalf of the entire Executive Board.

It is our combination of expertise, experience, innovation, shared identity, performance and passion that makes WACKER unique. This is the source of our strength and our optimism. My Executive Board colleagues and I express our gratitude to our customers, suppliers and shareholders for the trust they have placed in us. Stay with us on the path ahead!

**Munich, March 2019**



**Dr. Rudolf Staudigl**  
President & CEO of Wacker Chemie AG

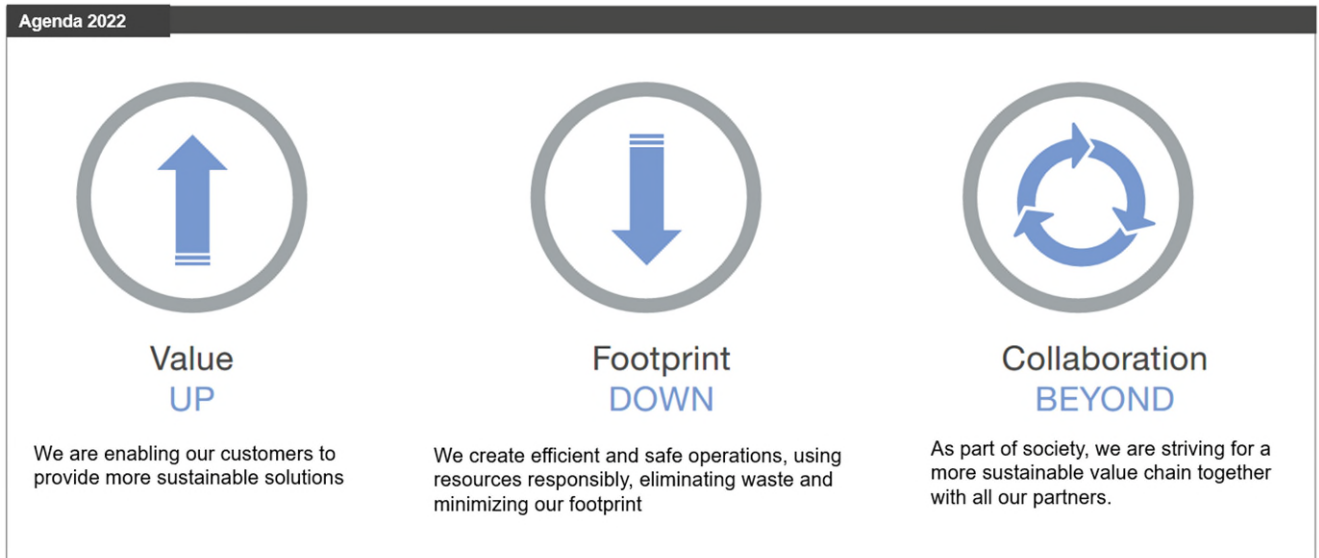
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## 2) Governance

### SustainaBalance®: Strategic Orientation for the future

Sustainability also lies at the heart of our strategic medium-term plan for the WACKER Group through 2020, which we presented at the Capital Market Day in October 2016. One of our five strategic goals is to “focus even more strongly on sustainability.”

We capture this in our SustainaBalance®:



### Alignment with Sustainable Development Goals

On September 25, 2015, the “2030 Agenda for Sustainable Development” was approved at the UN Summit in New York. WACKER is focusing on the fields of action on which we can have the greatest influence. Therefore, WACKER is prioritizing the following SDGs:



The Sustainable Development Goals (SDGs) describe

- The global challenges that WACKER can help overcome
- The significant opportunities for WACKER's operations
- The guiding principle for innovations at WACKER
- The orientation for approaching these challenges and opportunities in a targeted and efficient manner

It is important for us to align our strategic goal to the Sustainable Development Goals.



## Responsible Care® and the UN Global Compact

Our actions are guided by two voluntary global initiatives that form the basis for sustainable corporate management at WACKER: the chemical industry’s Responsible Care® initiative and the UN Global Compact. WACKER has been an active member of the Responsible Care® initiative since 1991 and, as a program participant, the company must act to continually improve health, safety and environmental performance on a voluntary basis – even in the absence of statutory requirements. As a member of the UN Global Compact, we actively support the goals of this, the world’s most important and extensive initiative for responsible corporate management. The Global Compact addresses the protection of human rights, social and environmental standards, and the fight against corruption.

## Principles of Corporate Ethics

Aside from our vision and goals, our ethical principles form the third pillar of WACKER’s corporate policy guidelines. These principles are laid down in five corporate codes – including the Code of Sustainability – and are supplemented by a body of regulations and directives. They are mandatory for all employees worldwide. The codes can also be viewed on the WACKER website: [Link](#)

## Integrated Management System

We control operational processes via our integrated management system (IMS). This system stipulates uniform standards throughout the Group for issues relating to quality, environmental protection, and health and safety. We have our Group management system certified by an international certification organization to ensure its compliance with ISO 9001 (quality) and ISO 14001 (environmental protection) and, at our German sites, also with ISO 50001 (energy).

The regional focus of sustainability management in the reporting year was the Americas. Our sites at Charleston, Adrian, Eddyville and Calvert City underwent health and safety audits. In 2019, the regional focus will be Europe.

## Sustainability Report

Every two years, we publish a sustainability report in order to inform our stakeholders about WACKER’s sustainability work in an open and comprehensive manner. In 2019, WACKER will publish its Sustainability Report for 2017/2018.

## Analysis of Fundamental Sustainability Issues

WACKER communicates regularly with numerous stakeholder groups – ranging from employees, customers, suppliers, analysts, investors and journalists to scientists, neighbors, politicians, associations and NGOs. For years, WACKER has regularly held stakeholder surveys as part of its sustainability reporting. In 2018, our global survey identified which sustainability topics are vital to stakeholders and upper management. The five top issues for companies and stakeholders were the safety of production plants, product safety, competitiveness / value trends, occupational safety / employee health, and compliance.

As a chemical company, we also prioritize transport and storage safety, risk management, energy consumption, resource conservation and the development of new, sustainable products.

As part of our materiality analysis, we also took account in this report of the statutory definition of materiality pursuant to Sections 315 b, 315 c and 289 b through 289 e of the German Commercial Code (HGB). For major non-financial issues, we ensure that the relevant stakeholders are involved. The corresponding Executive Board committees deal with all key topics.

### 3) Practical Actions

#### Human Rights

Respect for human rights, and the elimination of human rights abuses, are fundamental to our activities. We are explicitly committed to the UN Global Compact's Ten Principles and, thus, to protecting human rights and avoiding complicity in human rights abuses. In doing so, we follow the OECD Guidelines for Multinational Enterprises, the ILO Core Labor Standards and the UN Guiding Principles on Business and Human Rights.

Our efforts focus not only on working conditions in our company, but also on human-rights compliance in the supply chain. We expect our suppliers to follow the principles of both the Global Compact and the Responsible Care® initiative. It is a requirement that is anchored in our General Terms and Conditions of Procurement. To check compliance, we conduct assessments and audits in line with the criteria of the Together for Sustainability initiative.

#### Human Rights Committee

The Human Rights Committee, consisting of the member departments HR, Compliance, Sustainability and Procurement & Logistics (PL), was established in 2018. The committee is tasked with prioritizing potential effects on human rights (WACKER, the supply chain, etc.), checking existing management approaches for protective and control mechanisms, identifying weak points and covering information needs. It therefore also concerns itself with global implementation of the National Action Plan for Business and Human Rights (NAP).

#### Personnel Matters

WACKER's success is a team effort, involving the whole workforce. That is why WACKER – in the spirit of the UN's Sustainable Development Goal 8: Decent Work and Economic Growth – encourages its employees to realize their potential, assume responsibility and contribute their own ideas. We support their endeavors by providing basic and advanced training opportunities. We want our employees to have secure jobs, generous employee benefits and a work culture that facilitates a

positive work-life balance. It is important to us that they all enjoy equality of opportunity. Further, our aim is to ensure that any employees who are disabled or have chronic health issues are integrated in the workplace over the long term. Vocational training has always been a focus of WACKER's personnel-development activities. We offer our employees attractive compensation, good promotion prospects and a share in our company's success. And all key personnel matters are dealt with by the corresponding Executive Board committees.

In our Code of Conduct, we explicitly commit ourselves to the UN Global Compact's Ten Principles. They include the principles on labor standards, namely upholding the freedom of association (Principle 3), eliminating all forms of forced labor (Principle 4), abolishing child labor (Principle 5) and eliminating discrimination (Principle 6). We also make commitments to our customers to uphold these same labor standards.

The sanctions we impose for any proven misconduct in personnel matters are determined by the seriousness of the incident. There were no incidents of note in the reporting year.

### **Basic and Advanced Training at High Levels**

WACKER has made vocational training a focus of its personnel-development activities. In 2018, 191 young people began apprenticeships at WACKER or at the Burghausen Vocational Training Center (BBiW). With a total of 599 apprentices, the company employed almost as many as the year before (2017: 601). The percentage of apprentices (ratio of apprentices to Group employees in Germany) was 5.5 percent, marginally lower than the prior-year figure (5.7 percent). In 2018, WACKER kept on virtually all suitably qualified apprentices –157 graduates – hiring 130 on permanent contracts and 27 on temporary contracts. The Burghausen Vocational Training Center also provides training for partner companies outside the WACKER Group.

To keep abreast of demographic trends and offer young people long-term prospects, WACKER and the council of employee representatives agreed a new regulation about hiring qualified apprentices. The new company agreement provides that apprentices, if suitable, receive a job offer after graduating. If the offer is for a long-term position, hiring is permanent. For a temporary position, hiring is limited accordingly.

In 2018, WACKER invested a total of € 8.7 million in personnel-development activities and advanced training (2017: € 7.9 million).

### **Internal Sustainability Week**

Early in the year, all employees were invited to participate in the first internal "Sustainability Week." The aim was to motivate all WACKER employees who are passionate about sustainability to present their contribution under the motto: "My contribution: sustainability ambassador" – individually, as a member of a group or as the entire site – and to invite others to join in.

Held at over ten sites from September 17 to 21, 2018, the first WACKER Sustainability Week featured 28 activities and was a resounding success. A "Sustainability Ambassador of the Year" was selected from all contributions, with a team in Shanghai taking the title for organizing an Activity Week at WACKER Greater China. Sustainability week will be held again in 2019, this time focusing on the Sustainable Development Goal 12: Responsible Consumption and Production.

## Diversity and Equal Opportunity

**Equal opportunity:** we view human diversity as an asset. We oppose discriminatory or derogatory treatment on the basis of gender, race, ethnicity, religion, ideology, disability, sexual orientation or age. These principles are valid across the WACKER Group and, as part of our corporate culture, are embodied in our Code of Teamwork & Leadership. Employees can notify their supervisors, even anonymously, of any potential discrimination or report it to a compliance officer, employee representative or designated HR contact person. Complaints are investigated and the reporting party informed of the outcome. Cases of potential discrimination are included in the monthly compliance report submitted to the Executive Board. In addition, they are listed in the regular reports submitted to the Supervisory Board. We require all employees at our German sites to complete an e-learning course to familiarize themselves with the country's General Equal Treatment Act (AGG).

**Promoting diversity:** in 2015, WACKER launched a groupwide initiative to promote diversity and inclusion in its workforce, and also signed Germany's nationwide Diversity Charter. Ever since then, WACKER has set yearly priorities to sensitize employees to the opportunities and challenges of a diverse workforce. Our focus in 2018 was on inclusion, a topic that Germany's Diversity Day also highlighted from multiple perspectives.

In the reporting year, the Bavarian Ministry of Social Affairs awarded Wacker Chemie AG its "Inclusion in Bavaria – We Work Together" emblem. This Bavarian government citation recognizes employers who contribute significantly to the inclusion of persons with disabilities into working life. WACKER's goal is a prejudice-free work environment, where every employee can contribute to the company's success – and where employees with severe disabilities or with an equivalent status are integrated over the long term.

At WACKER, special arrangements are in place for anyone who has severe disabilities, who is of equivalent status or whose health is impaired. To provide targeted support in line with local laws, WACKER's workplace integration management involves close cooperation between supervisors, employees, Human Resources, employee representatives, representatives of employees with disabilities and Health Services.

Alongside inclusion, diversity management at WACKER is focusing on the issues of gender and cultural background. People from 67 different nations work for WACKER. At the end of 2018, 37 out of a total of 172 senior executives groupwide were of non-German nationality – which corresponds to 21.5 percent of the total. Overall, 15 nationalities were represented at the senior executive level.

## Proportion of Women in Executive Positions

We have set a goal to significantly increase the proportion of women in middle and upper management positions in the medium to long term. WACKER's talent-management process helps systematically identify and nurture women with management potential. The [Corporate Governance](#) report contains additional information about the proportion of women in management and, in particular, about how WACKER is implementing the German statute on equal opportunity for women and men in management that came into force on May 1, 2015.



## Diversity, Inclusion and Equal Opportunity

	2018	2017	2016
<b>Workforce, groupwide</b>	<b>14,542</b>	<b>13,811</b>	<b>13,448</b>
Of whom female	3,355	3,154	3,047
Female employees, groupwide (%)	23.1	22.8	22.7
<b>Workforce in Germany</b>	<b>10,291</b>	<b>9,984</b>	<b>9,775</b>
Of whom non-German	1,054	1,046	1,034
Non-German employees in Germany (%)	10.2	10.5	10.6
<b>Employees in middle management, groupwide (managerial level 3)</b>	<b>3,212</b>	<b>3,043</b>	<b>2,927</b>
Of whom female	762	690	650
Women in middle management, groupwide (%)	23.7	22.7	22.2
<b>Senior executives (OFKs), groupwide<sup>1</sup></b>	<b>172</b>	<b>166</b>	<b>165</b>
Of whom female senior executives	23	21	19
Female senior executives, groupwide (%)	13.4	12.7	11.5

<sup>1</sup> Number of senior executives (OFKs) exclude inactive employment contracts and the Executive Board of Wacker Chemie AG

## Global Employee Survey

After the 2015 employee survey in Germany, WACKER conducted its first worldwide survey in 2018, asking employees about the company's culture and performance. The outcome showed that WACKER's employees around the world identify strongly with their work and their employer. Globally, workforce engagement was 82 percent – calculated as an average approval rating for questions about work enjoyment, coping with workloads, pride in the company, and commitment. That was a very positive result, especially when compared with the external provider's benchmark, an industry average based on numerous surveys. In Germany, the score for the questions above beat the 2015 survey's strong 74 percent by 6 percentage points.

## Employee Turnover

Good social benefits, competitive compensation and motivating tasks make WACKER an attractive employer. That is evident in our employees' long-standing allegiance to the company. The average length of service in Germany (permanent staff) was 18.1 years (2017: 18.3 years). The average length of service of WACKER's executive personnel was 21.6 years.

## Employee Turnover Rate

%	2018	2017	2016
Germany	0.7	0.5	0.8
International	8.4	8.2	7.0
<b>Group</b>	<b>2.8</b>	<b>2.6</b>	<b>2.4</b>

## Employee Representation

Our employees in Germany also make use of their option to unionize. Every WACKER site in Germany has employee representatives. Elections are held regularly, most recently in 2018. WACKER actively nurtures social partnership. In the interests of the company's employees, relations between management and employee representatives are close and constructive. Innovative and feasible company agreements are one result of this dialogue.

Internationally, employees are also free to unionize. If non-German sites have no (statutory or voluntary) employee representation, HR staff members are the contacts for employee interests.

## Labor Standards & Safety

An important goal at WACKER is to operate plants and processes in a manner that poses no risk to people or the environment. To this end, we have installed a groupwide safety management system that addresses both workplace and plant safety.

### Plant Safety

The first stage in ensuring the safety of our plants is to systematically identify risks and assess them. This includes analyzing not only how well we control the energy present in a process (e. g. pressure, heat), but also what effect a single error might have on a chain of events that could culminate in the escape of a substance or an accident. After completing this comprehensive analysis, we specify safety measures to prevent undesired events.

Our safety management system focuses on prevention. Even so, safety-critical incidents cannot always be prevented. Across the Group, we promptly enter any incident relevant to safety, health or the environment in the IT system we use for sustainability reporting (SPIRIT). The reports are evaluated and measures tracked. Incident reports that offer cross-division or cross-site learning effects are processed and forwarded to any company units with a similar risk potential.

### Environment- and Safety-Related Incidents

	2018	2017	2016
Groupwide number of environment- and safety-related incidents <sup>1</sup>	37	22	44
Groupwide environment- and safety-related incidents per 1 million hours worked <sup>2</sup>	1.7	1.0	2.1

<sup>1</sup> According to European Chemical Industry Council (Cefic) criteria

<sup>2</sup> WACKER Process Safety Incident Rate (WPSIR)

## Safety Training and Inspections

WACKER attaches particular importance to providing its safety experts with ongoing training. We hold regular training sessions, for example, on plant safety and explosion-damage protection. In 2018, we audited our sites at Charleston, Adrian, Eddyville and Calvert City in the USA. WACKER awards recognition to facilities that operate for sustained periods of time without a reportable accident.

## Product Safety

WACKER provides information on the safe use of its products. It continually works to prevent or reduce the use in products of any substances harmful to human health and the environment. WACKER sells its products in compliance with the chemical legislation applicable in the country of destination.

As a guide for our product developers, we maintain a list of about 650 substances that WACKER products may no longer contain. In addition to prohibited and restricted chemicals (such as materials listed in Annexes XIV and XVII to the REACH Regulation), the list also includes substances that many companies find undesirable. As far as possible, we avoid substances on the European Chemicals Agency's List of Substances of Very High Concern (SVHC).

The REACH Regulation, which came into force in 2007, governs the registration, evaluation, authorization and restriction of chemicals within the European Union. REACH involves the collection of extensive data and imposes stringent requirements on the manufacturers, importers and users of chemical products. All substances on the European market that are used or imported in annual quantities exceeding one metric ton must be registered and evaluated. The scope of evaluation work is largely determined by the quantity produced or imported and the expected risks. Particularly high-risk substances are subject to regulatory approval. As part of REACH, WACKER had submitted 480 registration dossiers, including any revisions, to the European Chemicals Agency (ECHA) by the end of 2018. In the course of its regular evaluation activities, ECHA required additional information for many of the dossiers, all of which we provided on time in 2018.

WACKER's close contact with its suppliers extends to matters relating to substances not yet registered under REACH. We systematically requested definitive statements from our suppliers about registration status and the further availability of raw materials, especially in view of the expiration of the final registration phase for phase-in substances (>1 metric ton / year) on May 31, 2018.

To promote the safe use of chemicals, the International Council of Chemical Associations (ICCA) developed its Global Product Strategy (GPS), which is a guideline on how to assess chemical properties and provide product safety information. In Europe, most GPS requirements are satisfied by REACH and by the CLP Regulation (Classification, Labeling and Packaging of Substances and Mixtures). By the end of 2018, we had published 75 Safety Summaries on the ICCA chemicals website for the substances we have registered under REACH.

## Safe Transport of Hazardous Materials

WACKER ensures that its products are stored and transported safely, especially where hazardous goods are involved. In 2018, we had around 12,000 hazardous-goods trucks inspected in the shipping areas at our sites and warehouses in Germany (2017: over 11,000). We turn away any that are defective. Failure rates have been extremely low for years now. The rate for 2018 was about 2.0 percent for hazardous goods shipments from Burghausen, our largest site in Germany (2017: 1.4 percent).

As elsewhere, we rely on well-trained personnel for transport safety. In the reporting year, 1,300 employees in Germany alone attended classroom-training sessions on the shipment of hazardous goods, while more than 900 completed online courses on securing freight.

We regularly discuss the issue of transport safety with our logistics providers in Germany, for example during our annual Supplier Day. If deficiencies are found, we agree improvements and then follow up on their implementation. WACKER uses in-house criteria and internationally recognized systems to select logistics providers and assess their performance. Via contractually defined specifications (such as a requirements profile for providers of road transport logistics), WACKER ensures that both its

contractors and their subcontractors meet the company's stringent safety requirements. As part of the annual audit plan, selected hazardous-goods shippers are audited for compliance with these requirements and, if necessary, improvement measures are agreed.

For products with a high hazard potential, we use packaging and tanks of the highest quality

When monitoring the distribution of our products, we also record any transport incidents not involving hazardous goods, as well as those that have no negative impact on people or the environment. Such incidents are an important factor in the annual assessment of our logistics providers. In the year under review, we recorded a total of three transport incidents that did not involve hazardous goods.

### Transport Accidents<sup>1</sup>

Number of Accidents	2018	2017	2016
Road	3	6	2
Rail	-	2	4
Sea	-	-	-
Inland waterways	-	-	1
Air	-	-	-

<sup>1</sup> Only Germany

### Workplace Safety

Workplace and plant safety are vitally important for WACKER. That is why WACKER defines safety targets together with its executives in Germany (in upper and middle management) during its annual target-setting process.

WACKER's processes and standards for workplace safety are aligned with the international OHSAS 18001 standard. Systematic workplace safety includes regular evaluation of hazards and work-area monitoring.

All our employees are given safety training tailored to their own work areas. WACKER Germany, for example, offers a total of 42 online courses on occupational safety issues. Topics range from general safety guidelines for office and laboratory workers to instruction on safe behavior in potentially explosive atmospheres and the classification of hazardous materials.

In the reporting year, we processed the findings concerning the 2017 explosion at Charleston (USA) in a safety program. All our units worldwide have to check their protection strategy for compressors and retrofit them by year-end 2019 if necessary.

We also significantly improved the safety of pipe bridges in 2018. A groupwide initiative for pipe bridges involves reviewing and adjusting technical designs, corrosion protection, organizational rules and emergency planning.

Workplace accident performance is one of the most important non-financial performance indicators. One of our workplace safety goals is to ensure that the number of workplace accidents per 1 million hours worked does not exceed 1.7 groupwide in 2020. In terms of reportable accidents (accidents with more than three workdays missed), WACKER's numbers are far better than the German chemical industry average. The reportable accident rate at WACKER in 2018 was 1.3 per 1 million hours worked. In contrast, Germany's Social Accident Insurance Institution for the raw materials and chemical industry (BG RCI) registered 9.3 reportable accidents per 1 million hours worked in chemical

companies in 2017. In the reporting period, WACKER again had no fatal workplace accidents in its workforce.

Very few accidents at WACKER involve chemicals. The most common causes are tripping, slipping, falling and lack of care when performing manual activities. We are not satisfied with our accident rate and are stepping up our safety efforts. In 2018, we reviewed how effectively our German sites implement key safety regulations, for example those about the safety of partner-company employees or about working safely on ladders.

We are continuing to implement our WACKER Safety Plus (WSP) program, which looks at sites with particularly low accident rates and makes use of their successful safety measures, such as safety patrols, emergency drills and holding discussions with the workforce. The goal of WACKER Safety Plus is to recognize and avoid unsafe behavior.

### Workplace Accidents Involving Permanent Staff and Temporary Workers

	2018	2017	2016
<b>Accident rate across Group:</b>			
Accidents <sup>1</sup> per 1 million hours worked	2.9	2.8	3.0
Europe	3.6	3.3	3.8
The Americas	1.5	2.2	0.7
Asia	0.4	0.4	0.8
<b>Accident rate across Group:</b>			
Reportable accidents <sup>2</sup> per 1 million hours worked	1.3	1.4	1.6
Fatal accidents	–	–	–

<sup>1</sup> Accidents leading to at least one day off work

<sup>2</sup> Accidents leading to over three days off work

## Environment & Climate

By setting quantifiable environmental targets, we intend to lower the environmental impact of our production activities.

### WACKER's Environmental Targets through 2022

Region	Key Environmental Indicator	Base Year	Targets for 2022 <sup>1</sup> (%)
WACKER Germany	Weighted specific energy consumption (per metric ton of net production) <sup>2</sup>	2007	-50
WACKER Germany	Specific carbon dioxide emissions (per metric ton of net production) <sup>2</sup>	2012	-15
Group	Specific dust emissions (per metric ton of gross production) <sup>2</sup>	2012	-50
Group	Specific emissions of relevant VOCs (volatile organic compounds; per metric ton of gross production) <sup>2</sup>	2012	-25
Group	Specific NOx emissions (nitrogen oxide; per metric ton of gross production) <sup>2,3</sup>	2012	-25

<sup>1</sup> The target-related success level is not based on linear progression, but on individual projects that are implemented at different stages throughout the target period. This is why no intermediate results are reported.

<sup>2</sup> Gross production corresponds to the total production (target products and byproducts) of a plant or site. Net production is calculated by subtracting the internal reuse of products from the gross production of a plant or site.

<sup>3</sup> New target since 2018.

## Environmental Protection

WACKER attaches particular importance to integrated environmental protection, which begins right at the product-development and plant-planning stage. WACKER constantly works to improve its production processes, with the aim of conserving resources. A key task is to close material loops and recycle byproducts from other areas back into production. This enables us to reduce or prevent energy and resource consumption, emissions and waste, and to integrate environmental protection into our production processes. At WACKER, we monitor resource and waste targets at site and divisional levels.

### Environmental Protection Costs

€ million	2018	2017	2016
Operating costs	82.9	78.3	78.4
Capital expenditures	5.9	4.2	2.4

Our Groupwide standards for protecting the environment apply to all our production sites and technical competence centers. The site managers ensure that environmental protection requirements and environmental standards are met at their particular locations. The Group Coordinator for the Environment looks at how sites implement environmental standards in practice and performs random checks to verify legal compliance.

In 2018, WACKER invested €5.9 million in environmental protection (2017: €4.2 million). Environmental operating costs came to €82.9 million (2017: €78.3 million). Examples of capital expenditure on environmental protection include the process control system for the waste disposal

center at Burghausen and modernization of the waste-disposal installations and control room at Nünchritz.

### Assessment Using the Global Water Tool™

In 2018, we again used the Global Water Tool™ (GWT) developed by the World Business Council for Sustainable Development (WBCSD) – or the WRI Aqueduct contained in that tool – to analyze the relative water stress index of the countries where our main production sites are located. Beside the water stress index, we are checking whether other water-related risk factors used in this tool are of relevance to WACKER's production sites. The current result is that 99 percent of our annual water use and over 91 percent of our production volume are in regions with adequate water availability levels.

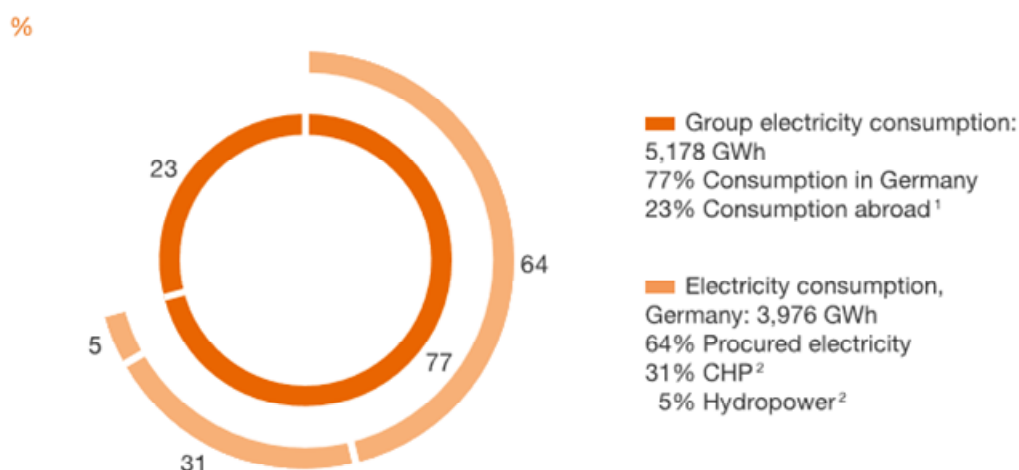
In 2018, WACKER submitted its first Carbon Disclosure Project (CDP) Water Security report for the reporting year 2017, achieving a D (Disclosure). Registered CDP users can download the details.

As part of the Bavarian Environmental Pact, WACKER and seven other companies in Bavaria's Chemical Triangle formed an association called "Naturnahe Alz" (Natural Alz) to support the state of Bavaria in renaturalizing the Alz river and enhancing its ecosystem in the long term. In the reporting year, the "Naturnahe Alz" association again donated €60,000, bringing its total investment in nature conservation to €200,000 since its foundation in 2015.

### Energy

The chemical industry is one of the most energy-intensive sectors. WACKER's sites in Germany consume 3,976 GWh of electricity, representing approximately 0.8 percent of the country's electricity consumption. WACKER is continually improving the energy efficiency of its processes. This enables us to remain globally competitive while at the same time contributing to climate protection.

#### Electricity Supply



<sup>1</sup> Outside Germany, we purchase electricity from third parties based on the local standard energy mix.

<sup>2</sup> Burghausen

Many chemical reactions generate heat that can be put to use in other production processes. In addition to recovering heat from such chemical reactions, we have been using integrated heat-recovery systems in Burghausen and Nünchritz for years and are continually improving and

expanding them. In this way, we can reduce the amount of primary energy (natural gas) consumed by our power plants.

To enhance energy efficiency and reduce specific energy consumption (amount of energy per unit of net production output), the Executive Board has defined energy targets for WACKER Germany. We have set a goal of reducing specific energy consumption by 2022 to one-half of the 2007 level. Net production is calculated by subtracting the internal reuse of products from the gross production of a plant or site. Gross production corresponds to the total production (target products and byproducts) of a plant or site.

## Energy Consumption

GWh	2018	2017	2016
Electricity consumption	5,178	5,460	5,199
Heat consumption	3,120	3,505	3,827
Primary energy use (total)	5,703	6,055	6,405
Of which			
Natural gas	4,827	5,056	5,378
Solid fuels <sup>1</sup>	640	750	769
Heat supplied by third parties <sup>2</sup>	236	249	258

<sup>1</sup> Coal, charcoal and wood; used as reducing agents at the silicon-metal plant in Holla, Norway.

<sup>2</sup> Steam and district heating

Our primary source of energy is climate-friendly natural gas. At Burghausen, our largest site, we produce steam and electricity using a cogeneration system. The highly efficient [combined heat and power \(CHP\) plant](#) operates at more than 85 percent fuel efficiency, which is significantly higher than that of conventional power plants. Additionally, Burghausen uses hydropower to generate electricity. At our Norwegian site in Holla, electricity comes mainly from hydropower.

WACKER's German production sites accounted for 77 percent (2017: 72 percent) of its total electricity consumption. In 2018, we adopted energy-efficiency measures to further reduce specific energy consumption. These involved further enhancing the heat-recovery processes and integrated systems used in our production plants.

Our German power plants – the hydroelectric and CHP plants in Burghausen and the cogeneration plant in Nünchritz – produced 1,431 GWh of electricity in 2018 (2017: 1,481 GWh), meaning that WACKER covered about 36 percent of its total energy requirements in Germany from its own production. Groupwide, carbon dioxide emissions from captive power plants subject to emissions trading rules and from silicon-metal production in Holla totaled about 1.0 million metric tons in the reporting period (2017: 1.0 million metric tons).

WACKER is subject to the regulations of the EU emissions trading system because of its power plants at the Burghausen and Nünchritz sites. We have covered shortfalls since 2014 by buying emission allowances for facilities subject to emissions trading.

## Emissions

In 2018, direct emissions of carbon dioxide (Scope 1 of the Greenhouse Gas Protocol) declined by 3.6 percent year over year, mainly due to lower steam consumption at our Burghausen and Nünchritz sites. As a result, groupwide nitrogen oxide (NOx) emissions fell by 2.9 percent.



Maintenance and project work at the Holla site's baghouse caused total dust emissions to rise by 2.4 percent year over year in 2018. We still reduced our specific dust emissions by 48 percent, already nearly achieving our target of halving them from 2012 to 2020.

The very warm summer of 2018 meant we had to increase the throughput of cooling water to keep process temperatures in our Burghausen production plants at the required levels. That led to a 15-percent increase in water consumption. By optimizing waste water treatment at Burghausen, we achieved a reduction of around 6 percent in chemical oxygen demand (COD) and of 14 percent in halogenated organic hydrocarbons (AOX).

The groupwide 13-percent increase in waste resulted from higher volumes of nonhazardous waste due to, for example, construction activities at Burghausen and the León, Spain site's inclusion in the report.

## Environmental Indicators

	2018 <sup>3</sup>	2017	2016
<b>Air</b>			
CO <sub>2</sub> emissions <sup>1</sup>			
Direct (kt)	1,194	1,239	1,277
Indirect (kt) <sup>2</sup>	1,478	1,606	1,588
NO <sub>x</sub> nitrogen oxides (t)	1,810	1,860	1,970
Non-methane volatile organic compounds (NMVOCs) (t)	860	880	890
Dust (t)	284	278	515
<b>Water</b>			
Water use (thousand m <sup>3</sup> )	227,510	197,430	207,930
Chemical oxygen demand (COD) (t)	1,230	1,310	1,210
Halogenated organic hydrocarbons (AOX) (t)	2.2	2.6	3.1
<b>Waste</b>			
Disposed of (t)	49,690	41,400	38,640
Recycled (t)	133,060	120,420	114,080
Hazardous (t)	77,070	75,800	73,660
Non-hazardous (t)	105,680	86,020	79,060

<sup>1</sup> CO<sub>2</sub> emissions are measured on the basis of the Greenhouse Gas Protocol (GHG Protocol: "A Corporate Accounting and Reporting Standard"), published by the World Resources Institute and World Business Council for Sustainable Development. Scope 1: direct CO<sub>2</sub> emissions. Scope 2: indirect emissions from purchased energy (converted into CO<sub>2</sub> for purchased electricity, steam and heat). Conversion is based on emission factors of the International Energy Agency (electricity) and from the GEMIS database (steam and heat).

<sup>2</sup> The amount of electricity supplied by the affiliate Alzwerke GmbH is included in indirect CO<sub>2</sub> emissions in a climate-neutral manner – because it is not fed into the public grid.

<sup>3</sup> The Amsterdam and León production sites were included in the reporting of environmental indicators in 2018 for the first time.

Measuring the Group's carbon footprint is an important tool for improving climate protection. That is why – in addition to tracking our indirect greenhouse gas emissions from procured energy (Scope 2) since 2011 – we have been measuring, since 2012, all WACKER-relevant emissions along the value chain (Scope 3), generated, for example, by procured raw materials or by waste disposal and the transport of products.

In 2018, we once again forwarded our emissions data to the Carbon Disclosure Project (CDP), which WACKER joined in 2007. In the CDP's Climate Change Report for the chemical sector, Wacker Chemie AG achieved a B (Management) on a scale from A (Leadership) to D (Disclosure). Registered CDP users can download the details.

## Products Based on Renewable Raw Materials

WACKER has been using the mass balance method to manufacture products based on renewable raw materials since 2018. By doing so, we not only boost the share of renewable raw materials in our supply chain, but also reduce the CO2 footprint of raw materials procured externally. Here, we use biomethanol and bioacetic acid instead of methanol and acetic acid from fossil feedstocks. The raw materials used are derived exclusively from waste streams, correspondingly certified and purchased from regional producers. Our aim is to enable our customers to make fossil-free products for their specific market. So, we take responsibility throughout the entire supply chain – from the extraction of raw materials to their use at end customers. Our supply chain becomes more sustainable by conserving valuable resources and reducing our CO2 footprint.

## Anti-Corruption and Bribery

Corruption and bribery have no place in our business model. Our principles on this are contained in our Code of Conduct and all WACKER employees are required to follow them. Training courses on compliance sensitize employees to specific risks and to the rules of conduct that apply at work. WACKER's business activities are predominantly in countries with a low or very low risk of corruption, according to the Corruption Perceptions Index (CPI) of Transparency International.

### Corruption and Bribery Incidents

	2018	2017	2016
<b>Prevention</b>			
Number of organizational units examined for corruption / bribery risks	31	26	26
Percentage of legal entities examined for corruption / bribery risks	20	17	19
<b>Corruption and Bribery Incidents</b>			
Examined	2	4	2
Concluded	1	4	1
<b>Measures Taken as a Result of Corruption and Bribery Incidents<sup>1</sup></b>			
Written warnings	–	–	–
Termination of employment contract	–	1	1
Number of lawsuits	–	–	1
Level of major fines <sup>2</sup> and number of non-monetary penalties	–	–	–

## Social Responsibility

WACKER sees itself as a corporate citizen – as part of the society in which we live and work. That is why we practice social responsibility, especially in the regions where our sites are located.

## Sustainable Supply-Chain Management

Since WACKER has production sites in Europe, the Americas and Asia, it procures goods and services from numerous countries. As a member of both the United Nations Global Compact and the chemical industry's Responsible Care® initiative, we consider it vital to verify that our suppliers fulfill generally accepted sustainability principles. Issues that are potentially critical include working

conditions, ethical standards, safety standards (especially for hazardous materials) and local-resource management (e. g. water use and energy consumption).

As verification is vital, WACKER joined the Together for Sustainability (TfS) initiative in January 2015. Launched by the chemical industry, this procurement initiative developed a process for auditing and assessing a supplier's sustainability performance. Because results are standardized and accessible to all TfS members, the program is also attractive for suppliers.

The results of TfS audits and assessments are integral to our process of supplier evaluation. We discuss results with the supplier, especially if they are unsatisfactory, so that improvements are initiated. Reassessments or repeated audits are used to follow up on progress. Consistently poor results and lack of cooperation have consequences, and may ultimately lead to business relations being terminated. We take a risk-based approach when assessing our suppliers.

Our aim is to use TfS to evaluate the sustainability performance of all our key suppliers. Since joining TfS, we have made good progress along this path. Already, over 65 percent of our key suppliers, and over 80 percent of the procurement volume they account for, are covered by TfS. Overall, more than 60 percent of our global procurement volume in 2018 was covered by TfS – for raw materials and energy, the figure is even around 80 percent. A monthly management report tracks how successfully TfS goals are met.

Further, we expect our suppliers to use a management system that meets the requirements of ISO 9001 (quality) or comparable specifications such as GMP (Good Manufacturing Practice). In the case of industrial suppliers, we also require certification to ISO 14001 (environmental protection).

## Neighbors

Corporate citizenship is based on good relations with municipalities and neighbors. We speak openly about what happens behind our factory gates. Across the world, our sites address the public's questions. Local residents who turn to us receive prompt, clear answers to their concerns. That's why we operate local hotlines and have central contact persons in place.

In our environmental reports and brochures, we publish information about our sites. We hold open houses and other outreach events, including WACKER's Knowledge Forum, Burghausen's Environment Information Days and Nünchritz's annual community meeting. In September 2018, three WACKER sites took part in a Germany-wide open house, where around 200 chemical and pharmaceutical companies opened their gates to the public. WACKER Burghausen alone welcomed some 20,000 site neighbors, interested citizens, and employees plus their families. At WACKER Nünchritz, the visitor count was 5,000. In Munich, some 500 toured our Consortium research facility, which had joined the open house for the first time for its 100th anniversary at its Munich address.

At many of our sites, we offer local communities free services, including health and eye checkups in India and a Household Hazardous Waste Day at Adrian (USA), where neighbors bring in household chemicals that are not allowed in trash cans.

## Schools and Universities

WACKER wants to get children and young people interested in technology and the natural sciences. Being a chemical company, we will need outstanding scientists in the future. To find them, we pursue multiple strategies. In 2018, we sponsored and organized the Young Scientists competition in Bavaria for the eleventh time.

WACKER supports progressive teaching methods and modern approaches to school management. We are one of the original members of the Bavarian Educational Pact, a foundation with 143 companies and the state of Bavaria as members. Its goal is to modernize the Bavarian educational system.

We started conferring our WACKER Silicone Award in 1987. The award-winner in 2018 was Dr. Herbert W. Roesky, Emeritus Professor of Inorganic Chemistry at the Georg-August University of Göttingen. Presented during the ninth European Silicon Days, the research prize recognizes Dr. Roesky's groundbreaking work in the field of low-valence silicon chemistry.

### **Commitment to Disadvantaged Children and Teenagers**

We want to improve children's and teenagers' lives and job prospects. This is why we support **Die Arche** ("The Ark") – a German charity for the young. "The Ark" helps five- to twelve-year-olds from socially disadvantaged families in several German cities. The Munich branch helps over 100 children and teenagers daily with warm meals, homework assistance and extracurricular activities, as well as advice and counseling.

From 2007 to 2018 WACKER made annual donations of €100,000 to the charity's Munich branch so that in over 12 years of partnership, WACKER has donated more than €1.2 million.

### **WACKER Relief Fund Provides Aid**

Following the catastrophic tsunami of 2004, WACKER founded a relief fund (WACKER HILFSFONDS) to help victims of natural disasters. This charitable fund provides long-term assistance for reconstruction projects in devastated regions. WACKER has always matched its employees' donations to the charity.

## **4) Special Awards and Events**

### **Commended as Family-Friendly Company**

The Bavarian government, in its "Successful. Family-Friendly" corporate competition, commended 20 companies, including WACKER, for their exemplary support in reconciling family life and work. 227 Bavarian companies from all industries and of all sizes participated in the competition.

In 2018, WACKER joined the "Familienpakt Bayern" network (Family Pact Bavaria) of the Bavarian government and Bavarian industry, a move that highlights our goal to foster a family-friendly corporate culture. About 600 companies have joined the Pact.

### **WACKER's Management Trainee Program Receives Absolventa Seal of Approval**

WACKER's trainee program was honored with the Absolventa job portal's renowned seal of approval. It is the first and only seal of approval of its kind and stands for trainee programs that promote careers and are fair. Absolventa GmbH's seal of approval for trainee programs was started in December 2011. It was initiated by the Institute for Human Capital Management (HCM) at Munich's Ludwig-Maximilian University, by the Süddeutsche Zeitung (a major newspaper) and by ten German companies.

## **The VCI's Bavarian Branch Confers 2018 Responsible Care® Award on WACKER POLYSILICON**

WACKER was Bavarian Responsible Care® winner 2018. The Bavarian branch of the German Chemical Industry Association (VCI) has honored the company for its polysilicon, which makes renewable energy sources possible thanks to photovoltaic applications. The VCI adopted a motto of "Our Contribution to the United Nations' Sustainable Development Goals" for its Responsible Care® competition.

Solar applications are a significant way to generate affordable, clean energy. Being able to replace energy sources that would otherwise produce greenhouse gases, solar power produced from photovoltaics thus makes a major contribution to the United Nations' Sustainable Development Goals (SDGs). "WACKER's decades-long R&D work has enhanced the accessibility of silicon, making this inexhaustible raw material a key factor in the breakthrough for solar energy," concluded this year's RC competition jury, which was made up of independent experts from science and various regulatory bodies.

The chemical sector has been using its Responsible Care® initiative to voluntarily do more than is legally required – which has been the case in Germany for over 25 years.

## **Fourth Place in the Statista Reputation Analysis of 300 Organizations**

WACKER has come fourth among 300 companies and organizations analyzed in the annual reputation analysis by the market research portal Statista and the financial magazine brand eins. In the chemical, pharmaceutical and biotechnology industries, Wacker Chemie AG even surpassed all other companies, taking first place.

## **WACKER Again Gets Gold in EcoVadis Rating**

As a member of Together for Sustainability, WACKER not only evaluates its suppliers in terms of sustainability but subjects its own performance as a supplier to external rating by EcoVadis. In 2018, the Group once again scored Gold in EcoVadis ratings. WACKER's result has risen from 65 to 76 points. It now ranks among the top 3% of the highest-scoring companies.

## **Burghausen – Good Ideas Are Always Winners!**

At this year's "ZI" National Congress (Zentrum Ideenmanagement or Idea Management Center) held in Fulda, Germany, prizes for top achievements were awarded in seven categories. WACKER's team of three won first prize in the Production and Engineering category, showing that WACKER's Employee Suggestion Program is still going strong even in its 90th anniversary year.

The ZI presents awards to employees whose ideas have made a significant contribution toward the competitiveness and viability of the company they work for. The Idea Management Center (ZI) is an interest group that promotes and disseminates idea and innovation management in Germany. WACKER is one of 150 member companies.

## 5) Principles of UN Global Compact and its relation to WACKER

UNGC Principle	Implementation at WACKER	Page
<p><b>Principle 1:</b> Businesses should support and respect the protection of internationally proclaimed human rights;</p> <p>and ...</p> <p><b>Principle 2:</b> ... make sure that they are not complicit in human rights abuses</p>	<ul style="list-style-type: none"> <li>• Corporate philosophy and target setting</li> <li>• Principles of Corporate Ethics</li> <li>• Participation in initiatives</li> <li>• Orientation on standards</li> <li>• Corporate Citizenship</li> <li>• Supply Chain Management</li> <li>• Human Rights Committee</li> </ul>	<p>2, 4</p> <p>5</p> <p>5</p> <p>4</p> <p>18,19,20</p> <p>18</p> <p>6</p>
<p><b>Principle 3:</b> Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining; ...</p>	<ul style="list-style-type: none"> <li>• Labor union</li> <li>• Global employee representation</li> <li>• HR staff members for employees' interests</li> </ul>	<p>10</p> <p>10</p> <p>10</p>
<p><b>Principle 4:</b> ... the elimination of all forms of forced and compulsory labor; ...</p> <p>and</p> <p><b>Principle 5:</b> ...the effective abolition of child labor;</p>	<ul style="list-style-type: none"> <li>• We condemn slavery and all other forms of forced or compulsory labor as well as child labor</li> <li>• Social benefits, working time models</li> <li>• work safety</li> <li>• Supply Chain management</li> </ul>	<p>6</p> <p>6</p> <p>12</p> <p>6,18</p>
<p><b>Principle 6:</b> ...the elimination of discrimination in respect of employment and occupation.</p>	<ul style="list-style-type: none"> <li>• Equal treatment, trainings</li> <li>• Compliance report</li> <li>• Equal opportunity charter</li> <li>• Proportion of Women in Executive Positions, WACKER Women's Circle</li> <li>• Idea Management</li> </ul>	<p>8,9</p> <p>18</p> <p>8</p> <p>8,9</p> <p>21</p>

UNGC Principle	Implementation at WACKER	Page
<p><b>Principle 7:</b> Businesses should support a precautionary approach to environmental challenges; ...</p>	<ul style="list-style-type: none"> <li>• SustainaBalance®</li> <li>• Environmental targets and transparent key figures</li> <li>• Integrated environmental protection</li> <li>• Activities for more energy efficiency</li> <li>• Product, plant and transport safety</li> <li>• Use of tools</li> <li>• Materiality</li> </ul>	<p>4 14 14 15 10,11 15 6</p>
<p><b>Principle 8:</b> ... undertake initiatives to promote greater environmental responsibility; and ...</p>	<ul style="list-style-type: none"> <li>• SustainaBalance®</li> <li>• Alignment to SDGs</li> <li>• Product safety, trainings</li> </ul>	<p>4 4 7,11</p>
<p><b>Principle 9:</b> ... encourage the development of environmentally friendly technologies.</p>	<ul style="list-style-type: none"> <li>• SustainaBalance®</li> <li>• Innovation strategy</li> </ul>	<p>4 2</p>
<p><b>Principle 10:</b> Businesses should work against corruption in all its forms, including extortion and bribery.</p>	<ul style="list-style-type: none"> <li>• Code of Conduct</li> <li>• Trainings for employees</li> <li>• Compliance Management</li> </ul>	<p>18 18 18</p>



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The contents of this publication apply to men and women alike, even if gender-specific words (e.g. "he" or "she") are used for simplicity's sake.