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# **2017 Sustainability Report**

Short version



Employees at  
Maasvlakte power  
station, Rotterdam,  
Netherlands.

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# Foreword

## Dear Reader,

2017 was an eventful year at Uniper. We modified our organizational setup and refined our strategy. In short, we set our course for the future. Throughout this process, we worked closely with everyone who makes Uniper what it is: our employees, shareholders, investors, suppliers, and business partners. All of them are crucial to our success. For them—and also for policymakers, the media and the general public—we strive to be a reliable and transparent partner.

The energy world is changing. Renewables are essential for reducing global carbon emissions and limiting climate change. But renewables production fluctuates, and the options currently available for storing renewable energy are limited. Uniper will play an important role in meeting these challenges: our highly flexible and efficient power plants and our long-term gas contracts and gas storage facilities safeguard the energy supply when the sun isn't shining and the wind isn't blowing.

Security of supply will become an increasingly urgent issue in the years ahead. Energy demand is growing worldwide. Going forward, gas in particular will play a key role by partnering with renewables to meet the world's energy demand. These global trends fit with our strategy of focusing on three main growth businesses: provision of tailored solutions for industrial customers, diversification and expansion of our global trading presence, and participation in the growth of new energy markets.

We believe that our business activities can help tackle global challenges such as access to energy, climate change, human rights protection, and support for innovation and infrastructure development. For this reason, we promote the UN Sustainable Development Goals as an important framework for measuring progress.

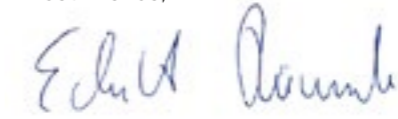
As an organization, we are currently working to ensure the long-term resilience of our business by implementing a dedicated Sustainability Strategic Plan. Based on the UN goals, it consists of a set of long-term commitments that guide our activities and our action plans to address key sustainability topics.

In order to improve the situation regarding human rights violations in the coal supply chain, in 2017 we further engaged with the Bettercoal initiative and implemented roundtable dialogues with NGOs.

Of course, we have a responsibility not only toward people but also the environment. In 2017 we continued to reduce air emissions from our plants. Carbon emissions decreased as well. We want to further limit our climate impact while we continue to provide a secure and reliable energy supply.

I'm pleased to present our new Sustainability Report, which follows our first Non-Financial Report published in March of this year. The full version of our Sustainability Report, which is available online, describes what corporate responsibility means to us and the progress we've made. We hope you find this report useful and informative and that you continue to accompany us on our journey.

Best wishes,



Eckhardt Rümmler



Eckhardt Rümmler  
Member of the  
Management  
Board and Chief  
Sustainability Officer



# Governance and sustainability management

**Uniper is a global energy company offering a secure energy supply and tailor-made energy solutions in an increasingly complex energy world.**

Sustainability is a high priority for our company and our value chain. It's therefore integrated into all aspects of our business. In 2017 we further developed our business strategy and aligned it consistently with the requirements of the future energy world. Our focus is on the future of our business and individual growth areas.

With our flexible conventional power plants, low-carbon hydroelectric power, nuclear energy in Sweden, and our gas storage facilities, we stand for a secure and reliable energy supply.

We're committed to deploying our products and services in a socially and environmentally responsible manner and where they're needed most. We operate in a transparent way for our customers, employees, and the communities we impact, directly and indirectly. Our environmental, social, and governance (ESG) management approach helps us to live up to this commitment. To ensure long-term business resilience, we seek to minimize negative environmental and social impacts, by actively managing our operations and engaging with our stakeholders.

## Overall responsibilities

The Uniper SE Management Board bears overall responsibility for Uniper's sustainability management. One of our Board members, Eckhardt Rümmler (COO), is designated as our Chief Sustainability Officer. He oversees how we meet our sustainability expectations and integrate them into our strategy, our governance, and especially our operations. In short: into our corporate culture.

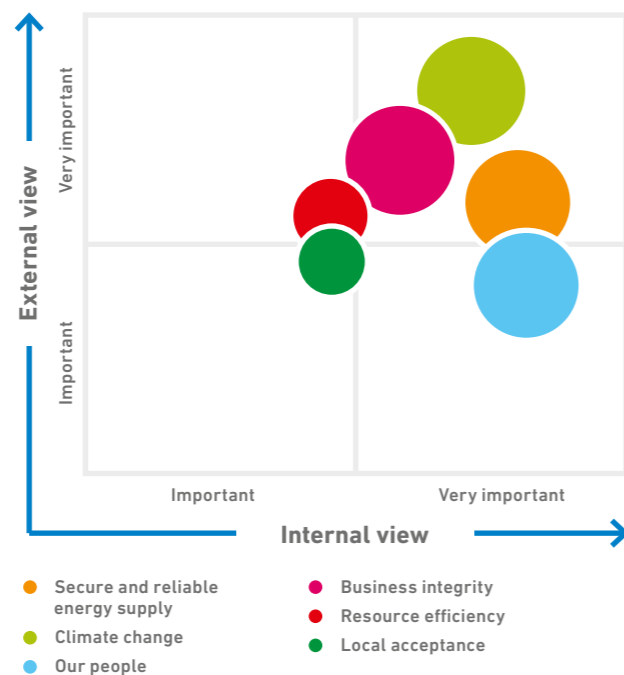
The Health, Safety, Security, and Environment (HSSE) and Sustainability function is responsible for developing and coordinating our sustainability activities. It also involves all levels of the organization in this effort, including employees, whose active involvement is essential for us to achieve a robust sustainability culture. Under

the guidance of HSSE & Sustainability, our business units have a responsibility to implement annual HSSE & Sustainability Improvement Plans to help us meet our overall objectives for these areas.

## Our material topics

We defined Uniper-specific topics based on our 2017 materiality assessment. The materiality assessment analyzes the significance of our economic, environmental, and social impacts and of their influence on our stakeholders' assessments of, and decisions regarding, our company. We consider a combination of internal and external factors to assess whether a topic is material from the perspective of employees, senior managers, customers, non-governmental organizations, industry partners, as well as current and potential institutional investors.

## 2017 Uniper materiality matrix<sup>1</sup>



<sup>1</sup>Bubble size reflects the strategic relevance of the topic.

## New HSSE Identity and Policy Statement

Our amended HSSE & Sustainability Policy Statement, which defines our ambitions and priorities for HSSE and Sustainability, was signed by all members of the Management Board in November 2017. This statement provides the framework for developing Group-wide Sustainability Strategic Plans (SSPs) and defines our specific HSSE and Sustainability commitments.

HSSE is a core part of our Uniper identity – we care about people and the environment.

The Policy Statement articulates our new HSSE identity, which is encapsulated in four declarations:

- "We only work safely"
- "We look after people's health"
- "We act with responsibility to reduce our environmental impact"
- "We protect our people and our assets"



## About this Report

This is the short version of Uniper's second Sustainability Report. It presents selected information about our most material sustainability topics.

The full version, which is available online, presents further information such as figures and standard disclosures.

 [cr.uniper.energy](https://cr.uniper.energy)

# Our strategic approach

## Local acceptance

How do we minimize social and environmental impacts on the communities where we operate?

## Secure and reliable energy supply

How do we provide essential energy services without interruption in a changing and complex energy world?

## Climate change

How do we deal with climate-related risks in our value chain?



## Resource efficiency

How do we reduce the waste of natural capital in our value chain?

## Business integrity

How do we act responsibly with regard to compliance, human rights, trading, and transparency in advocacy groups?

## Our people

How do we attract and retain a diverse and motivated workforce and ensure a healthy and safe work environment?

## Uniper Sustainability Strategic Plans

Our Sustainability Strategic Plans (SSPs) describe how sustainability supports our business strategy and put in place commitments for our ESG topics and the selected UN Sustainable Development Goals (SDGs).

Our SSP is built around a set of long-term commitments that reflect core elements of our corporate culture and business strategy. The SSP provides the framework for medium-term target-setting, annual progress reviews, and specific action plans.

For more information, please visit our sustainability website at [cr.uniper.energy](http://cr.uniper.energy).

## UN Sustainable Development Goals

Uniper supports the SDGs. To guide our actions, we aligned our material topics with relevant SDGs and used this as the basis for developing strategic commitments.

The 17 SDGs were endorsed by the United Nations in September 2015. They encompass fundamental improvements in the living conditions of all people today and in future generations as well as the protection of the environment.

We prioritized seven SDGs during our 2017 materiality assessment based on the nature of our business and its strategic development.

## 01

17 Sustainable Development Goals published by the United Nations. The seven SDGs relevant for Uniper are highlighted.





# Secure and reliable energy supply

**Most people take electricity for granted. We can watch television, listen to music, or run the dishwasher whenever we like: 24/7, 365 days a year. But the energy market, particularly in Western Europe, is experiencing dynamic change. This change is driven primarily by energy policies.**

Europe's energy transition is under way. Renewable energy is increasingly prevalent in several countries. Most is wind and solar. But the growth of renewables presents the energy system with numerous challenges as well as opportunities.

Our long-term commitments:

- Foster established and new flexible generation solutions to enable a secure transition toward renewables worldwide.
- Enter new markets in developing and emerging countries responsibly, supporting their rapid industrialization.

These commitments support in particular SDG 9 and 12:



## Keeping the power supply secure and reliable

Our power plants are flexible, efficient, and in the right place to balance out the volatile output from renewables. Renewables alone can't ensure a reliable energy supply. Periods of cloudy, windless weather can lead to interruptions in the power supply, especially when energy demand

is high. That's when our flexible power plants and energy-storage facilities step in.

This means that we make a substantial contribution toward security of supply. We also generate power 24/7 to meet demand continuously. Gas-fired power plants are fuel-efficient and can adjust their output within a few minutes, enabling them to balance out the fluctuations in renewables production and ensure grid stability. They also have relatively low carbon emissions. That's why gas will play a pivotal role in the energy system of the future. Around 50% of our installed capacity runs on natural gas.

No other energy company has more system-relevant power plants in Germany than Uniper. With Germany to decommission 8 GW of nuclear capacity by 2022, our generating capacity will become even more important to the country's supply security. And our power plants don't just produce electricity. They also generate process steam, compressed air, and heat for industrial enterprises and thousands of households. In the years ahead, we will expand these services in order to make our business more independent from changes in wholesale markets.

Uniper's key performance indicator for supply reliability is the average asset availability of its conventional generation portfolio. In Europe and Russia, it was 82.2% in 2017, slightly lower than in 2016 (82.8%). The reduction is due to increased planned unavailability to conduct maintenance that will help to keep our assets reliable in the future. We reduced our unplanned unavailability from 9.2% in 2016 to 7.9% in 2017.

Periodic technical upgrades to our assets are crucial for ensuring high rates of availability and efficiency and for preventing unplanned downtime. Most power outages are the result of severe weather or faults in the transmission grid. Essential public services depend on our power and gas supply. That's why, along with safety, preventing supply interruptions is our top priority.



**Proportion of system-relevant capacity in Germany operated by Uniper<sup>1</sup>**

## Storage availability and solutions

For the energy transition to succeed, Europe not only needs flexible generating capacity, it also needs other ways to keep the energy supply secure. One way is to store surplus renewable electricity. Electricity can be stored in many ways, from established pumped-storage hydroelectric (PSH) stations to promising new possibilities, such as battery systems and power-to-gas.

Our hydro fleet includes PSH stations, which use surplus electricity to pump water to a reservoir at a higher elevation. When energy is needed, the water is released to drive turbines that produce electricity. About 70 to 80% of the energy used to pump the water higher is recaptured when it falls. Because of their short response time, PSH stations can balance out load fluctuations and regulate grid voltage and frequency. They therefore play a crucial role in ensuring grid stability and in jump-starting the grid after

a widespread outage. They currently represent the only technology capable of efficiently storing large amounts of energy for an extended period.

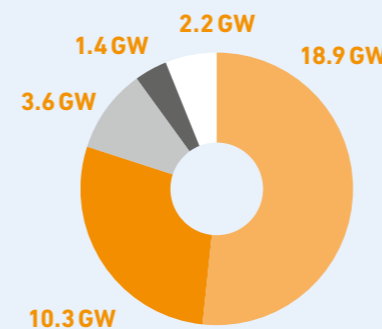
We're working on a variety of storage technologies to meet different challenges, such as storing renewable energy where it's produced. When electricity production exceeds demand in one grid segment, the surplus has to flow to another. When grid congestion prevents this, wind farms in the first segment often have to curtail their output or even go offline to eliminate the surplus and prevent overload.

That's why we're working on transforming surplus renewable power into hydrogen or methane. The technology is called power-to-gas or wind gas. In particular, methane (known as synthetic natural gas) could be stored in the

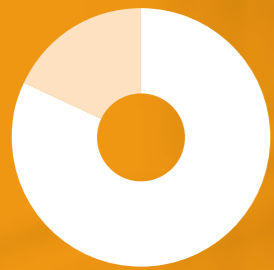
<sup>1</sup>BNetzA, report on the determination of the reserve demand for the winter of 2017/2018.

# 36.4 GW

Uniper generating capacity helps ensure a reliable energy supply in seven countries<sup>1</sup>



- Gas
- Coal
- Hydro
- Nuclear
- Other



82.2%

Average asset availability of our conventional generation fleet

8.2bn cubic meters

Gas storage capacity



natural gas system and in underground gas-storage facilities without limitation. We've been conducting power-to-gas trials for several years in Falkenhagen in northeast Germany, producing more than 8 GWh of hydrogen from renewable power and injecting it in the natural gas system. In May 2018, our existing EU-funded power-to-gas facility was supplemented with a methanation plant, which produces green methane from renewable sources. Unlike green hydrogen, it can be made available to a variety of sectors, such as manufacturing, power generation, heating, and mobility. But using power-to-gas on a larger scale will require a suitable policy and regulatory environment.

Batteries offer another flexible way to store energy. So far, few battery systems are suitable for utility-scale applications. Yet the importance of battery storage will increase as more renewables capacity is added, since batteries can swiftly balance out fluctuations in renewables output. Along with several partners, we launched the M5BAT project at RWTH Aachen University to further explore the technical and economic viability of utility-scale battery storage and to continue with test operations.

Europe has to import much of the gas it needs. Consequently, our more than 8 billion cubic meters of underground storage capacity in Germany, Austria, and the United Kingdom play an important role in ensuring a secure and flexible supply of gas. Gas can be injected and withdrawn from storage as needed. Our gas storage facilities could also be used to store hydrogen and methane produced from renewable sources.

**Gas supply security and global energy services**

Our long-term gas contracts, liquefied natural gas (LNG) procurement, and gas storage facilities help ensure Europe's gas supply security, particularly during the winter. In 2017 we procured 406 TWh of gas under our long-term gas contracts. Moreover, we buy and sell gas on a forward and a spot basis at Europe's trading venues. In 2017 we sold a total of 1,944.8 TWh of gas.

Natural gas is becoming increasingly important outside Europe as well. It's expected to provide one quarter of the world's energy in 2040.<sup>1</sup> As a global energy trader, in addition to procuring pipeline gas we transport LNG from various exporting countries. We are actively working on diversifying our supply chain, both in terms of suppliers and gas infrastructure.

We also market technologies and provide energy services to support the efficient management of generation assets as well as infrastructure development. Operation and maintenance of third parties' existing assets and the provision of engineering consulting for new energy projects is a growing business: in 2017 our activities focused on developing business opportunities in Azerbaijan, India, and South Africa.

<sup>1</sup>International Energy Association (IEA) – World Energy Outlook 2017.



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**01** Uniper employees at our gas storage facility in Etzel, Germany.

**02** Our power-to-gas unit in Falkenhagen in northeast Germany, part of the STORE&GO research initiative.



# Climate change

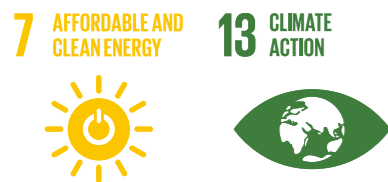
**Climate change is one of the biggest challenges the world faces and one of our most material long-term issues. In particular, the climate impact of the direct carbon emissions from our fossil-fueled power stations is of great significance to us and our stakeholders.**

Our business will be increasingly affected in the years ahead by social, regulatory, and economic developments that are related to carbon emissions and their impact on climate change. This will present us with challenges as well as opportunities.

Our long-term commitments:

- Promote lower-carbon fuels like gas and LNG worldwide and expand our global gas and LNG third-party trading.
- Develop business models for carbon utilization.
- Promote less carbon-intensive power generation technology.
- Monitor and optimize CO<sub>2</sub> intensity of our European Generation portfolio.

These commitments support in particular SDG 7 and 13:



## Greenhouse-gas emissions (GHG) from our operations

Direct carbon emissions from our fossil-fueled power production account for the biggest share of our GHG emissions. Measured in accordance with the Greenhouse Gas Protocol, in 2017 they represented around 3% of all carbon emissions from stationary power plants and industrial plants covered by the EU Emissions Trading Scheme (EU ETS).

In 2017 our direct carbon emissions from the combustion of fossil fuels for power and heat generation declined to 63.3 million metric tons (2016: 73.6 million metric tons), mainly because of reduced generation in Russia and Germany, the closure of units 1 and 2 at Maasvlakte power station in the Netherlands, and the increased use of gas rather than coal in the United Kingdom. The decline in our direct carbon emissions reflects an ongoing trend. From 2005, the year of the EU ETS's entry in force, the assets composing our European Generation segment have decreased their direct carbon emissions by around 60% and have thus declined further than the current EU climate targets.

## 63.3m metric tons of CO<sub>2</sub>e

**Direct scope 1 emissions from our power stations<sup>1</sup>**

<sup>1</sup>These figures also include emissions from nonconsolidated generation assets over which Uniper has operational control.

The carbon intensity of our consolidated assets was 503g of CO<sub>2</sub> per kWh in 2017, almost unchanged compared to 2016 (502g of CO<sub>2</sub> per kWh). In Russia, we plan to carry out a modernization plan to raise our assets' plant efficiency. This will tangibly improve our International Power segment's carbon intensity. The carbon intensity of our European Generation segment's consolidated assets was 476g of CO<sub>2</sub> per kWh in 2017, lower than in 2016 (481g of CO<sub>2</sub> per kWh).<sup>1</sup>

## Comprehensive carbon management

Regulatory uncertainty in most of the jurisdictions where we operate makes it difficult to predict the absolute and specific carbon emissions of our fossil-fueled generation portfolio. For example, some European countries may seek to shut down fossil-fueled power plants at a faster rate, whereas others may include some older plants in their capacity reserves, with the result that the plants would operate only a few hours per year.

Uniper commits to developing and publishing measurable targets for the CO<sub>2</sub> intensity of its own European Generation which also consider regulatory and economic developments as far as possible.

<sup>1</sup>The methodology to calculate our carbon intensity figures has been updated from an operational control to a financial control approach. In the calculations heat and steam generation was included.

# “

**In 2017 we announced that we do not intend to invest in any more coal-fired power plants after we have commissioned Datteln, a 1.1 GW high-efficiency coal-fired plant in west-central Germany.”**

**Klaus Schäfer**  
CEO

Furthermore, we closely monitor developments at the Task Force on Climate-related Financial Disclosures (TCFD), which plans to design a framework for voluntary, consistent climate-related financial risk disclosures that companies can use to provide information to their investors and stakeholders. We will continue to assess whether the framework for disclosing climate-related risks in the context of financial reporting can add value to Uniper and its stakeholders in the future. We're also participating in the new edition of the Climate Disclosure Project (CDP).

## Contributing to a lower-carbon energy world

We support global efforts toward low-carbon energy generation. Together, gas-fired and hydroelectric capacity accounts for more than 50% of our European portfolio, enabling us to support the transition toward low-carbon energy generation.

With an average thermal efficiency of just under 50% and comparatively low carbon emissions per kWh, our gas-fired fleet in Europe helps reduce our carbon intensity. Gas demand is forecast to increase by 45% between now and 2040.<sup>1</sup> We therefore intend to intensify our activities in generation and trading to realize the potential of natural gas as a viable supplement for renewables in tomorrow's energy world.

We are conducting numerous modernization projects to make our generating units more efficient, in particular by enabling them to start up and shut down faster. This reduces fuel consumption, costs, and carbon emissions. We're implementing these measures primarily at our

<sup>1</sup>International Energy Association (IEA) – World Energy Outlook 2017.

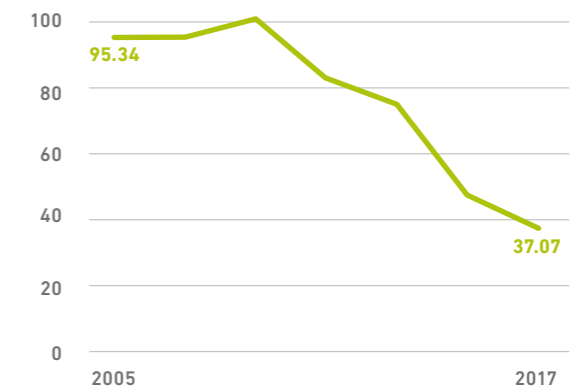
combined-cycle gas turbines, because they can achieve the highest levels of fuel efficiency.

Climate-friendly hydropower accounts for about 10% of our total generating capacity and 13% of our generation portfolio in Europe. Sweden aims to use 100% renewable energy by 2040. As the country's third largest hydropower producer, we'll continue to be a mainstay of its low-carbon energy supply. In Germany alone, each year our hydro assets prevent the emission of 2.8 million metric tons of carbon based on the country's current energy mix.

In addition, we intend to play a bigger role in innovative technologies such as renewable-energy storage and carbon utilization. In December 2017 Uniper assumed the presidency of CO<sub>2</sub> Value Europe, a new association of stakeholders along the carbon value chain. In this platform, we work with 42 other founding members from different sectors and countries to develop solutions for the industrial use of carbon in a responsible way.

## Development of Uniper's carbon emissions in Europe<sup>1</sup>

m metric tons of CO<sub>2</sub>e



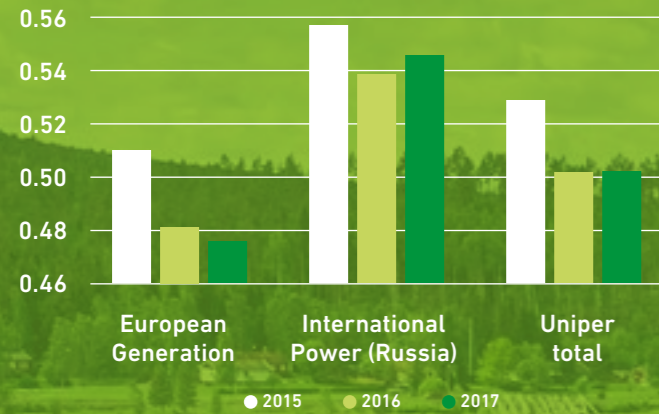
<sup>1</sup>Uniper SE accounting boundaries at year-end 2017; fully consolidated companies 2005-2017.



# 503 g/KWh

Uniper's total carbon intensity<sup>1</sup>

Carbon-intensity trend of Uniper's portfolio<sup>1</sup>



# 476 g/KWh

Carbon intensity of our European Generation segment<sup>1</sup>

<sup>1</sup> Data source: reported emissions (under EU-ETS and Russian Scheme); method: electricity generation adjusted to reflect heat and steam components (CHP only); consolidation approach: financial control.

One of our hydropower plants in Sweden.





# Our people

**Our people are our most important asset. We empower them to demonstrate leadership, to give their best every day, and to utilize their diverse skills and strengths. This is how we bring the Uniper Way, our corporate identity, to life. It guides us to pragmatic work practices and supports the development of our corporate culture.**

We're committed to providing our people with a safe, healthy, and supportive work environment in which they feel confident sharing their ideas and trying new approaches. Their creativity is crucial to our success. Furthermore, we strive to prevent any form of discrimination and to promote gender equality.

Our long-term commitments:

- Protect labor rights and ensure a safe, healthy, and secure work environment for all employees and contractors; promote the same standards in our joint ventures and partnerships.
- To have zero tolerance of discrimination on the basis of gender, ethnic background, or any other diversity factor.
- Ensure equal opportunities and foster diversity in leadership positions.

These commitments support SDG 5 and 8:

5 GENDER EQUALITY



8 DECENT WORK AND ECONOMIC GROWTH



## Health and Safety (H&S)

We want to protect people and the environment from harm, minimize risks, enhance security, and thus make sure that everyone at Uniper

feels safe at their job and returns home safely at the end of each day. This is our top priority. Our commitment to health and safety also extends to the employees of our business partners and to the people who live near and visit our facilities. Stressful situations and unsafe work habits in complex environments such as power plants could lead to injuries, serious accidents, and fatalities.

We view H&S as a key leadership task that requires a culture of continual improvement. This will enable us to prevent accidents, safeguard our people's health, and also avoid the additional costs of work stoppages and lost time. We have in place Group-wide programs and policies that are adapted to differences in the safety practices of the countries where we operate. They are designed to provide a safe and healthy workplace, both for our employees and contractors, to enable us to learn from accidents, and to achieve the H&S targets and improvement measures we define annually.

In 2017 we laid the foundation for improving health management across Uniper. We conducted a series of workshops with fifteen senior leadership teams, communicated on a variety of health issues throughout the year, and initiated local health action plans.

Our HSSE team helps our organization and employees integrate H&S standards into their strategic and operational planning, business decisions, and daily activities.

In November 2017 the Uniper Management Board approved a new three-year HSSE Improvement Plan for 2018–2020. HSSE Improvement Plans, which include H&S targets and improvement measures, are reviewed on an annual basis, and progress is monitored regularly. These plans help us live up to our commitment to continual improvement in our HSSE performance. The HSSE Improvement Plan provides the framework for our efforts across all functions. On this basis, our operating entities develop their own annual improvement plans.

01 Uniper employees at Maasvlakte power station, Rotterdam, Netherlands.



01

Our main safety metric for management purposes is combined total recordable incident frequency (TRIF), which measures the number of incidents per million hours of work. Our combined TRIF for 2017 was 1.53 (including Russia). This was an improvement relative to 2016 (1.68). Our combined TRIF for 2017 (excluding Russia) was 1.98, which was slightly below our own 2017 TRIF threshold of 2 (excluding Russia) and also an improvement relative to the prior year (2016: 2.13).

**1.53**  
Uniper's combined TRIF (including Russia)<sup>1</sup>

<sup>1</sup> TRIF takes account of all relevant reports, including those from Uniper companies that are not fully consolidated but over which Uniper SE has operational control.



Since November 2017, HSSE together with Uniper IT has been implementing a new and improved incident-reporting system that meets Uniper's health, safety, security, environment, and data requirements. The system, which replaces different systems and solutions currently being used across Uniper, went live in May 2018. Its purpose is to reduce complexity and to increase efficiency as well as transparency. The new system also supports the sharing of incident-related information and learning from incidents.

### Diversity

Diversity and inclusion support our innovation and growth potential. An open, inclusive, innovative, and creative culture can unlock hidden value for the business, enable our people to realize their full potential, and foster innovation and resilience.

In 2017 the Uniper Management Board gave its full commitment to promoting inclusion and diversity in the six dimensions defined by the

01  
Uniper employees at  
Maasvlakte power station,  
Rotterdam, Netherlands.

01



63

Nationalities  
working together  
at Uniper



23.9%

Proportion of  
female employees

12,180

Uniper people<sup>1</sup>

<sup>1</sup> Headcount as of Dec. 31, 2017. Figures do not include board members, managing directors, apprentices and interns.

German Diversity Charter: gender, nationality or ethnic background, religion or worldview, disability, age/generations, and sexual orientation and identity. The Charter was signed in 2016 by CEO Klaus Schäfer on behalf of Uniper. In 2017 we conducted an employee survey that included questions about diversity in order to raise awareness of this issue among all employees.

In 2018 a team of senior managers and a team of six diversity ambassadors from different units began designing a Diversity Improvement Plan for 2018-2020. All senior leaders at Uniper were encouraged to develop such a plan for their teams. One of the purposes is to foster greater awareness in the business of the six dimensions of diversity and the issue of inclusion. The improvement plan, which the Management Board views as an enabler of Uniper's innovation and growth potential, will focus on three areas:

1. Leadership and culture
2. Communication
3. Infrastructure and compliance

The diversity ambassadors, who will be the main point of contact for all employees, will conduct communications on a regular basis to raise awareness of the diversity topics.

In 2018 we also plan to conduct a pilot reverse-mentoring project in which junior colleagues mentor senior leaders. This will not only bring together and nurture talented people from multiple generations, but also should provide interesting insights into cross-generational teamwork. HR will also work to ensure diverse recruitment and selection processes are in place.

We also raised our targets for the percentage of women in leadership positions. Our targets had been 20% for the first level of management below the Management Board and 22.5% for the second level. In 2017 we raised both targets to 25%. We intend to reach these targets by June 2022 at the latest, primarily through more diverse selection and recruitment procedures, mentoring, and flexible work arrangements for all employees.



# Business integrity

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Uniper employees in  
Düsseldorf, Germany.

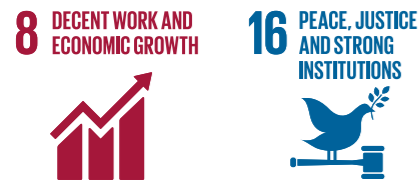
**Doing the right thing. It sounds simple but presents many companies with challenges. Not doing the right thing can cause considerable damage to stakeholders and the company itself. That's why it's important to systematically prevent and sanction violations of the law or regulations. This is the only way to credibly convey that our company is being managed responsibly and is committed to creating sustainable value. Compliance is an essential part of our integrity and culture.**

We support transparency, both toward and within institutions, to avoid corruption and promote more effective public administration. In accordance with the Universal Declaration of Human Rights, we respect and support human rights—including the prohibition against child and forced labor—across our business activities. We expect our business partners to do the same.

Our long-term commitments:

- Have zero tolerance of forced labor, child labor, modern slavery, and human trafficking.
- Continue to strengthen our compliance culture and protect the business from corruption risks.
- Foster the development of effective, accountable, and transparent institutions at all levels.

These commitments support SDG 8 and 16:



## Compliance and governance

The foundation of compliance is good corporate governance, which is of the highest priority at Uniper. It is founded on close and efficient collaboration between the Management Board and the Supervisory Board. It guides all our decision-making and aims to ensure that we achieve success responsibly and sustainably. The Management Board and Supervisory Board endorse the goals of the German Corporate Governance Code, which seeks to promote responsible, transparent corporate governance and controls aimed at enhancing enterprise value in the long term.

Effective January 1, 2016, we have in place a Compliance Management System (CMS) to ensure that we mitigate compliance risks. Compliance risks are defined as major legal risks, significant monetary fines, and significant damage to the Company's reputation that arise for the entire Uniper Group and its officers and directors due to misconduct and violations of laws and regulations.<sup>1</sup> These could arise both from the actions of Uniper staff or third parties acting on Uniper's behalf.

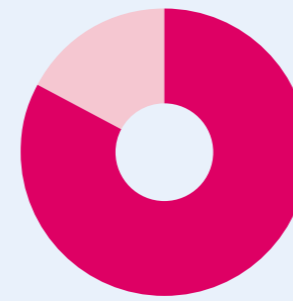
The CMS sets uniform standards for compliance topics that reflects Uniper's specific compliance risks. The CMS also incorporates the reporting of any compliance violation that have already occurred, so that the necessary responses and improvements to the CMS may be implemented. The Management Board has appointed a Chief Compliance Officer, who reports to the CEO, the Management Board, and the Supervisory Board's Audit Committee. The Chief Compliance Officer is responsible for our Group-wide CMS and is supported by the Senior Vice President for Compliance & Regulation.

## Promoting integrity

Uniper's business activities are grounded in integrity and respect for the law. They are based on the Uniper Code of Conduct, as amended in October 2017 and approved by resolution of the Management Board. The Code of Conduct requires that all employees in all Group companies comply with all laws and regulations and with Company policies. The Management Board and line managers serve as role models and must act accordingly.

The Code of Conduct sets out principles for dealings with business partners, third parties, and government institutions, particularly with regard to laws on combating corruption, money laundering, antitrust violations, and the financing of terrorism. It also includes issues such as compliance with international sanctions, the granting and acceptance of gifts and hospitality, the involvement of intermediaries, and the selection of suppliers and service providers. Other rules address issues including the avoidance of conflicts of interest and the handling of Company information, property, and resources.

<sup>1</sup> The definition of a significant fine is related to the materiality of the direct economic impact on the organization's financial performance.



**83%**  
Percentage of employees who took the basic compliance course in 2017

**3**  
Number of new cases of alleged corruption reported internally at Uniper in 2017<sup>1</sup>

We require our suppliers to observe all principles of the Uniper Supplier Code of Conduct. The Code of Conduct and more information on our CMS can be viewed [online](#). The new Code of Conduct explains corruption risks and provides guidance for addressing them. As in previous years, group-wide training, which covers the Code of Conduct's main principles and how to apply them, was provided to employees in December 2017. In addition, employees who work in business functions exposed to a high risk of corruption received further training tailored to their function's particular type of exposure.



## Human rights along our value chain

Uniper does business around the world, including in countries where fragile institutions are not always fully able to protect basic human rights. Because we consider human rights violations unacceptable for any entity operating ethically and correctly, respect for human rights is embedded into our business policies and procedures, ensuring that we do not benefit from breaches of human rights.

Modern slavery, unlawful compulsory displacement, and forced and child labor can still happen in countries with a history of insufficient standards for the protection of human rights. Furthermore, instances of violence and inhumane and degrading treatment can occur in high-risk areas and in more stable countries that have weak institutions. From our perspective, the occurrence of such situations, which may be an undesirable indirect consequence of business activities in such countries, would adversely affect the safety and security of employees and contractors, particularly during travel. Although rare, these risks may negatively affect the quality of operations and reduce confidence toward us and our business partners. They may also increase the chance of lawsuits, cause project delays, incite social unrest, and, ultimately, harm our reputation.

Our sourcing and trading of coal and gas may have an indirect impact on human-rights-related issues resulting in a potential risk exposure. We also face potential risks when providing engineering and energy services in regions such as the Middle East, Central and South-East Asia, and North Africa. Failure to take adequate measures to prevent, monitor, and mitigate these risks would significantly increase the risk potential.

For coal procurement, we strive to mitigate these risks by participating in Bettercoal, a not-for-profit initiative established by a group of major European utilities committed to a more responsible coal supply chain. Bettercoal directly engages the major coal producers worldwide through a dedicated assessment program. The goal is to help mining companies, specifically those in risky countries, to promote the economic development of local communities and the protection of human rights.

As part of Bettercoal's country-prioritization strategy, in March 2017 Uniper joined a Bettercoal delegation for a stakeholder engagement campaign in Bogota and in the Cesar mining region in Colombia. The purpose was to have all the major coal-mining companies in the region participate in the Bettercoal Supplier Assessment Process. A second mission took place in April 2018 to seek further engagement of the companies and align expectations with the Colombian National Action Plan on Business and Human Rights. Thanks to these campaigns, it is expected that by the end of the second quarter of 2018 the vast majority of Colombian thermal coal will come from Bettercoal suppliers, enhancing Bettercoal's role in supporting the country's peace-building and social development efforts.

<sup>1</sup> Three new cases of alleged corruption were reported internally at Uniper in 2017. Two of these were closed, and one is still pending. Because two cases reported in 2016 were still open, a total of three cases of alleged corruption were pending at year-end 2017.



# Resource efficiency

Uniper produces energy from finite resources like natural gas and coal. Water is another important resource as it is used to cool power plants, generate electricity, store energy at pumped-storage hydro plants, and produce steam for industrial purposes.

It is important to us that we use natural resources efficiently and responsibly. It affects not only our operating efficiency, cost margins, market position, and the public's perception of us but also the communities near our assets.

Our long-term commitments:

- Reduce waste, prevent land pollution, and promote environmentally responsible mining.
- Work with our contractors, suppliers, and industrial customers to adopt a life-cycle approach to protect the environment, use resources efficiently, and market our by-products.

These commitments support SDG 7 and 12:



## Optimizing our resource use

We aim to use resources efficiently and get as much energy as possible from every unit of fuel. This shrinks our ecological footprint, reduces our costs, and makes us less exposed to potential supply-chain risks. Furthermore, we're committed to using water responsibly and efficiently, reducing the amount of non-recyclable waste we produce, and preventing uncontrolled emissions to the air, water, and land.

Procurement is a key lever for optimizing our resource use. Our Global Origination Desk, specializing in gas and LNG, together with the Coal & Freight Desk conducts centralized fuel



01

**01**  
Uniper employee at one of our hydropower plants in Sweden.

**02**  
Hydropower plant in Sweden.

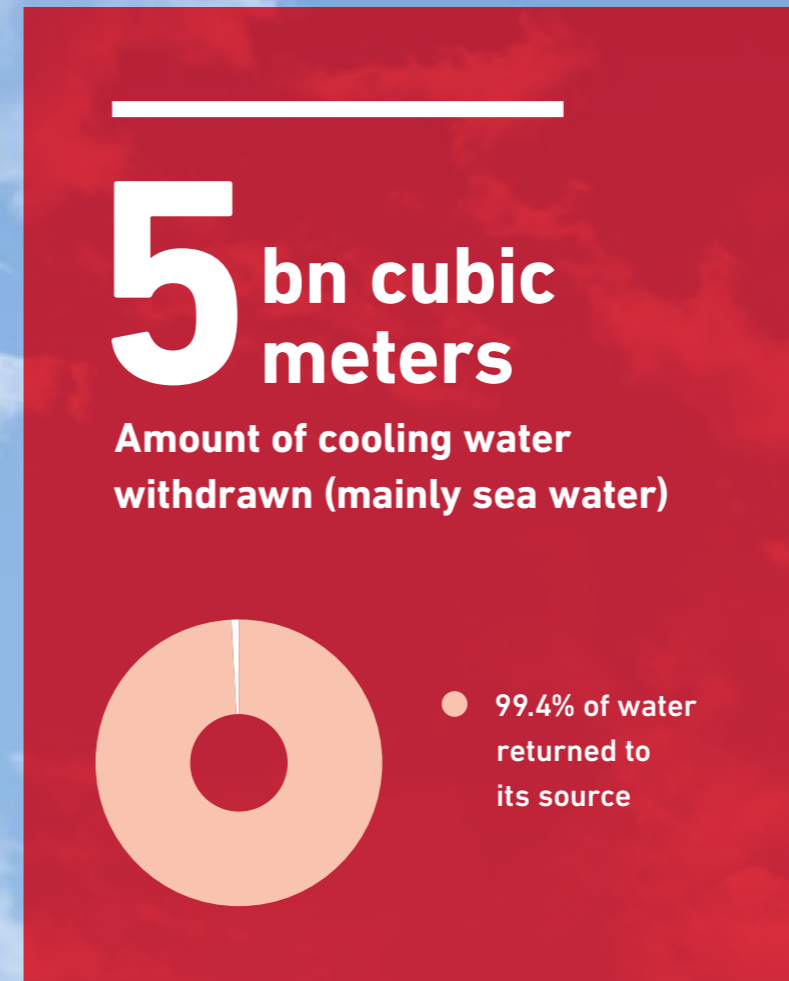
procurement for our operations. It works closely with the procurement teams at our power plants so that each plant has the right amount of fuel when required, thereby ensuring cost-effectiveness and preventing unnecessary inventory.

Increasingly, we aim for a life-cycle approach for our operations. Examples include projects for the optimization of our industrial customers' energy consumption in Europe and Russia and, together with the mine owners, the recovery of gob piles at former coal mines in the United States to reduce environmental impacts.

Asset management and modernization also help us use resources efficiently. For example, almost twice as much energy can be derived from hard coal today than in 1950. And more improvements are possible. We also consume less coal because some of our plants operate below their full capacity and because others have been sold or have been decommissioned after reaching the end of their useful operating life. Our European coal fleet used 16% less coal in 2017 than in 2016, continuing a trend that emerged in 2015.

An integrated management system based on our Physical Asset Policy and HSSE & Sustainability Policy helps us further reduce our resource consumption. These policies include provisions that specify in detail how we use resources.

22



02

23



## Deriving power plant by-products

In addition to procuring fuels, we also trade them and market a number of by-products from our power stations. In accordance with applicable regulations, our fossil-fueled power stations are equipped flue-gas cleaning systems. These systems capture sulfur compounds and other environmentally harmful materials. We design our plant processes in so that the by-products of flue gas cleaning are of a sufficient quality to be marketed as coal combustion products (CCPs).

Our power stations have storage facilities and loading equipment, enabling us to meet our customers' CCP needs efficiently. BauMineral GmbH, a wholly owned Uniper subsidiary, markets our CCPs in Germany and the Netherlands.

When customers use our CCPs (pulverised fly ash, furnace bottom ash, and gypsum) as building materials, this displaces the carbon dioxide that would otherwise be emitted from the manufacture of such materials. With approaches like these, we're making our raw material supply chains more sustainable and independent.

We produced 1.9 million metric tons of pulverised fly ash and furnace bottom ash in 2017 (2016: 2.1 million metric tons) and sold or recovered 92.8% of it. Gypsum is a by-product of the desulfurization process in coal-fired power stations. In 2017 we produced 0.9 million metric tons of it (similar to the amount in 2016). We sold as by-products or recovered 99.8% of it.

**01**  
Uniper employees at Datteln power station in Germany.

**02**  
Uniper employee at Öresundsverket gas-fired power plant.

## Mitigating environmental risks

Our generation fleet in Europe is technologically advanced and highly efficient; our fleet in Russia is one of the country's most modern. In recent years, we've invested in power-plant upgrades and increased plant efficiency and availability. Going forward, we intend to continue to pursue operational excellence.

To mitigate environmental risks, we establish and maintain dedicated management systems. The majority of our facilities have environmental management systems (EMS) certified to ISO 14001, the internationally recognized standard for environmental management. In 2017 many of these facilities were certified to the most recent and more stringent version of this standard (ISO 14001:2015), which has made our EMS more robust.



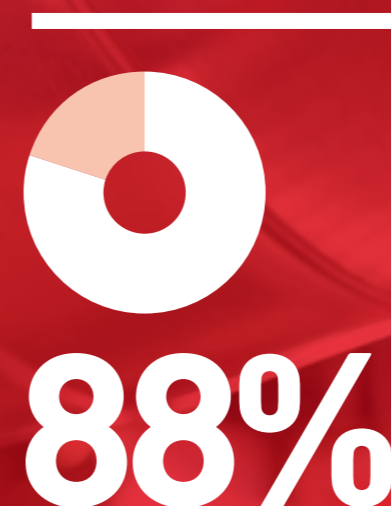
02

At year-end 2017, 88% of our fully consolidated industrial facilities were certified to ISO 14001, an increase from 83% at year-end 2016 due to the certification of several more of our power plants in Germany to ISO 14001: 2015. We plan to obtain ISO14001 certification for our remaining facilities in Germany in 2018. All of our fully consolidated industrial facilities in other countries are certified to ISO 14001. The energy management systems of all of our fossil-fueled power plants in Germany were recertified to ISO 50001 in 2017.

We're also shrinking our environmental footprint by avoiding waste or reusing it. Waste results from our operations and our projects to dismantle assets. We strive to operate our power plants as efficiently as possible. This reduces fuel consumption and thus the resulting waste. In 2017 we implemented several projects, for example in Hungary, France, Great Britain and Russia, to make our power plants more flexible and efficient.

In developing our business outside Europe, where water scarcity issues are more significant, we must further integrate water management practices into our fuel procurement and asset operations in order to mitigate risks and seize opportunities. In 2017 participants from our graduate program developed a tool and a set of detailed guidelines for water management best practices. The tool and guidelines will be initially adopted by our CCGT fleet in 2018 and then reviewed to determine whether to use them in other parts of our business as well.

01



Percentage of our fully consolidated industrial facilities certified to ISO 14001



Percentage of ash and gypsum from our power stations classified as a by-product or recovered



# Local acceptance

**The energy world is complex, dynamic, and sometimes contradictory. People need energy yet often oppose the construction of the necessary assets. It matters little whether the asset is a new wind farm or a new coal-fired power station. “Not in my backyard” is a common attitude in many developed countries. The situation is different in emerging countries where people’s desire for economic development and a better standard of living is coupled with mounting concerns about air and water quality.**

Earning and maintaining the trust of our stakeholders, particularly of people who live near our assets, is paramount for us as an energy provider. We listen to them, strive to understand their concerns, and work with them to minimize adverse impacts of our business activities. We also make sure they understand the purpose of our business activities and the value we create for local economies and for society as a whole: in Europe, we help ensure supply security and foster the transition toward a low-carbon future. Outside Europe, we support the development of energy markets by means of our own generation activities and our services for other companies and communities.

Our long-term commitments:

- Actively engage with our stakeholders to ensure transparency and ongoing dialog about our activities.
- Minimize the impact on communities affected by our operations.

These commitments support SDG 8 and 9:

**8** DECENT WORK AND ECONOMIC GROWTH



**9** INDUSTRY, INNOVATION AND INFRASTRUCTURE



## Stakeholder engagement

Our Stakeholder Management policy stipulates how we interact with stakeholders. It defines our objectives for internal and external communications and assigns roles and responsibilities. The dialog formats vary, ranging from information stands at trade fairs and public forums for residents who live near our assets to discussions with community representatives and local interest groups. The purpose of these forums is to promote open discussions and to enable us to learn more about local stakeholders’ views and concerns.

Dialog doesn’t resolve all differences. Sometimes disputes lead to litigation and require more time to be resolved. For example, diverging standpoints exist regarding our new coal-fired power station in Datteln, Germany, and our biomass power station in Provence, France. We held discussions with regional stakeholders and drew on the results to move the projects forward.

## Air emissions

The environmental performance of our assets significantly affects not only our operating efficiency and market position but also local perceptions. Air emissions are an important topic for local stakeholders. In 2017 we further reduced these emissions.

Sulphur dioxide (SO<sub>2</sub>) results primarily from the combustion of sulphurous coal. Flue-gas desulfurization equipment captures 90% of our SO<sub>2</sub> emissions and prevents them from entering the atmosphere. We emitted 20.6 kilotons (kt) of SO<sub>2</sub> in 2017, just under 1.4 kt less than in 2016, mainly because our coal-fired power stations generated less power (primarily in the United Kingdom and Russia).

Most nitrous oxides (NO<sub>x</sub>) are produced from the reaction between nitrogen and oxygen during combustion at high temperatures. Our gas- and coal-fired power stations emit NO<sub>x</sub>, the majority coming from our power stations in Russia. In 2017 these emissions declined by just over 6 kt year on year to 60.6 kt, likewise mainly because our coal-fired power stations operated less.

**Around 7%**  
Reduction in SO<sub>2</sub> emissions relative to the prior year

**9%**  
Reduction in NO<sub>x</sub> emissions relative to the prior year

**0**  
Severe environmental incidents

**2**  
Significant ongoing disagreements with local communities regarding environmental issues<sup>1</sup>

<sup>1</sup>The disagreements refer to our coal-fired power station in Datteln, Germany, and our biomass power station in Provence, France.

## BREF: reducing the emissions of fossil-fueled power plants

In mid-August 2017 the European Union adopted new emission standards that power plants must meet by 2021. A review examined what emission levels could be achieved by each type of power plant using the best available techniques (BAT). The review’s findings were published in a BAT Reference Document (BREF). Uniper played an active role in the review process, providing detailed performance data from some of our power plants and lending our expertise to the policy debate.















Many of our plants already meet BREF emission thresholds. Over the next four years, however, we may need to make investments to reduce the emissions of others. Much will depend on how individual countries transpose BREF into national law. We’ve established a project to coordinate compliance with BREF across our operations and to lobby on BREF’s transposition into national emission regulations.

## Hydropower in dialog

We have a responsibility to operate hydroelectric stations safely, economically, and in a way that minimizes their impact on the environment, water levels, the landscape, and biodiversity. We work closely with stakeholders ranging from political leaders (mayors, county commissioners, members of parliament) to nature conservation associations and other NGOs. We engage stakeholders in several dialog formats: regional “Hydropower in Dialog” conferences held annually or every two years, information events for public officials, and public forums.



# Sustainability commitments

Material topics	Subtopics	Relevant SDGs	Uniper commitments
<b>Secure and reliable energy supply</b>	<ul style="list-style-type: none"> <li>Power supply</li> <li>Storage availability and solutions</li> <li>Gas purchase and supply</li> <li>Business adaption and resilience</li> </ul>	  	<ul style="list-style-type: none"> <li>Foster established and new flexible generation solutions to enable a secure transition toward renewables worldwide.</li> <li>Enter new markets in developing and emerging countries responsibly, supporting their rapid industrialization.</li> </ul>
<b>Climate change</b>	<ul style="list-style-type: none"> <li>Policy and regulatory environment</li> <li>Greenhouse-gas emissions from our operations</li> <li>Physical impacts of climate change</li> </ul>	  	<ul style="list-style-type: none"> <li>Promote lower-carbon fuels like gas and LNG worldwide and expand our global gas and LNG third-party trading.</li> <li>Develop business models for carbon utilization.</li> <li>Promote less carbon-intensive power generation technology.</li> <li>Monitor and optimize CO<sub>2</sub> intensity of our European Generation portfolio.</li> </ul>
<b>Our people</b>	<ul style="list-style-type: none"> <li>Health and safety</li> <li>Diversity</li> <li>Workforce restructuring</li> <li>New employees</li> </ul>	 	<ul style="list-style-type: none"> <li>Protect labor rights and ensure a safe, healthy, and secure work environment for all employees and contractors; promote the same standards in our joint ventures and partnerships.</li> <li>To have zero tolerance of discrimination on the basis of gender, ethnic background, or any other diversity factor.</li> <li>Ensure equal opportunities and foster diversity in leadership positions.</li> </ul>
<b>Business integrity</b>	<ul style="list-style-type: none"> <li>Compliance and governance</li> <li>Human rights along the value chain</li> <li>Transparent trading</li> <li>Transparency in advocacy groups</li> </ul>	 	<ul style="list-style-type: none"> <li>Have zero tolerance of forced labor, child labor, modern slavery, and human trafficking.</li> <li>Continue to strengthen our compliance culture and protect the business from corruption risks.</li> <li>Foster the development of effective, accountable, and transparent institutions at all levels.</li> </ul>
<b>Resource efficiency</b>	<ul style="list-style-type: none"> <li>Flexible and efficient power plants</li> <li>Energy savings</li> <li>Resource consumption</li> <li>By-products</li> <li>Waste management</li> <li>Water management</li> </ul>	 	<ul style="list-style-type: none"> <li>Promote waste reduction, land pollution prevention, and environmentally responsible mining.</li> <li>Work with our contractors, suppliers, and industrial customers to adopt a life-cycle approach to protect the environment, use resources efficiently, and market our by-products.</li> </ul>
<b>Local acceptance</b>	<ul style="list-style-type: none"> <li>Stakeholder engagement</li> <li>Air emissions</li> <li>Biodiversity</li> <li>Employee engagement</li> </ul>	 	<ul style="list-style-type: none"> <li>Actively engage with our stakeholders to ensure transparency and ongoing dialogue regarding our activities.</li> <li>Minimize the impact on communities affected by our operations.</li> </ul>



# Key figures

		2017	2016
<b>Uniper employees<sup>1</sup></b>		12,180	12,635
<b>Proportion of female employees</b>	%	23.9	24.1
<b>Combined TRIF (including Russia)<sup>2</sup></b>		1.53	1.68
<b>Uniper generating capacity<sup>3</sup></b>	GW	36.4	38.2
<b>Average asset availability of our conventional generation fleet</b>	%	82.2	82.8
<b>Unplanned unavailability of our conventional generation fleet</b>	%	7.9	9.2
<b>Coal consumption<sup>4</sup></b>	m tons	13	15.6
<b>Gas sold</b>	TWh	1,944.8	1,725.7
<b>Direct scope 1 emissions<sup>5</sup></b>	m metric tons CO <sub>2</sub> e	63.3	73.6
<b>Indirect scope 2 emissions (location-based method)<sup>5</sup></b>	m metric tons CO <sub>2</sub> e	0.25	0.21
<b>Indirect scope 2 emissions (market-based method)<sup>5</sup></b>	m metric tons CO <sub>2</sub> e	0.32	0.28
<b>Total carbon intensity<sup>6</sup></b>	g/KWh	503	502
<b>Carbon intensity of European portfolio<sup>6</sup></b>	g/KWh	476	481
<b>PFA and FBA produced</b>	m metric tons	1.9	2.1
<b>Gypsum produced</b>	m metric tons	0.9	0.9
<b>Facilities certified to ISO 14001<sup>5</sup></b>	%	88	83
<b>Facilities certified to OHSAS18001<sup>5</sup></b>	%	100	100
<b>Cooling water withdrawal</b>	bn m <sup>3</sup>	5	6.4
<b>SO<sub>2</sub> emissions</b>	kt	20.6	22
<b>NO<sub>x</sub> emissions</b>	kt	60.6	67
<b>Severe environmental incidents<sup>7</sup></b>		0	0

<sup>1</sup> Headcount as of Dec. 31, 2017. Figures do not include board members, managing directors, apprentices and interns.

<sup>2</sup> Total recordable incidents per million hours of work (TRIF) for Uniper and contractor employees. TRIF takes account of all relevant reports, including those from Uniper companies that are not fully consolidated but in which Uniper SE has operational control.

<sup>3</sup> BNetzA, report on the determination of the reserve demand for the winter of 2017/2018.

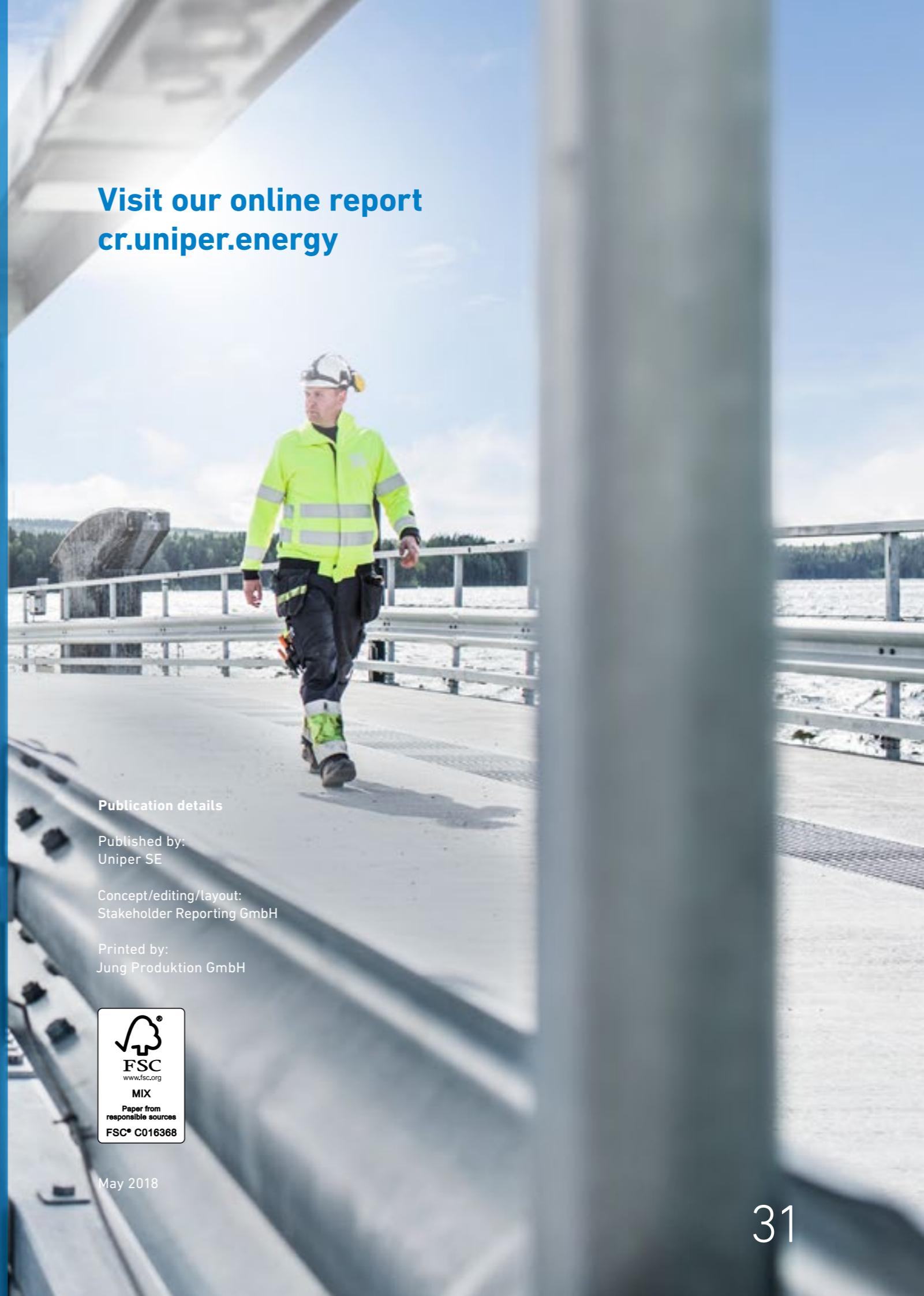
<sup>4</sup> Figure includes domestic lignite consumed by Unipro plants.

<sup>5</sup> These figures encompass all consolidated Uniper entities as well as nonconsolidated entities over which we have operational control.

<sup>6</sup> Data source: reported emissions (under EU-ETS and Russian Scheme); method: electricity generation adjusted to reflect heat and steam components; consolidation approach: financial control.

<sup>7</sup> Severe impact beyond site which is reversible within years or irreversible.

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