Sustainability Report





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About this report

GRI 102-45, 102-50, 102-52, 102-54

Goals and contents

With our Sustainability Report 2018, we are for the first time providing comprehensive information about our economically, environmentally and socially responsible conduct. We are explaining our understanding of sustainability and presenting our goals and measures. In doing so, we want to reach our internal and external stakeholders as well as interested members of the public. In future, we will publish a sustainability report annually as a key communication medium where we provide transparent information about our progress in these activities.

Prior to publishing this report, EEW Energy from Waste undertook an extensive process to strategically implement sustainability. The results of this process form the basis for this reporting. The primary focus is on:

- strategically deriving the material sustainability issues and areas of action
- formalising specific sustainability goals in the identified areas of action
- incorporating stakeholders' perspectives by ascertaining their views and expectations of EEW's sustainability management

Structure and orientation

As part of the strategy process, we identified three specific areas of action: "strengthening relationships", "taking on challenges" and "delivering results". Each of these three areas of action corresponds to one main chapter, thus establishing the basic structure of this report. The thematic focus areas that we identified based on the material topics are each presented as a sub-chapter within the three main chapters.

The three main chapters are bookended by the introductory chapter, "Embedding sustainability", and the concluding section of the report, "Facts and figures", which contains the key figures relevant to the report and the company's sustainability goals.

External assurance by auditor

Selected contents of EEW Energy from Waste GmbH's Sustainability Report 2018 were verified by the independent auditor Ernst & Young in accordance with the International Standard on Assurance Engagements (ISAE) 3000 revised Standard ("limited assurance"). The verified information is indicated accordingly in the text of the report as well as in the overview of key figures.

Use of the GRI reporting standards

This report was prepared in accordance with the GRI Standards (Core option). For reasons of clarity, the references to the GRI disclosures are displayed under the headings and pertain to the text that follows. The information provided relates to the 2018 financial year (1 January 2018 to 31 December 2018) of EEW Energy from Waste GmbH. Events or results outside of this reporting period and information that

does not relate to EEW Energy from Waste GmbH are indicated accordingly. This sustainability report is published in German and English and is available in print and as a PDF download on the company's home page. 4 EEW Sustainability Report 2018 5

Foreword by the Board of Management

GRI 102-14

"Where do you stand when it comes to sustainability?" This is a question that we at EEW Energy from Waste are asked again and again – by our customers and business partners and by policymakers, the capital market, the media and our neighbours in the immediate vicinity of our plants.

For us, it is a key priority to talk to our stakeholders about their expectations regarding various economic, environmental and social aspects of our corporate conduct. In this inaugural sustainability report, we present the initial results of these discussions.

Our business operations are and will be subject to constantly shifting underlying conditions, such as economic and environmental change, the energy and heat transition, the limited availability of resources, and the digital transformation. At EEW, we rise to the associated challenges and attempt through our daily conduct to make a positive contribution for the environment, society and our company.

As the foundation for firmly embedding sustainability in our day-to-day thinking and actions, we have implemented a company-wide sustainability strategy. It is based on three defined areas of action, where we can make a specific contribution to sustainable development.

In the action area "strengthening relationships" we include employee, customer and supplier relationships as well as important aspects of compliance. The "taking on challenges" area of action addresses global megatrends, future fields of business and resource scarcity. The action area "delivering results" encompasses the economic performance of our thermal waste treatment plants at all our sites and their contribution to ecological issues, as well as climate and environmental protection aspects.

We have set specific sustainability targets in each of the above-mentioned areas of action, which are aligned with the 17 UN Sustainable Development Goals (SDGs) as an overarching system of aims. With our company-wide measures, we systematically pursue our goals and track our progress on the basis of defined KPIs.

With the help of modern plant technology, we continue to work on reducing our own emissions to an efficient minimum level as well as making an important contribution to long-term energy supplies for consumers and industry by producing electricity, heat and process steam. Moreover, we are working on guaranteeing the reutilisation of valuable resources such as phosphorus via thermal sewage sludge recovery.

With a continuous improvement process, we strive to achieve ever-better performance in these areas of action and take the lead on the way to a sustainable future as the market leader in energy from waste. In our sustain-

ability reports, we will in future therefore regularly and transparently report on our goals, measures and the progress we have made. They form the basis of a continuous and open dialogue with all our stakeholders.

We are convinced that through transparent engagement that contributes towards sustainable development, we can strengthen the trust that our employees, our customers and business partners, policymakers, the media and the public have in our company and our field of business.



k.-H. Atta

Karl-Heinz Müller
Chief Operating Officer (COO)
Member of the
Management Board

3. Comer

Bernard M. Kemper Chief Executive Officer (CEO) Chairman of the Management Board

Markus Hauck

Markus Hauck Chief Financial Officer (CFO) Member of the Management Board

Embedding sustainability



Company portrait

GRI 102-1, 102-2, 102-3, 102-4, 102-5, 102-6, 102-7, 102-9

EEW Energy from Waste: leading in thermal waste treatment, environmentally friendly when it comes to energy supply

EEW Energy from Waste GmbH is Germany's leading thermal waste recovery company. For around 30 years, we have been planning, building and operating energy-from-waste (EfW) facilities, always with state-of-the-art technology and meeting the highest environmental standards. We currently operate 18 plants at 15 sites in Germany as well as one site in the Netherlands and one in Luxembourg With a market share of around 16.4 per cent (as measured by technical plant capacity), we are the market leader in Germany. As the only operator of an EfW plant in Luxembourg, our market share there is 100 per cent. In the Netherlands, we currently account for 4.8 per cent of the market.

Our company is headquartered in Helmstedt, Germany. We have a total of 1,137 employees at our headquarters in Helmstedt and across all of our sites. Every day, our team works to further develop energy from waste as an integrated component of the energy and heat transition. Our range of services focuses on:

- thermal recovery of waste from local authorities and companies
- · production of electricity, heat and steam
- thermal sewage sludge recovery
- recycling of iron and non-ferrous metal

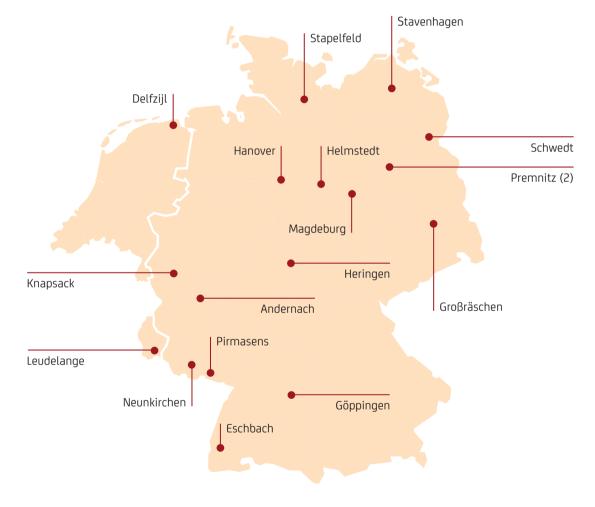
The combined annual recovery capacity at our 18 plants amounts to 4.9 million tonnes of waste. By utilising the energy contained in this waste, EEW generates process steam for industrial plants, district heat for residen tial areas and eco-friendly electricity for the equivalent of around 700,000 households. As the waste contains 50 per cent biogenic material on average, we generate energy from renewable sources in accordance with the German Renewable Energy Sources Act (EEG). At the same time, the energy recovery of the fuels used in EEW's plants leads to a smaller carbon footprint. Further, the supply of district heating substitutes primary sources of energy and also contributes to the reduction of CO₂.

As part of the EfW process, not only does EEW recover energy, it also reclaims raw materials from the residues that remain after waste combustion: the largest share consists of bottom ash (also known as clinker) generated by the combustion process, which can be used as a substitute building material in road construction. In addition, metals contained in the bottom ash - such as iron, aluminium and copper – can be reused in numerous ways thanks to their high degree of purity. Other residues are fly ash and filter dust from flue gas cleaning. They arise when state-of-the-art technology removes pollutants from the flue gas to prevent them from entering the environment. In an environmentally sound recovery process, EEW uses fly ash and filter dust as backfilling material in mines.

In the course of the German Sewage Sludge Ordinance (AbfKlärV) being amended, we are also ready to serve local authorities as a partner for thermal sewage sludge recovery. We develop tailor-made solutions for the resource-efficient recovery of this waste product generated by wastewater treatment. At existing EEW sites in particular, this is resulting in beneficial synergies with present EfW plants.

With our current network of 18 plants at 17 sites in Germany and neighbouring countries, we have created a logistical infrastructure which offers maximum flexibility in acceptance capacity and thus reliable waste management for local authorities and companies in both the short and long term.

Our locations

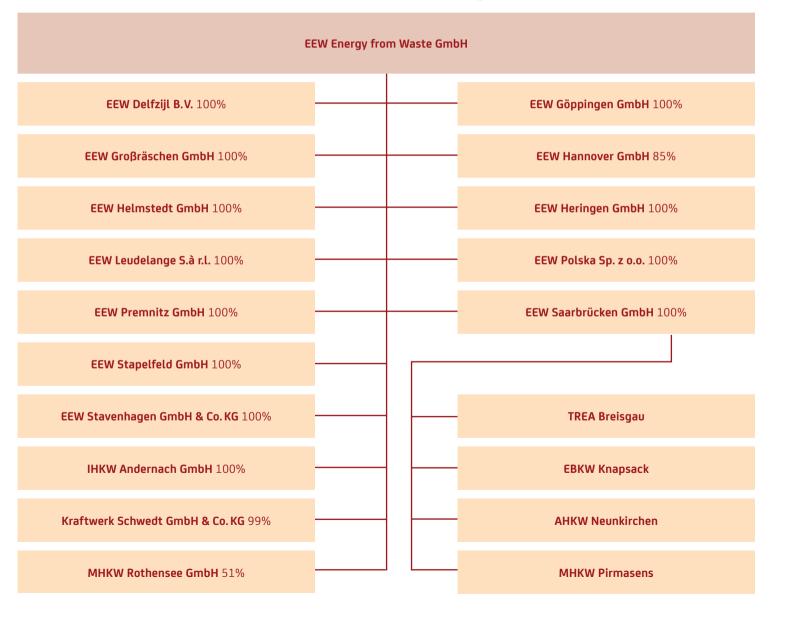


Our corporate structure

The EEW Group is led by the Board of Management of EEW Holding GmbH. EEW Holding

GmbH holds more than 99 per cent of the shares in EEW Energy from Waste GmbH, including direct investments. Since 2016 the sole shareholder of the EEW Group has been the Chinese company Beijing Enterprises Holdings Limited (BEHL).

Overview of the ownership structure of EEW Energy from Waste GmbH



Our strategy: the umbrella for all sustainability activities

GRI 102-11, 102-44, 102-46, 102-47

In 2018 we launched the strategic implementation of sustainability at EEW Energy from Waste. Our goal was to evaluate specific topics as the foundation for our future sustainability management, to establish sustainability goals to guide our actions, and to present our understanding of responsibility in a sustainability mission statement. We successfully carried out this process with the engagement of our stakeholders.

For many years, we have been pursuing regular and intensive dialogue with our customers as well as local authorities, employees, trade unions, policymakers and other societal actors. Through transparent interaction, we find out their views of our company as well as their concerns and potential challenges. Accordingly, we see stakeholder dialogue as essential to EEW's long-term business success. As such, we also included stakeholders in the development of our sustainability strategy and sought out their external assessments.

The outcome of our strategy process is a comprehensive sustainability strategy with goals, a mission statement and governance structures. As part of our corporate strategy, it will in future form the umbrella for all our sustainability activities. For the mandatory companywide implementation of the strategy, we developed a road map with measurable sustainability goals for our three areas of action: "strengthening relationships", "taking on challenges" and "delivering results". The road map clearly

defines the deadlines for these goals. In this way, our strategy becomes more than just a theory; it is credibly and transparently put into practice. As our external environment is in flux and our company is constantly developing, we will continuously review and evaluate our strategy and goals (see also chapter "Effectively managing sustainability in the company"). By doing this, we ensure that the material topics are always the focus of our sustainable conduct. The Sustainability Report 2018 represents the starting point for the annual documentation of our business activities, taking into consideration environmental, social and economic aspects. With this inaugural report about our sustainability performance, we have laid the foundations for regular and transparent sustainability reporting.

Our materiality analysis: finding the key topics

A core element of our process to strategically implement sustainability was a comprehensive materiality analysis carried out with the involvement of stakeholders. Identifying the material sustainability topics was the prerequisite for setting the right priorities in our day-to-day work and our reporting.

We started the process in June 2018 with a comprehensive context analysis. From our own perspective, we identified 22 potentially relevant topics relating to the areas of business, environment, employees and society, along with global challenges.

In the first step of the materiality analysis, we asked selected external stakeholders to assess the relevance of these 22 topics. Moreover, we wanted to know how the stakeholders viewed EEW in relation to these topics. To this end, in July and August 2018 we surveyed customers, local suppliers, and representatives from local authorities, politics, associations and trade unions. The individuals selected represented a cross-section of EEW's stakeholder universe. Furthermore, they all had a high level of expertise in their respective field. In telephone interviews, the stakeholders provided a qualitative assessment of the topics. In addition, quantitative results were collected via a digital evaluation form.

Subsequently, an impact assessment from EEW's perspective was carried out as a second step. At in-house workshops, employees from relevant departments assessed from their personal viewpoint how much of an economic, environmental and social impact EEW's actions have in relation to the given topics.

In a third step, the results of the stakeholder survey and the impact assessment were combined in a materiality matrix.

Materiality matrix

Economy

- 1 Economic performance/ indirect economic effects
- 2 Procurement/supply chain
- **3** Fair operating practices/compliance
- **4** Political influence

Environment

- 1 Use of resources (input)
- 2 Resource reclamation and recycling (output)
- 3 Energy efficiency in business activities (input)
- 4 Energy generation and supply (output)
- 5 Emissions (output)

Employees

- 1 Employment
- 2 Occupational health and safety
- **3** Vocational and further training
- 4 Diversity and equal opportunity

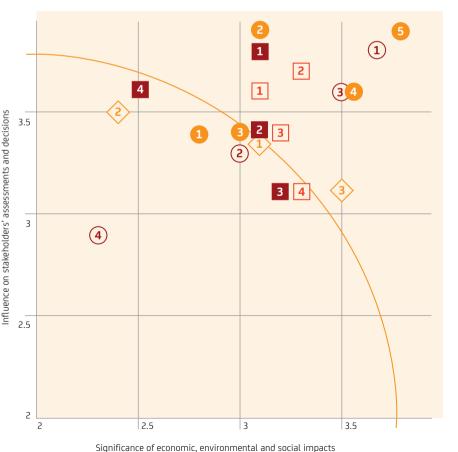
Society

- 1 Customers
- 2 Local communities
- 3 Partnerships
- 4 Innovations

Global challenges

- 1 Dealing with climate change
- 2 Dealing with scarce resources
- 3 Dealing with the digital transformation

This image represents a section of the overall materiality matrix and shows 20 of the 22 topics evaluated. The corresponding topics are listed in the column on the left.



Based on the results of the materiality analysis, the key themes were grouped according to three specific areas of action related to EEW's expertise: "strengthening relationships", "taking on challenges" and "delivering results". From these, we then derived thematic focus areas, such as "developing partnerships", "efficiently managing resources" and "advancing environmental protection through innovative solutions". The following table provides an overview of the overall grouping of the themes:

Strengthening relationships

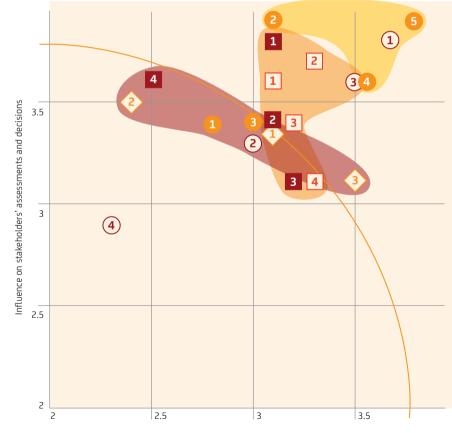
- Fair operating practices/compliance
- Occupational health and safety
- Employment
- Vocational and further training
- Diversity and equal opportunity
- Procurement/supply chain
- Customers
- Local communities
- Partnerships

Taking on challenges

- Use of resources (input)
- Energy efficiency in our business activities (input)
- Innovations
- Dealing with climate change
- Dealing with scarce resources
- Dealing with the digital transformation

Delivering results

- Economic performance/ indirect economic effects
- Resource reclamation and recycling (output)
- Energy generation and supply (output)
- Emissions (output)



Significance of economic, environmental and social impacts

Our sustainability goals: applicable company-wide, measurable, with specific deadlines

Based on the three areas of action, we developed a road map with defined goals. For each thematic focus area in a particular area of action, we set operationalised goals and linked these with KPIs so that we can measure our progress. We set out deadlines for achieving these goals and which measures will be used to reach them. To ensure efficient management, we also established responsibilities within the company. We strive to continuously improve our performance in the areas of action on the basis of these goals. In future, we will report on our progress regularly and transparently.

Our mission statement: the common thread guiding our sustainable conduct

In our sustainability mission statement, we have established our understanding of responsibility and linked this with our corporate values. The mission statement therefore serves as a common thread running through all of our company's sustainability activities and as a guiding framework for our employees. We want to motivate employees to contribute to responsible business operations. One aspect of our understanding of corporate responsibility is that EEW makes an important contribution to decarbonisation as part of a sustainable waste management industry. With our expertise and innovative strength, we develop forward-looking solutions in order to contribute to a climate-friendly energy supply. With environmentally sound energy from waste, we

want to offer society and industry long-term supply security.

On this path, we align our actions with binding targets and values.

- We place a strong emphasis on fair and trusting collaboration, based on compliance with existing laws and voluntary agreements that apply to not only the company itself, but also our business partners and employees.
- EEW Energy from Waste sees itself as a good employer that offers its employees long-term job prospects, attractive continuing education opportunities and extensive occupational health and safety programmes.
- We continuously work on increasing energy efficiency in our own processes, further reducing emissions and using resources responsibly.
- EEW is an economically strong player, embedded in local communities. To foster fair and long-lasting partnerships, we strengthen regional infrastructure and promote cooperation with local suppliers.
- We engage in regular open dialogues with all relevant stakeholder groups in order to take into account external expectations, build trust and provide information about our activities.

Management systems: recognising and preventing risks

Through systematic management of our sustainability activities, we want to ensure that the risks associated with material topics are effectively reduced. EEW has introduced and been certified in important management systems at all its plants and administrative sites. These include: ISO 9001 (quality management), ISO 14001 (environmental management), ISO 50001 (energy management) and OHSAS 18001 (occupational safety). All management systems are based on the control cycle using the plan-do-check-act (PDCA) principle.



Effectively managing sustainability in the company

GRI 102-18

In 2018 we successfully completed our process of strategically implementing sustainability at EEW. Now we aim to make sustainability an integral part of the company by embedding it in our daily operations and thus in our existing organisational structure.

We are currently working intensively on creating an efficient governance structure for company-wide sustainability management. Sustainability management will be responsible for regularly evaluating the material topics, pursuing the goals and measuring our progress towards reaching the goals. Furthermore, sustainability management will be in charge of the envisaged future implementation and realisation of continuous stakeholder management as well as the establishment of regular reporting processes.

Overall responsibility

Company-wide responsibility for sustainability lies with the Board of Management of EEW Energy from Waste GmbH. As the senior decision-making body, it determines the strategy, evaluates and adopts key strategic decisions and is responsible for the budget.

Organisation and management

A steering committee is being established to coordinate the sustainability activities across all departments. This central body is made up of a representative each from the Chairmanship, the Finance department, and the Technology department, and representatives from

the plant sites. The steering committee further develops the sustainability strategy, prepares decisions to be made by the Board of Management and ensures these decisions are consistently implemented within the company. Furthermore, it monitors whether the sustainability goals are being met and oversees the budgets. In an advisory role, the committee is in close contact with the Board of Management.

Implementation

To ensure the practical implementation of sustainability activities, sustainability officers are appointed within the departments and at the plant sites. They serve as points of contact for all projects and strategic decisions relating to their area of responsibility. Furthermore, they regularly collect data which they report to the steering committee in order to measure progress towards the goals.

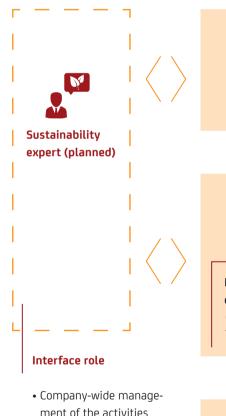
Envisaged expansion

In addition to the already defined areas of responsibility, we plan to create the position of a sustainability expert, who will be responsible for managing sustainability activities throughout the company. Furthermore, this person will serve as an intermediary between the steering committee and the Board of Management. We plan to fill this position in the second half

We also intend to introduce process instructions for our internal sustainability management,

building on the established certified management systems in the areas of quality, environment, energy, and occupational safety. Such process instructions set out all of the strategic and organisational decisions taken thus far and make them accessible to all employees.

Sustainability organisation at **EEW Energy from Waste GmbH**



- ment of the activities
- Acts as intermediary between steering committee and Board of Management





Steering committee

Representatives from company departments Chairmanship Finance Technology

Representatives from sites

Overall responsibility

- · Determines sustainability strategy
- Adopts key strategic decisions
- Approves budgets

Organisation and management

- Further develops sustainability strategy
- Prepares decisions and ensures implementation
- Monitors progress towards goals
- Checks budgets
- Advises Board of Management



Sustainability officers in the departments and at plant sites

Implementation

- Ensure activities are carried out
- Responsible for projects and strategic decisions
- Measure progress towards goals
- Regularly collect data

Strengthening relationships



What guides us

GRI 103-1, 103-2, 103-3

As a company, we want to take the lead by **strengthening relationships.**

The foundation for successful business operations is acceptance from society, long-lasting customer relationships and qualified employees at our sites. We place a strong emphasis on fair and trusting collaboration based on compliance with existing laws as well as voluntary agreements. We expect this not only of ourselves, but also of our business partners and workforce.

Well-qualified, motivated and skilled employees are a key resource for us and we want to retain them at our company over the long term. Our aim is to be seen as an attractive employer that offers employees long-term job prospects, and will do so in the future, as well as a wide variety of vocational and further training. Furthermore, as a producing company, the topic of occupational health and safety is a top priority. We strive for excellent performance in this area, going beyond the legal minimum standards.

We are on the path to fulfilling this aspiration and strengthening relationships with customers, employees and suppliers for the long term. To do so, we have set ourselves specific goals against which we will measure our future performance.

Acting with integrity as the foundation of our business		
Carrying out role-oriented compliance training	Ongoing	Ensure compliant behaviour
Qualifying and empowering employees		
Encouraging participation in the "Leadership Passport" programme	Ongoing	Promote young talent throughout the company and prepare them for future leadership positions
Developing partnerships		
Development of a company-wide policy on stakeholder management	2020	Systematise stakeholder management

Acting with integrity as the foundation of our business

GRI 102-16, 103-1, 103-2, 103-3, 419-1

Acting with integrity, building trust

It is crucial for the long-term success of our company that we have the trust of customers, business partners and the public. The group's top priority is therefore to maintain and strengthen EEW's trustworthiness. The materiality analysis conducted last year showed that this topic is particularly relevant when it comes to preserving integrity and protecting EEW from risks.

Fair operating practices/compliance

We avert risks through measures combating corruption and anticompetitive behaviour as well as through compliant handling of data. We have an external data protection officer who ensures the applicable data protection regulations are adhered to. Moreover, as a matter of course, we aim to respect human rights in our business operations. We have an internal system of corporate values and compliance rules in place to ensure this. Last but not least we believe acting responsibly and with integrity also means transparently disclosing the influences that our business operations have on the environment and society.

EEW implements compliance throughout the company. All employees are encouraged to act in a responsible and compliant manner with regard to laws, company guidelines and values. This corporate principle is enshrined in our

sustainability mission statement and is mandatory throughout the company. Through legally compliant and responsible behaviour at all levels of the company, we aim to obviate negative impacts on our own business activities. Such impacts include, for example, exclusion from participation in public procurement procedures and the associated loss of revenues, increased expenditures for sales activities, antitrust fines, and even further criminal prosecution. Furthermore, we avoid immediate or direct consequences, such as losing public acceptance or the trust of our stakeholders and especially our business partners. We also protect ourselves from loss of reputation, which would negatively impact the recruitment of skilled employees for our company.

Averting risks: our compliance management system

Our goal is to avert risks through education and prevention and thus avoid damage to the company and its employees. To this end, we provide employees with education about legally compliant behaviour and competition law. Furthermore, we have established mechanisms to identify potentially undesirable developments in good time. In particular, the focus is on sales and procurement activities as well as the service areas energy management, IT and finance since these are exposed to the greatest potential risks. Should any relevant incidents occur, these are promptly dealt with and resolved.

EEW is not aware of any compliance infringements in the reporting period. There were no significant fines or non-monetary penalties imposed on EEW in 2018 for non-compliance with existing laws and regulations.

An important basic instrument for meeting all the statutory requirements is our internal compliance management system (CMS). It is applied at all administration and plant sites and contains responsibilities as well as steering mechanisms. The Board of Management has overall organisational responsibility for ensuring EEW conducts its business activities in compliance with the law. At the division level. the respective department heads are responsible. They report to the responsible Managing Director about compliance with company and legal regulations. The Board of Management is therefore directly informed about every known infringement of legal regulations and about known incidents of corrupt or anticompetitive behaviour. The Chief Compliance Officer coordinates all of the compliance-relevant processes and tasks in close coordination with the Legal department.

EEW's own Compliance Directive stipulates that compliance with all statutory requirements is mandatory. As the overarching norm of behaviour, it represents the main guidance for the conduct and decision-making of all employees at the company. The Directive is complemented by internal norms of behaviour for

the following specific topics: occupational health and safety; environment, energy and quality policy; internal audits and the integrated HSEQ (health, safety, environment and quality) management system.

For EEW, respecting human rights is one of the foundations of lawful and responsible

Ensuring compliance: implemented measures and mechanisms

EEW has established measures and instruments to support employees in complying with statutory regulations and in dealing with legal risks. Upon joining the company, all employees are made aware of lawful conduct via their employment contracts.

departments but can have effects on the entire company. This annual awareness-raising ensures that employees remain conscious of these risks.

Infringements of statutory regulations or internal rules can be anonymously reported via the internal whistle-blower hotline. In addition, all communication channels within the company are available, such as the intranet or personal conversations with the compliance officers, the equal opportunities officer or the disabilities officer. If a suspected rule violation is reported, the matter is investigated by the head of the unit responsible along with the Legal department. The aim is to investigate the issue as thoroughly as possible. If necessary, we also call in third parties for an external investigation of the issue and/or assessment.

The laws applicable to our business operations are constantly evolving. We therefore always keep track of current legislative procedures and continuously evaluate them for EEW. At the moment, the projects relevant to≈us include Germany's upcoming umbrella ordinance introducing a substitute building materials ordinance, the 17th ordinance implementing the Federal Immission Control Act (17. BlmSchV) and the ordinance on facilities for handling substances that are hazardous to water (AwSV). EEW also consistently monitors other changes to various legislation in, for



"When working together, great importance is attached to dependability and legal conformity."

Dr Heinz-Ulrich Bertram, Lower Saxony Ministry for the Environment, Energy,

Construction and Climate Protection (Former Deputy Head of Department 36

[Circular Economy and Waste Management, Contaminated Sites, Resource Management])

conduct. At present, the scope of our activities and our current suppliers and customers are located only within Central Europe. We currently do not plan explicit regulations to safeguard human rights in supply and service relationships because all suppliers are subject to European laws and therefore also to the corresponding standards in the various European jurisdictions. If, however, EEW learns of infringements of human rights by suppliers or customers, we will terminate the contractual relationship or refrain from concluding any new contracts with that supplier or customer.

As part of our online learning offerings, we also educate employees with respect to certain aspects of legally compliant conduct. In 2018, for example, more than 90 per cent of all employees attended training on the topics working hours, occupational safety, maternity protection, youth protection, data protection and the German General Act on Equal Treatment (AGG).

Departments that we have identified as particularly "at risk", such as Sales and Procurement, receive specific training on an annual basis. The training focuses on how to deal with potential risks which apply especially to these

example, public procurement law or energy sector regulation, including the relevant juris-prudence. EEW is in continuous dialogue with public authorities, political decision makers, and associations at the national and European level with regard to legislative and approval processes as well as threshold compliance. In future, we want to develop this dialogue further.



Qualifying and empowering employees

GRI 103-1, 103-2, 103-3

Enhancing employer attractiveness, offering long-term employment prospects

Qualified and committed employees are the foundation of our company's long-term success. We provide an appealing work environment and fair working conditions in order to achieve a high level of employee satisfaction. Our goal is to be an attractive employer in the regions where our plants are located, today and in the future.

In our materiality analysis, we identified four central topics and corresponding goals, which are particularly relevant for EEW as an employer:

Employment

EEW recruits and retains skilled employees by offering attractive employment conditions. We ensure a high level of employee satisfaction and thereby keep our staff turnover rate low.

Vocational and further training

With systematic vocational training and employee development, EEW safeguards the quality of its services. We encourage talented employees and utilise modern working methods.

Occupational health and safety 🗸

EEW protects employees from hazards in the workplace and promotes health. We do so by raising employees' awareness of occuptional safety and health-conscious behaviour.

Diversity and equal opportunity

EEW has established an open corporate culture characterised by appreciation and respect and that complies with social as well as legal requirements, such as Germany's General Act on Equal Treatment (AGG).

Furthermore, we conducted a stakeholder survey to determine which current challenges are associated with our goals. We address these challenges by exploring them intensively and further strengthening our measures. In doing so, we focus on being a competitive employer that implements digitalisation projects and makes its employees fit for the requirements of the digital work environment. Another focus area is promoting health maintenance among our workforce and preventing accidents. In light of demographic trends, we also systematically set up succession planning. Last but not least, we treat each other with respect and have firmly anchored this in our corporate culture.

Not only do our measures increase employee satisfaction and employer attractiveness, they also protect EEW against economic, environmental and social risks. By, for example, preventing accidents thanks to strong occupational safety, we protect the health and physical integrity of our employees and those from our partner firms and prevent inefficient downtime at our plants and damage to our company's image. We regularly provide information to increase the safety awareness

of our employees so that they can recognise and eliminate hazards. When working together with employees from other companies, we make sure that they comply with our desired high safety standards. At our sites in Germany, the Netherlands and Luxembourg, there are country-specific standards for employee rights, which we comply with as a matter of course.

Firmly embedded in the strategy: management, responsibilities, communication

To steer our management approach, we use various instruments within the company. These instruments – in combination with responsibilities and specific measures for employees and managers – also serve to implement our zero-accident strategy. As such, EEW is certified according to OHSAS 18001, a management system for occupational health and safety which primarily serves to reduce accidents and minimise lost time. Furthermore, we have implemented EEW-internal directives that guide us in our day-to-day work and are binding for all employees. These include the guidelines on leadership and cooperation as well as the principles for responsible procurement. Moreover, the principles of health management, which were jointly developed with trade unions and the Central Works Council, apply at EEW. These in turn form the basis for locally adopted agreements regarding, for example, flexible working hours.

What is more, at EEW, further directives and process instructions apply to policy on occupa-

tional health and safety; environment and quality policy; the development, introduction and continuous improvement of the integrated HSEQ (health, safety, environment and quality) management system; and for risk assessments, work preparation and implementation, corporate environmental protection, accident management and internal audits. We have also created emergency management handbooks for all plant sites. These contain structured rules and instructions for emergencies and breakdowns in order to protect people, the environment and company assets. If an accident nevertheless occurs at one of the plant sites, this is reported to the specialist department RESHQ (Residual Materials, Environment, Safety, Health & Quality) and the internal controlling unit Occupational Safety Measures and is included in the monthly reporting. Each accident is extensively evaluated and analysed in order to learn from the experience and prevent similar accidents in the future.

In addition to the management instruments, we have identified clear responsibilities. As a central function, the Human Resources Management department reports to the Chairman of the Board of Management. It is made up of the teams Human Resources Business Partner, Personnel Development and Training as well as Personnel Controlling/Interface Management. The overarching management of all topics relating to occupational safety and environmental protection is the responsibility of the RESHQ department. This department reports to the Managing Director responsible

for technology. It advises managers on the implementation of legal and trade association regulations, monitors compliance with these rules and carries out the associated documentation.

Besides the central departments Human Resources Management and RESHQ, the plant sites also have employees who are directly responsible for the implementation of the corporate goals at the operational level. These include trained safety specialists, technical administrators, the environmental protection officer and other officers in the areas of waste, immission control, water protection and hazardous materials.

The employees at our plant sites must actively integrate occupational health and safety into their daily work. Not only is it therefore important to provide them with information, but also to incorporate their experiences and feedback. At EEW, this takes place at all sites via employer-employee committees. They provide support especially in the monitoring of occupational health as well as safety programmes and offer consultation in these areas. The two most important bodies are the occupational safety committee at the company level and the committee for health, safety, environment and quality at the division level. Each committee represents 100 per cent of employees at that level. Moreover, employee interests are also represented at the occupational safety committee meetings that take place each quarter at all our sites. These quarterly meetings are

attended by company representatives as well as safety experts, company doctors and occupational health physicians.

Pursuing goals: measures at the sites

In all four areas that are particularly relevant for EEW as an employer, we implement measures that contribute towards our overarching goals. Our management approach is evaluated via regular internal and external HR audits and the reporting of the RESHQ department.

Employment

We create an attractive working environment for our employees to ensure a long-lasting commitment to our company. We offer a wide variety of company benefits and allow flexible working-time models under plant agreements. At many sites, we also offer a cafeteria, subsidise public-transport tickets and contribute towards day-care costs.

Another priority for us is encouraging dialogue and creating space for new ideas and inspiration. We foster communication within the company at various levels. The head of the Human Resources department regularly engages in discussions with employee representatives. Furthermore, there is a working group for vocational training and meetings of plant managers and the central Technology department as well as meetings of production managers and maintenance managers. In the second quarter of 2019 we conducted an employee survey at our headquarters in Helmstedt to assess the mood and potential



"Our highly qualified and motivated employees are the basis of our company's success and an important asset for the future of EEW."

Birgit Fröhlig, Chairwoman of the Works Council of EEW Energy from Waste GmbH, Helmstedt

improvements. EEW's internal idea management programme also encourages employees to contribute suggestions and ideas to, for example, improve the working environment, implement raw-material and energy savings, optimise plants, increase occupational safety, or achieve greater customer satisfaction. In this way, everyone contributes to a continuous process of improvement in the company. Idea management at EEW is regulated by a new central works agreement on idea management, which entered into force in April 2019.

Vocational and further training

We want our employees to be able to pursue continuous personal development and expand their skills. We give them regular feedback on their performance in employee appraisals and we jointly consider in which areas further training measures would make sense. Our EEW qualification programme includes both subject-specific offerings on, for example, thermal waste recovery, as well as seminars for personal development, such as self-manage-

ment or communication. We encourage talented young employees with our "Leadership Passport" programme, in which we prepare them for future leadership positions. At our EEW centre for vocational and further training in Helmstedt, we also offer vocational and further training for participants from across the company. Our facility is therefore an important anchor in the regional education landscape and strengthens EEW's position as an attractive employer.

Occupational health and safety 🗸



At our plant sites, we make a great effort to raise employees' awareness of occupational health and safety. For example, safety inspections are mandatory and first responders are trained in first-aid courses. Flyers, posters and our instructional film on occupational safety educate employees about potential hazards and show preventive measures. Employees from partner firms are also instructed to learn this information. There is at least one safety specialist at each site. If required, the safety

experts receive training and continuing education from EEW. Depending on the risk assessment for the particular workplace, EEW provides employees with personal protective equipment along with information material about how to use it. At all workplaces, we carry out risk assessments with regard to mental stress, in accordance with EEW's central works agreement. These are evaluated by the steering committee at each site. Naturally, we also carry out risk assessments when new jobs are created. Every tip about a possible breach of occupational safety measures is important to prevent accidents. Employees can submit such tips at any time by contacting managers, Human Resources Management or the Works Council.

Since 2013 we have presented our Safety Award as an additional incentive to prevent any form of workplace accident. It is given to the plant site with the best occupational safety record, based on specific criteria, including the number of workplace accidents and the performance of risk assessments. In 2018 employees at the EEW plant in Pirmasens were given this award.

When selecting external and partner firms, we also take into account adherence to occupational safety standards and require these firms to disclose this information. Once the work has been carried out, we evaluate it using a school grading system. If we are considering awarding a subsequent contract, we can thus see immediately whether our standards are in fact quaranteed.

Diversity and equal opportunity

It is important to us that our working environment is characterised by integration, mutual appreciation and equal opportunities and that no form of discrimination or harassment is tolerated. In accordance with Germany's General Act on Equal Treatment, we have appointed an equal opportunities officer. If employees feel they are being discriminated against, they can contact the equal opportunities officer at any time to express their concerns.



Developing partnerships

GRI 102-12, 102-40, 102-42, 102-43, 102-44, 103-1, 103-2, 103-3

Engaging stakeholders, safeguarding the company's long-term success

Our plant operations and the associated generation of heat, power and steam have effects on the environment and touch on the interests of our various stakeholders. As a responsible actor in the waste management sector, it is therefore very important to us to maintain an ongoing dialogue with customers, suppliers, local authorities, unions and political institutions. By interacting with our stakeholders, we want to recognise expectations, understand needs, identify challenges and gather ideas. At the same time, we convey our company's interests and increase the trust in our business activities.

As part of our materiality analysis, we derived four material topics and the associated goals with respect to stakeholder engagement:

Procurement/supply chain

We have implemented sustainable procurement practices at EEW. The selection and evaluation of our suppliers are also based on social and environmental criteria and take into account the supplier's labour and production conditions.

Customers

Solid and trusting customer relationships are an important foundation for our economic success. We openly communicate with our customers, maintain personal contacts, transparently share information and take

a solution-oriented approach to handling potential conflicts.

Local communities

At its sites, EEW is a strong partner of the regional economy. As part of the local communities, we take on responsibility for the economic, social and environmental development in the area – by awarding contracts to local suppliers, providing jobs and through regional environmental protection.

Partnerships

EEW establishes cooperative partnerships with research institutes, is active in various industry associations and engages in the dialogue on the circular economy.

Stakeholders perceive EEW as a reliable and fair partner, as the recent stakeholder survey found. In the view of stakeholders, EEW is an important player for the local economy and, especially in less economically developed regions, contributes to regional structural change. It was also seen positively that EEW maintains long-standing partnerships and provides financial support to social projects in the vicinity of its plant sites. Furthermore, stakeholders accredit us with having a high level of professional expertise and view the company as an important player in various industry associations which addresses the current topics in the waste management sector. With regard to external communication, EEW's personal approach to stakeholders was positively highlighted. By contrast, there is room for improvement in terms of communication with the broader public. Therefore, there is a wish for EEW to in future more strongly outwardly communicate the advantages of thermal waste recovery for the environment and society.

Strengthening relationships: expanding stakeholder management

With their perspectives, actions and decisions, our stakeholders contribute significantly to our success as a company. We therefore maintain constructive relationships with them and integrate them into the development of our business via regular interactions. For example, in 2018 as part of our materiality analysis, we carried out a stakeholder survey and began establishing systematic stakeholder management, which we want to further develop throughout the company. Stakeholder engagement is currently the responsibility of the Sales and Communications departments. For critical decisions, for example, relating to the cooperation with certain suppliers, the Board of Management is involved.

Suppliers

We work together with our suppliers on the basis of clear norms and guidelines set out in the respective contracts. For the procurement of external services, our general procurement conditions apply for, for instance, construction services, planning or expert opinions. An integral element of tenders and all con-



"EEW maintains steady and stable relationships with its partners for years and fosters existing contacts."

Dr Heinz-Ulrich Bertram, Lower Saxony Ministry for the Environment, Energy,

Construction and Climate Protection (Former Deputy Head of Department 36

[Circular Economy and Waste Management, Contaminated Sites, Resource Management])

tracts is the principles of responsible procurement, which are summarised in a supplier code of conduct. All business partners and suppliers are obligated to comply with these criteria and the relevant laws of the countries where they operate. The principles relate to social standards, including the recognition of human rights and the assurance of appropriate working conditions for employees. They also contain environmental standards in order to minimise environmental impacts. The third main emphasis is on governance standards, meaning the application of strong ethical and moral business principles. If a supplier does not adhere to our principles, EEW expects the supplier to take corrective action. We reserve the right to terminate contracts if the suppliers cannot prove that they are complying with the supplier code of conduct. Currently, the rate of recognition by suppliers is 100 per cent.

Through numerous measures, we want to ensure that suppliers in our plants comply with occupational safety and health protection.

A precondition for approval as a supplier is a positive self-assessment on the topics of occupational health and safety and environmental protection. When a contract is awarded, only those contractors who have successfully completed an online test on safe working behaviour may receive access to our plants. With the help of an instructional film, we also familiarise suppliers with our occupational safety rules. During audits, we regularly investigate compliance with our standards at the sites.

We evaluate the effectiveness of our management instruments as part of external audits of the integrated management systems. These are based on the ISO standards for quality, environment, energy and occupational health and safety management as well as for the compliance management system. External parties can lodge complaints with EEW's plant managers, procurement managers and technical managers on-site. Employees can express their concerns to EEW via a whistle-blower report relating to, for example, questions about accounting, internal invoice control,

auditing or if they suspect infringements of the code of conduct. Employees have the ability to anonymously report suspicious cases via a form on the intranet. They can also in writing or by phone contact EEW's Chief Compliance Officer, who investigates all suspicious cases. In this process, the provisions of the data protection law are complied with at all times.

Entering into dialogue: interactions with our stakeholders

Procurement/supply chain

We work together with our suppliers on the basis of clear norms and guidelines. Once a delivery has been made or a service provided, we can evaluate whether it was carried out smoothly via an internal portal set up for this purpose. In this portal, our employees can evaluate the suppliers on the basis of quality, occupational safety and environmental protection. The Technology and Procurement departments use this information to award contracts for subsequent projects to suitable responsible suppliers. In future, we aim to increase the quota of completed supplier evaluations for maintenance contracts and the related work in our plants.

Customers

The capacity utilisation of our energy-fromwaste plants is largely dependent on waste deliveries from our customers, who are mainly municipal entities and commercial waste management firms. It is important to us that our customers are satisfied and want to con-

tinue working with EEW. To ensure this, we quantitatively and qualitatively measure customer satisfaction using customer satisfaction surveys. The last survey took place in the fourth guarter of 2017. In future, we want to survey our customers every two years and derive potential improvements from the results. In our survey, customers evaluated the following aspects: reachability, quality of response to inquiries, handling of waste deliver ies, importance of EEW plants for their volumes, pricing, service/customer-friendliness, flexibility and fairness. The results paint a positive picture overall, with need for optimisation here and there. The technical and market knowledge of our sales staff, the high quality of advice and the customer-friendliness were rated as very good. The reliability of acceptance of commercial waste volumes was evaluated as "good". This shows us that we must continue to optimise this process as well as waiting times at all sites, in addition to actively pursuing the further digitalisation of our processes. Moreover, our sales team gets valuable feedback during customer meetings. On this basis, we had the idea in 2018 to launch partner dialogue events. In 2019 we will be inviting our customers for the first time to four events in Kassel, Stuttgart, Hanover and Berlin, where we will discuss selected topics.

Local communities

We are an actor in the economy and society in the host communities of our plants and we contribute to the development of the regions.

We engage in dialogue with the local commu-

nities and strengthen trust in our business operations. At all plant sites, we regularly invite local residents to an open day and to a summer party. During information events and public hearings, we talk with citizens and explain our planned projects, such as in Stapelfeld. In this way, we involve the local community in the development of the site and increase social acceptance in the area. In Stapelfeld, EEW is planning a new facility to replace the existing energy-from-waste plant as well as a new sewage sludge monoincineration plant. These new construction projects aim to secure waste recovery capacity in the region, while also offering solutions to implement the new legal framework for sustainable sewage sludge recovery. The company therefore involved Stapelfeld residents at an early stage. At information and discussion events, EEW provided extensive information about the plans and answered questions about, for example, air pollution control. Furthermore, the company has a website (in German only) to provide up-to-date information (www.energie-zukunft-stapelfeld.de). At the Premnitz site, we also invited nearby residents and interested members of the public to two events in 2018 about the planned replacement investment, where we took in their concerns.

Partnerships

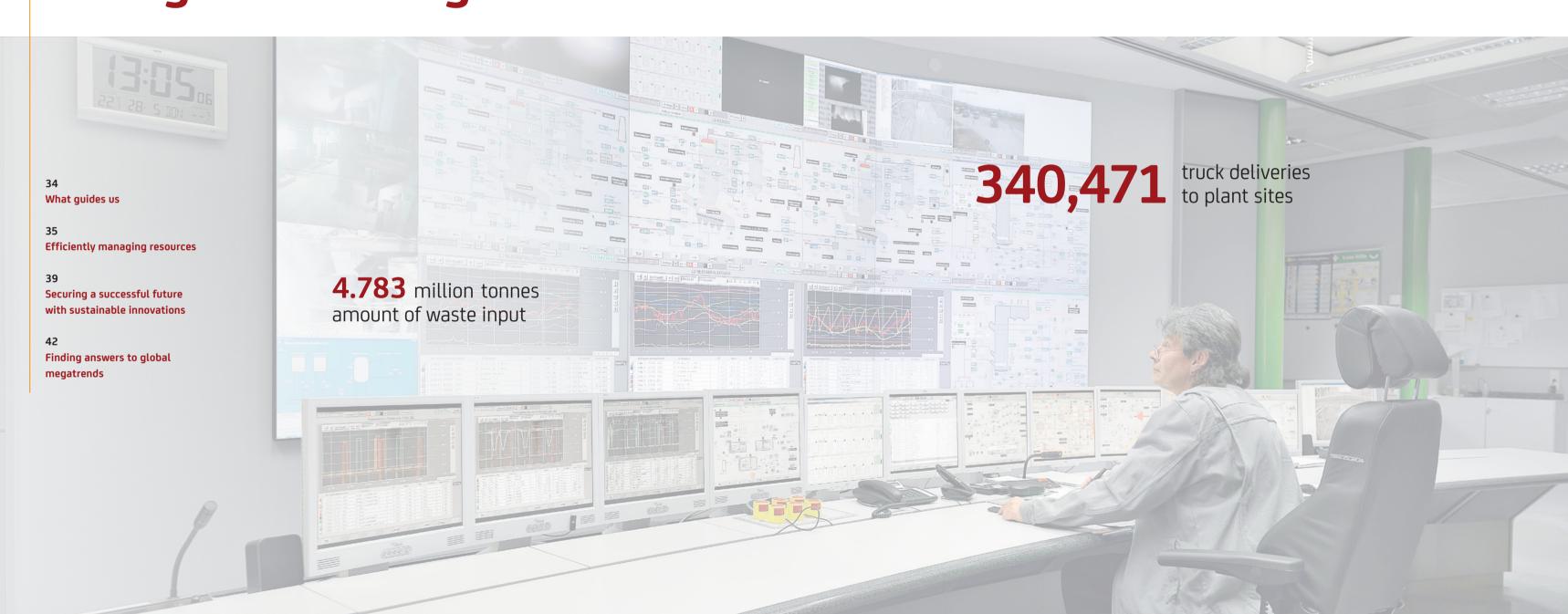
On a company-wide level, we interact with policymakers, in industry and specialist associations and through cooperative partnerships with research facilities, such as the Technical University of Braunschweig. We invite

politicians and other stakeholders to parliamentary evenings in Berlin and, furthermore, take part in various political events at the state, national and EU level. EEW in dialogue with its stakeholders **Employees** Employees and managers at EEW as well as potential employees on the labour market 皿 **Policy** Society Political players at the NGOs. local residents local authority, state, and citizens' initiatives national and EU levels in the region eew 200 **Economy** Customers Existing and potential Banks, business partners, market participants, business customers, new industry associations, prospects in all markets universities and science relevant to EEW

The inaugural "Dialogforum.Zukunft." event exploring the role of the circular economy took place in autumn 2018. With this event format, we want to establish a platform in Berlin

where representatives from politics, science and business can regularly meet for informal discussions of current topics relating to the circular economy. In this way, we want to contribute to a better understanding of efficient and sustainable intermeshing of the environment, economy and society.

Taking on challenges



What guides us

GRI 103-1, 103-2, 103-3

As a company, we want to take the lead by **taking on challenges**.

Our business operations are and will be subject to constantly changing underlying conditions, such as ongoing climate change, the energy transition, the limited availability of resources and the digital transformation. We are addressing the associated challenges and pushing sustainable innovations that create added value

for our company and for society. In doing so, we pay particular attention to the input side of our business operations: we strive to continuously improve energy efficiency and to responsibly use natural resources in our own processes. Moreover, we are reliant on dependable supplies from local suppliers and we therefore foster fair and long-term partnerships in the region.

We are on the path to fulfilling this aspiration and taking on challenges related to efficient resource management and global megatrends. To do so, we have set ourselves specific goals against which we will measure our future performance.

Efficiently managing resources		
Increasing time availability in defined steps to increase overall equipment effectiveness (OEE)	2027	Optimise OEE at EEW's plants
Securing a successful future with sustainable innovations		
Participation in the development of an innovative process to reclaim phosphorus from sewage sludge ash	2021	Phosphorus recovery from sewage sludge ash
Finding answers to global megatrends		
Converting business processes to low-paper ordering and invoicing	2022	General low-paper execution of company-wide business processes

Efficiently managing resources

GRI 103-1, 103-2, 103-3

Lowering resource consumption, increasing energy efficiency

By transforming waste into energy, EEW Energy from Waste makes an important contribution to climate and resource protection. Thermal recovery reduces waste volumes by 90 per cent while simultaneously producing electricity, steam and heat. To do this, our plants naturally also require energy as well as operating and auxiliary materials. As part of our recent materiality analysis, we therefore identified two material topics and the associated goals.

Optimising processes: efficient and trouble-free plant operations

Trouble-free efficient plant operations are the foundation for environmentally sound and economical waste recovery. This is true along the entire value-adding process – from the delivery of the waste to the conversion into energy. This is also what our stakeholders expect of EEW. On the basis of binding KPIs, we can objectively assess plant performance, compare our plants and identify and implement potential optimisations.

One of the main indicators for process quality is overall equipment effectiveness (OEE).

we also regularly ascertain the consumption of operating materials, with the aim of further reducing this figure and making our resource consumption even more efficient.

The amount of energy EEW consumes annually during its own business activities depends on the various parameters of daily plant operations. Some of these fluctuate, especially due to external non-plannable factors, such as the characteristics of the waste or changing weather conditions. To measure our energy consumption, we use guide KPIs for energy. In 2018 we were able to minimise the consumption of heating oil — one of our guide KPIs —

Use of resources

The waste recovered by EEW contains on average 50 per cent biogenic material. By using this material, we conserve natural resources and produce energy from renewable sources (in accordance with Germany's Renewable Energy Sources Act [EEG]). Furthermore, we adhere to responsible resource management in all of our procurement processes and thereby reduce the use of operating and auxiliary materials.

Energy efficiency in our business activities

We increase energy efficiency in our own processes by reducing energy consumption in our plants and buildings and by increasing the use of alternative sources of energy.



"Reducing the carbon footprint and avoiding emissions and fossil fuels should be at the heart of the sustainability strategy."

Matthias Harms, CEO of Veolia Deutschland

It provides information about the generation availability and time availability of a plant as well as its quality. In 2018 our OEE exceeded the planning value. By 2027 we want to increase the time availability in defined steps and thus raise the OEE. The volume of operating and auxiliary materials used during combustion also provides information about how optimally the plant is running. Therefore, when we measure our environmental performance,

both in absolute terms in litres and specifically in litres per tonne of waste. We were able to achieve this because we had fewer unscheduled plant shutdowns. As a result, the heating oil burner, which is mainly needed for the start-up process, was not used as often. The second guide KPI for energy is our own specific demand for electrical work in kWh per throughput. This was higher than planned in 2018. For one thing, this was because of the prolonged high

temperatures in summer, which resulted in the air condensers requiring more electrical energy than in previous years. A second reason was that longer downtimes made it necessary to maintain temperatures without waste input.

Managing resource and energy consumption: structures and responsibilities

EEW wants to prevent its business activities from having negative effects on people and the environment. We therefore aim to keep our own consumption of resources as low as possible and to continuously increase the energy efficiency of our operations. Clear internal structures and management instruments support us in doing this. The basis for this is our environmental management system ISO 14001 and the energy management system ISO 50001, supplemented by various EEW-internal norms and directives (see also chapter "Advancing environmental protection through innovative solutions").

We carry out energy assessments at all our plant sites every year and analyse the use of operating materials. When doing so, we measure our progress based on defined target KPIs. These contribute to the ongoing reduction in consumption of operating materials and to more energy-efficient operations of the plants. We regularly review the fulfilment of these KPIs. The combustion parameters are measured and monitored automatically. In monthly technical reports, the Technology department also presents key figures to the

Board of Management. These provide information about the overall equipment effectiveness as well as the capacity utilisation and efficiency of our plants. They also show malfunctions and their effects and document the consumption of operating and auxiliary materials.

The EEW Performance Award has been given annually since 2015. Presented during the corporate executive retreat, it honours the year's best plants for their innovative achievements. The award takes into account the maintenance and investment costs per tonne of waste throughput, the overall equipment effectiveness (OEE) and the downtime frequency per line at the plants. For each of these three criteria, the plants are ranked between 1 and 17. A plant's overall rank is calculated as the mean of these three ranking positions. In 2018 the award was presented to the site in Hanover.

Moreover, we believe that clearly defined responsibilities are a key prerequisite for achieving progress. Accordingly, the departments at company headquarters as well as the directors at each site and their employees are responsible for implementing energy efficiency in their own processes and using natural resources in plant operations. At each plant site, we have also appointed an environmental officer, a legally mandated immission protection officer and officers for waste, water protection and hazardous materials. They are in close contact with the employees on-site and

the RESHQ department at company headquarters. Moreover, communication between the plant sites is important to share experiences relating to plant performance and optimisation potential as well as to pass on knowhow and findings regarding plant operations. In addition to internal reviews, we also regularly subject our management systems to external audits to ensure that we are consistently complying with norm specifications and maintaining our high quality standards.

Identifying where action is needed: measures and progress

Evaluating our processes is a key step in further optimising them. We therefore analyse the results of internal and external audits as well as technical reports and we consider the findings of the analysis and energetic assessments at the plant sites.

Use of resources

As part of our resource management, the deliveries of waste are subject to monitoring. Based on random sampling, we check whether it is waste according to agreement. We ensure that the European Waste Catalogue (EWC) code numbers cited in the customers' declaration analyses do in fact correspond to the delivered waste and comply with the permit specifications of the particular EEW plant. Since the waste recovery occurs in the nearby region, transport routes can be kept as short as possible.



The biogenic proportion of the fuel input is considered a renewable source of energy. It is determined based on the monthly statistics collected on the various waste types and using the calculation rules established by the German Environment Agency. Accredited environmental verifiers assess and certify the calculation of this proportion each year for all of EEW's plants in accordance with the German Renewable Energy Sources Act (see also chapter "Advancing environmental protection through innovative solutions").

We continuously work on making our plant operations as efficient as possible and carrying out preventive maintenance to avoid unplanned downtime. In this way, we save fossil fuels, which are used when there are malfunctions at a plant to ensure that our customers' energy supply is not disrupted. Furthermore, this also enables us to reduce our need for operating materials. In our administrative offices, we also pay attention to resource consumption and recycling. For instance, we developed a waste separation concept based on the German Commercial Waste Ordinance (GewAbfV) and have informed our employees about it.

Energy efficiency in business activities

Each plant site measures and documents the relevant environmental aspects annually in accordance with the process instructions on corporate environmental protection. This also includes the calculation of our energy use in order to answer the following questions: which factors influence energy consumption

and to what extent? Which areas offer savings potential and how much do they offer? And what would it cost to realise this? In this process, we are also helped by our internal "energy scouts". They search for energy savings potential in the company and implement energy-saving measures.

Based on all our findings, we develop measures in order to operate our plants and sites in an energy-efficient manner. For example, we identified lighting as a cause of power consumption at all sites and we have switched over to LED light sources everywhere. At the Helmstedt plant site, this saved us around 100,000 kWh of electrical energy in 2018. In addition, the IT infrastructure in Helmstedt requires a considerable amount of electricity, so here too we are planning measures to reduce energy consumption as well as a photovoltaic installation.

In 2018 we also optimised various plant components in order to reduce our own demand for energy. At the Rothensee energy-from-waste plant, we installed a heat accumulator, which enables us to decouple heat supply from heat demand and thus increase energy efficiency. Another area that offers potential for energy savings is compressed air production in the plants. That is why we overhauled this at the Stapelfeld site, where four energy-efficient compressors are now controlled according to consumption. In addition, we optimised the combustion processes so that there are fewer temperature fluctuations and therefore reduced the need for operating and auxiliary materials.

GRI 103-1, 103-2, 103-3

Developing sustainable innovations, advancing resource protection

EEW has transformed conventional waste incineration into a highly efficient process combining waste recovery with energy conversion. With innovative solutions, we contribute to environmentally sound waste management and generate energy that is not based exclusively on fossil fuels. With a view to the future, EEW acts for the long term and is already addressing the challenges of tomorrow with progress and vision in, for example, sewage sludge recovery. This is because, like our stakeholders, we believe innovations are a decisive driver to create added value for the company, society and the environment. Accordingly, innovations are among the central topics that we identified in our recent materiality analysis.

Innovations

EEW sees sustainable innovations as an important key for the energy transition as well as for resource and environmental protection. We therefore continuously work on optimising our plant operations and we invest in the development of new technologies.

Our stakeholders not only see innovations as a material topic, they also believe EEW has great potential when it comes to the development of new technologies and processes. They see future innovation potential in particular in carbon capture and utilisation (CCU). We will take into account the expectations of our shareholders in our future endeavours and continue to work on new innovation projects such as electricity storage facilities. In all projects, we act with foresight and consider the potential future developments relating to climate protection, such as the upcoming phase-out of coal and political efforts to make non-climate-neutral carbon emissions more expensive. We want to contribute to Germany achieving its goal of a 55 per cent reduction in greenhouse gas emissions by 2030 compared to 1990 levels. Sewage sludge incineration, for example, is an area where we are currently planning new plants. It is nearly climate-neutral because the fuel is purely of biogenic origin. Moreover, by constructing sewage sludge mono-incineration plants today, we are already putting ourselves in a position to implement the recovery obligation for phosphorus that applies from 2029.

Managing innovation development: responsibilities and coordination

How much potential do technical and nontechnical innovations offer? Moreover, how can these contribute to sustainable development? We get answers to these questions by identifying and implementing innovation potential. To this end, we have assigned responsibilities and established structures such as the continuous improvement process (CIP).

Innovation management at EEW is primarily the responsibility of the Business Development department. It has the task of recognis-

ing technical and organisational innovation potential, evaluating this potential and initiating projects. For each innovation project, the Board of Management allocates personnel and financial resources for the project development and implementation. Based on this. project teams are created that include representatives from all relevant departments. The appointed project lead is responsible for managing the project in close coordination with the Board of Management. At periodic project meetings, all of the participants discuss the status quo and the next steps. As part of an information process, the status of innovation development is regularly measured and assessed. Furthermore, depending on the project, the Business Development department regularly coordinates with the Board of Management.

Shaping the future: strategies, projects, research

As the market leader, we operate the most energy-from-waste plants in Germany. Equipped with state-of-the-art technology, our plants have the ability to make the best possible use of the energy potential of waste. To do this, we develop innovative plant solutions: from plant layouts that take into account efficient operations and the future development of the site and market to functional architecture and the use of leading technologies for, for instance, combustion and air pollution control. EEW is currently working on various patent applications, for example a process to detect impurities in the waste bunker using

specialised sensor technology and a process to monitor process quality. Further, we are working on a process for supplementary cocombustion of water that contains hazardous substances in waste fire by non-toxic combustion of harmful constituents.

In addition to the ongoing optimisation of our plant operations, we also focus on new technologies for the future. One important area is sewage sludge recovery. The 2017

tained in sewage sludge as well as any possible pathogens. Simultaneously, the inorganic pollutants, such as heavy metals, sulphur dioxide and hydrochloric acid present in the flue gas can be removed by the air pollution control equipment. The use of sludge monoincineration enables a phosphorus recovery rate of over 80 per cent in subsequent processes. This should ensure that the statutory requirements are reliably fulfilled (see also chapter "Advancing environmental protec-

As a company whose business model is based on thermal waste treatment, we are intensively investigating the pioneering topic of carbon capture and utilisation. After all, CO₂ can be more than a waste product that harms the climate: based on innovative technologies, it can become a valuable raw material. Accordingly, we launched an initiative in 2018 that aims to develop projects that make the CO₂ contained in the flue gas from waste combustion available as a raw material that can be used by industry. Our current agenda includes feasibility studies for appropriate sites, pre-planning for the establishment of a largescale pilot plant, the analysis of funding opportunities and, finally, the conclusion of preliminary contracts with selected partners. In parallel, we engage in ongoing dialogue with researchers, industry and policymakers about the potential of CO₂ as a raw material as well as about the current state of development of CCU technologies.

'People must be made clearly aware how closely sustainability is linked to EEW's core business."

> Jörg Liebermann, District Manager of the Mining, Chemical and Energy Industries Union (IG BCE) in the district Wolfenbüttel / Vice-Chairman of the Supervisory Board of EEW Energy from Waste GmbH

revision of the German Sewage Sludge Ordinance (AbfKlärV) contains extensive provisions on the reclamation of phosphorus from sewage sludge and sewage sludge incineration ash, which are mandatory as of 2029. EEW is already thinking far into the future: at various plant sites, we are investing in the construction of sewage sludge mono-incineration plants and we are already planning to recycle phosphorus as soon as possible from the resulting sewage sludge ash. With thermal recovery, it is possible to reliably destroy the harmful organic substances con-

tion through innovative solutions"). EEW is considering eventually expanding and further developing this innovative sewage sludge recovery at its Stapelfeld, Helmstedt, Stavenhagen and Delfzijl sites among others. Since sewage sludge recovery and phosphorus recovery are highly important to EEW, we are also active in key industry and specialist associations (BDE, DWA, DPP), Professional interactions and the transfer of know-how enable us to systematically work on marketing our sewage sludge ash from mono-incin-

With its practical expertise, EEW also directly ment options for filter dust is becoming more

engages in research to support the development of new technologies and to use the research findings with regard to its own business activities. Currently, the main focus areas are further reutilisation of bottom ash (grate ash) as well as alternative recovery options for ash, depollution and the composition of filter dust. For example, EEW supports a start-up that is carrying out research in this area in collaboration with a university. In particular, the question of alternative recovery or manageof a focus for EEW because recovery via backfilling mines is reaching its economic limits and is not unconditionally accepted everywhere in Europe as recovery. Together with partners from industry and the university in Braunschweig, we have already carried out laboratory experiments and test series, which aim to find other possibilities for reutilising filter dust and bottom ash.



Finding answers to global megatrends

GRI 103-1, 103-2, 103-3

Addressing global challenges, forging new paths

Protecting the climate and resources is one of the greatest global challenges of our time. It is up to policymakers, business and society to conserve natural resources for future generations. At the same time, the digital transformation is proceeding rapidly and changing the way we communicate, work and live. Digitalisation also creates new opportunities that EEW wants to systematically utilise in future.

As part of our materiality analysis, together with our stakeholders we assessed these global challenges as relevant for EEW. Our stakeholders believe our company plays an important role in the search for workable answers to the major questions of the future.

Dealing with climate change

EEW uses up to 50 per cent renewable fuels for energy conversion. In this way, we reduce CO₂ emissions in the energy sector and contribute to decarbonisation.

Dealing with scarce resources

By producing energy from waste, EEW reduces the consumption of fossil raw materials. We reclaim resources and close material loops.

Dealing with the digital transformation

EEW takes advantage of the opportunities that digitalisation offers for the waste management sector. We are installing digital infrastructure in our plants and strengthening digital channels in our business and customer relationships.

To limit the negative effects of climate change,

Finding answers: dealing with climate change

the European Union has established clear targets: by 2030 greenhouse gas emissions should be at least 40 per cent lower than 1990 levels, energy efficiency should rise by 32.5 per cent and the share of renewable energies in the overall energy mix should be increased to 32 per cent. Germany aims to reduce its CO₂ emissions by 55 per cent by the year 2030. To meet these German and European climate goals, there will have to be incremental decarbonisation in all sectors – from the energy sector to transportation and buildings. EEW already supports climate protection with its business model and contributes to the decarbonisation of the economy. To reach our own climate goals, we act in accordance with the same management systems and EEW-internal norms that apply for environmental protection (see also chapter "Advancing environmental protection through innovative solutions").

Particularly in the area of heat production, which accounts for around 56 per cent of energy demand in Germany, we contribute to reducing fossil fuels. The heat extraction from our plants also meets the requirements of the German Renewable Energies Heat

Act (EEWärmeG) because half of the heat obtained through the efficient combined heat and power technology is generated from the proportion of organic combustibles. With this decentralised climate-friendly heat supply, we support cities and regions in transitioning to a sustainable heating supply and preparing for the planned phase-out of coal. Overall, by generating energy from waste, we are helping to shape the energy transition in Germany. Furthermore, we contribute to reaching the Sustainable Development Goals (SDGs).

A glance at a European map shows that some countries — especially in south-eastern Europe – are a long way from reaching the EU's climate targets. The continued high rate of landfilling indicates, among other things, that there is a need there for thermal waste recovery. Against this backdrop, EEW plans to develop new markets in Europe. We see this as an opportunity to contribute to a functioning circular economy in other countries as well. When looking at arising global waste, China in particular shows a need for thermal waste recovery facilities. EEW therefore regularly shares information about sustainable waste treatment methods at IE expo China, to spread these methods in Asia and thus support climate protection worldwide. In addition, EEW supports BEHL in the design and optimisation of thermal waste treatment sites in China.

Closing loops: dealing with scarce resources
As natural resources become scarcer, waste

becomes increasingly important as a valuable resource. Along with the direct recycling of raw materials, waste treatment with energy recovery constitutes a crucial component of the eco-friendly circular economy. Since not all wastes are suitable for high-value recycling, thermal recovery is generally the most sustainable treatment method. Besides energy, EEW is able to reclaim other raw materials that replace natural resources. For instance, metals that we reclaim from the bottom ash are returned to the materials loop, our bottom ash replaces natural building materials and we plan to reclaim phosphorus from sewage sludge. Moreover, we permanently remove the pollutants contained in waste, such as heavy metals, from the biosphere. Such materials would enter the environment if the waste were improperly treated. In future, we are planning new product developments in the areas of residues, waste heat and flue gas to further increase the recovery rate and thus the protection of resources.

Shaping the digital transformation: Digital@EEW

Digitalisation is spreading to all sectors and business fields. For EEW as well, it is playing an increasingly important role. Ultimately, the digital transformation is changing the competitive environment and customer expectations, creating new key technologies and enabling more efficient processes. For EEW, this is about more than simplifying day-to-day processes. Our goal is to use digital solutions to further improve the entire business, includ-

ing plant operations and interactions with customers. We are convinced that digitalisation safeguards our future. If we do not sufficiently utilise digital opportunities, they will become risks for our business.



"EEW is already well positioned for the digital transformation and is incorporating digitalisation into its business decision-making."

Peter Kurth, President of the Federation of the German Waste, Water and Raw Materials Management Industry (BDE)

In 2018 we therefore developed a company-wide digitalisation strategy: Digital@EEW. Under this umbrella, we want to introduce a set of harmonised measures in the coming years. In doing so, we will take a holistic approach, which we see as a lever to improve the operating business and as an important foundation for sustainable growth. Our digitalisation strategy will be implemented in the company in four phases. In the first phase in 2018 we developed a target vision as a foundation for the future management approach. In it, we set out the following goals:

- Established digital platforms have expanded the business model while creating added value and strengthened EEW's customer ties.
- EEW's core processes are simplified and digitalised and are being continuously improved – clear end-to-end responsibilities are fulfilled.
- Digital technologies have further enhanced the technical excellence of the plants.

- A unit for digital transformation coordinates and continuously optimises the digital improvement process.
- Digital skills and agile working methods have been conveyed to employees and managers and embedded in the corporate culture, and they are actively applied in the organisation.

We will only be able to achieve these goals if we get all managers and employees on board. To accomplish this, it is important that we empower our entire organisation to help shape the digital transformation at EEW. We are communicating the strategy internally, engaging in dialogue with each other and fostering agile working methods. Through further training and the transfer of know-how, we want to give all employees the ability to undertake digitalisation measures. Furthermore, we are recruiting new talent and developing the digital skills of our existing talent. Step by step, we are creating a corporate culture where we all bring Digital@EEW to life

and make it a success. In 2019 we are establishing a corporate unit for digital transformation to take on the management necessary for this.

As part of our strategy development, we defined four lighthouse initiatives that we want to implement as a priority: detection of impurities, automation of scales, establishment of a platform model and the simplification of core processes. We decided on these four initiatives because they are strategically relevant and have a significant financial impact. Moreover, they are closely linked with our core business and they focus on critical points of contact with our customers in order to optimise them.

Following the basic conceptual work, phase 2 will entail the specific implementation planning of the lighthouse initiatives as well as the digital empowerment of the organisation. Led by a steering committee in cooperation with the Board of Management, EEW is establishing an independent programme organisation with clearly defined roles, responsibilities and budgets. A road map with an implementation plan is being developed. The Communications and HR departments are also developing measures to equip all employees with digital know-how and introduce them to agile working methods. Once we have created a solid foundation in phase 2, the initiatives will be put into practice in phase 3. In phase 4, we plan to firmly establish our Digital@EEW strategy in a stand-alone organisational unit.



Delivering results



What guides us

GRI 103-1, 103-2, 103-3

As a company, we want to take the lead by **delivering results.**

We are an economically strong player embedded in local communities. Our business operations contribute to added value for society and strengthen regional infrastructure, also in economically underdeveloped areas. We measure our performance based on concrete results, especially in relation to the provision

of renewable energy and the recovery and recycling of valuable resources such as phosphorus. Moreover, with the help of the latest plant technology, we aim to reduce our own emissions to an efficient minimum level. With our plants, which can serve as baseload facilities, we produce electricity, heat and process steam and thereby also make an important contribution to long-term supply security for industry and society.

We are on the path to fulfilling this aspiration and living up to our responsibility, both as a local player as well as in the area of environmental protection. To do so, we have set ourselves specific goals against which we will measure our future performance.

Economic impact of our plants on the local communities		
Early changeover from OHSAS 18001 to ISO 45001	End of Q1 2020	Create a sustainable structure to reduce hazards at plant sites
Advancing environmental protection through innovative solutions		
Increased purchasing of electricity and gas based on renewable energies	Ongoing	Increase share of renewable energies in use of energy

Economic impact of our plants on the local communities

GRI 103-1, 103-2, 103-3

Ensuring reliable waste management and energy supplies, strengthening regional infrastructure

Waste is a part of everyday life — whether in commercial enterprises or private households. Safe waste management and recovery is one of the basic requirements of a society. With its business operations, EEW not only provides sustainable management of non-recyclable waste, it also recovers this waste in a useful way. By using waste as a resource for regional energy generation, we combine long-term reliable waste management and energy supplies with environmental compatibility and economic efficiency. In this context, our materiality analysis identified the following topics relating to the economic impact of our business operations.

Our stakeholders encourage us to continue on this path: with expertise, innovative strength,

vision and transparency. They believe it is important that EEW makes technical preparations for possible changes in waste streams and intensifies its communication of innovative developments at the sites.

Local anchoring: short distances, long-term solutions

EEW offers local authorities and commercial enterprises reliable waste management in the short and long term thanks to maximum flexibility in acceptance capacity and our dependable infrastructure. We develop customised cost-stable waste management concepts for our customers. By consistently using state-of-the-art technologies, we also ensure a high degree of efficiency, availability and environmental protection. Short distances to the energy-from-waste (EfW) plants reduce transport costs and make a positive contribution to the region's environmental footprint.

By using the energy contained in waste, we guarantee a continuous and secure supply of energy for households, local authorities and industrial companies. We offer regional off-takers customised supply contracts that take into account their particular requirements. As a result, our customers get energy supplies tailored to their needs. For example, we supply process steam to industrial firms in the vicinity of our plants as well as district heating and electricity to residential neighbourhoods. One example is the city of Magdeburg, where the Rothensee EfW plant produces 370,000 MWh of electricity annually for the equivalent of approximately 105,000 households (more than 30 per cent of households) as well as commercial enterprises in the city. In addition, EEW supplies a total of 350,000 MWh of heat to 44,000 households and businesses via the 142-km-long Magdeburg district heating network. With a total capacity of around 660,000 tonnes, the Rothensee plant is one of

Economic performance/ indirect economic effects

EEW ensures a high level of waste management and energy supply security via sustainable, reliable and high-quality infrastructure. As a locally anchored player, we stand for economic stability and contribute to added value in the regions where we operate our plants. We see innovation as the driving force for our company's success.



"EEW has good economic prospects, also in the long term. Waste management is always a local business and a relevant issue in our society."

Jörg Liebermann, District Manager of the Mining, Chemical and Energy Industries Union (IG BCE) in the district Wolfenbüttel / Vice-Chairman of the Supervisory Board of EEW Energy from Waste GmbH

Germany's largest EfW facilities and a cornerstone of waste management in Saxony-Anhalt

Since 2018 we have also been involved in a new district heating project in Hanover. The utility company enercity wants to produce half of the city of Hanover's district heating from renewable energy sources by the year 2035. The use of heat from EEW's energy-fromwaste plant will make a key contribution to this. In 2018 we signed the corresponding heat supply contract for a term of 20 years. At the peak, EEW will provide a quarter of the total annual district heating sales of 1,200 GWh/a.

Owing to the increased demand for waste management capacity and energy supplies, we expanded our plants at several sites in 2018 with extensions or new construction: in Delfzijl, Premnitz, Helmstedt and Stapelfeld. In Göppingen and Neunkirchen, we will soon be able to accept more waste than before and more efficiently recover the energy that it contains. In Stapelfeld, for example, with the same throughput we will be able to extract approximately 227 GWhel instead of the previous 90 GWhel and we will also be able to increase our district heating extraction from 250 GWhth to 310 GWhth. As a locally anchored player, it is important to us to engage residents and other local stakeholders in such expansion projects. We take in their expectations and requests, which we then analyse and work with. We proactively inform local residents at all sites about the planned



"Major investments are being made in, for example, the construction of new plants. The company should raise public awareness about its investments and position itself as an economically strong company."

Prof. Dr Rüdiger Siechau, Managing Director of Stadtreinigung Hamburg / Spokesman for the Management Board

changes and we transparently answer their questions. In Stapelfeld, we did this by hosting various public information events. These events were also the first time the EEW "infomobile" appeared as a publicly visible point of contact in the community, where we provided information about the new building project and offered a space for dialogue with local residents.

Providing decentralised energy supplies to industrial companies and residential areas is not the only way that EEW contributes to added value in the region. We also support the regional economy by awarding contracts to local suppliers. Furthermore, our environmental protection measures at the plants contribute to the climate and environmental protection targets in each particular region. At all our sites, we see ourselves as a partner of local authorities — a partner who takes a

long-term view and operates proactively, also with regard to resource-conserving sewage sludge recovery.

Today, we already sometimes recover sewage sludge along with waste in our plants. With the planned construction of sewage sludge mono-incineration plants at existing EEW sites, there will also be environmentally and economically advantageous synergies with our EfW plants. Our investments will sustainably pay off, especially for local authorities that require sound solutions for sewage sludge treatment.

The Business Development department is responsible for the sustainable further development of our company. It carefully observes the markets in order to recognise trends and developments at an early stage. Based on this work, the department creates growth strat-

egies, plans the development of new markets and initiates internal development projects. These include, for example, portfolio measures and growth projects. The Communications department then has the job of communicating all topics internally and externally – in direct dialogue with key stakeholders as well as through communication measures aimed at the wider public. By intensifying these measures, we are also fulfilling the desire of our stakeholders to see a more proactive approach to communicating innovative developments at our plant sites.



Advancing environmental protection through innovative solutions

GRI 103-1, 103-2, 103-3

Extracting energy and raw materials, reducing emissions

Thermal waste recovery and the associated energy production have direct impacts on the environment. On the one hand, EEW's waste treatment reduces the volume of waste, sanitises it and lowers the climate-damaging methane emissions that would otherwise occur in landfills. At the same time, we utilise the energy contained in the waste, approximately 50 per cent of which is of biogenic origin, to produce electricity, heat and steam. In doing so, we make an important contribution to climate-friendly energy supplies. Then again, despite everything, emissions and residues result from the combustion at our plants.

In this context, as part of the recent materiality analysis, we identified three important subjects relating to environmental protection where EEW advances innovative solutions.

Generating and supplying energy

EEW efficiently uses the energy contained in waste and produces electricity for households, process steam for industrial plants, and district heating for residential neighbourhoods. As such, we promote decentralised energy infrastructure. Simultaneously, we reduce CO_2 emissions by using renewable fuels.

Resource reclamation and recycling

Besides energy, EEW also recovers valuable

raw materials such as metals from thermal waste treatment and thus closes material loops. For example, bottom ash is used in road construction and replaces the natural resources gravel, stones and sand. Other residues, such as fly ash, can be recovered in a responsible way. The sodium chloride residues can be used, among other things, as a salt substitute in aluminium smelters. Furthermore, we are working on a pioneering solution for phosphorus recycling from future arising of municipal sewage sludge ash.

Emissions

At all its plants, EEW uses state-of-the-art flue gas cleaning technology to optimally filter out organic and inorganic pollutants, avoid air pollution and thus contribute to improving air quality.

Our stakeholders see EEW as having an important role in the topic areas "emissions" and "resource reclamation and recycling". We will therefore work even harder on further reducing our emissions and increasing resource reclamation as part of our business operations.

Environmentally sound conduct: management and responsibilities

For the practical implementation of environmental protection in our business activities, we have put in place management instruments and assigned responsibilities. Our conduct is based on a comprehensive integrated management system comprising the following compartments: the environment management system ISO 14001, the energy management system ISO 50001, the quality management system ISO 9001 as well as the occupational health and safety management standard OHSAS 18001 (in future: ISO 45001:2018). Moreover, various directives and process instructions serve to ensure compliance with external and internal rules on environmental protection and to drive improvements. These include the directives on occupational health and safety, environment, energy and quality policy as well as the process instructions on health and safety at work, corporate environmental protection, energy management, internal audits and continuous improvements. The overall organisation of residue management and recovery is regulated by the process instructions on residues. At all of our plant sites, we register and keep track of hazardous waste via an electronic waste records procedure (eANV). Our principles for the responsible procurement of operating materials also contain statutory environmental standards as well as EEW's own environmental standards, which go even further. Our suppliers are required to fully adhere to these standards.

We regularly inspect the operations of our 18 energy-from-waste plants to ensure that all plants are running in as environmentally friendly a manner as possible. For a precise analysis, we use daily, weekly and monthly reports, measurements and comparisons of

planned/actual data, which immediately show deviations from normal operations. We are committed to transparency when it comes to emissions and share this data with the outside world (external parties/stakeholders). The levels are recorded at the emissions measuring point, sent via a data cable to the responsible permitting authority and made available to the public. In addition, we voluntarily present the annual reports compiled by the officers for immission protection, waste, water protection and hazardous materials to the respective authorities, which is not legally required. None of the EEW plants directly generates process wastewater, since they all circulate and recover the process water they use. The sanitary wastewater from the plants is piped to sewage treatment plants, just like wastewater from private households is. The concentration of pollutants in other wastewater, such as precipitation collected in rainwater retention basins at the plant sites, is limited by regulatory bodies through the respective permits under water law. These levels are regularly monitored by the competent local authorities.

Each plant site is responsible for the operations of its plant and thus for on-site environmental protection. This includes compliance with the emission thresholds, the implementation of all other environmental standards and guidelines, and the prevention of unplanned downtimes. The individual plants are supported by EEW's Technology department

as well as the environmental protection unit of the RESHO department. Among other things, they provide the sites with evaluations and instruments, foster the transfer of know-how, advise and work on the environmentally friendly further development of the plants. The infrastructure team based in the depart ment is also responsible for technical controlling. The residue management unit has the overarching responsibility for carrying out the management of residues. It is also responsible for auditing carriers and waste management firms as well as for evaluating the analysis of waste arising. The individual plant sites take care of the waste transfer documentation.

Of course, above and beyond these responsibilities, all employees are encouraged to rigorously implement the environmental and energy policies that EEW has conveyed to them. The officers for immission protection, waste, water protection and hazardous goods also regularly participate in certified training measures. Our management approach is evaluated as part of annual internal audits, which are carried out by qualified EEW employees, as well as annual external audits, which are carried out by an independent certification organisation.

Taking on responsibility: environmental protection in operating processes

EEW is systematically working to reduce the effects of its business activities on the environment and to contribute to climate and environmental protection with specific measures.

Energy generation and supply

EEW uses the energy released by the combustion of waste to supply electricity, heat and process steam for industry and households. In this way, we replace fossil fuels, such as coal and oil, and avoid greenhouse gas emissions.

EEW produces environmentally friendly electricity for the equivalent of around 700,000 households per year, assuming that each household consumes on average 3,450 kWh annually. We supply district heating for residential neighbourhoods and process steam for industrial plants located close to our sites representing a combined total of around 2.5 million MWh per year. By generating climate-friendly power and heat, roughly half of which is considered renewable energy, EEW makes an important contribution to decarbonising the economy. Especially with a view to the volatility of electricity prices, we want to further expand the production and sales of heat and process steam and invest in local energy infrastructure.

Resource reclamation and recycling

Following the thermal recovery of waste, the non-combustible components of waste are left behind as residues, amounting to approximately 31 per cent on average. That means that a waste throughput of 4.55 million



"EEW makes a positive contribution to energy supplies by providing climate-friendly energy."

Wittich Schobert, Mayor of the town Helmstedt

tonnes generates around 1.41 million tonnes of residues. The largest share of residues is made up of the combustion output bottom ash, which has a high potential for recovery. In accordance with the rules established by Germany's Federation/Federal States Working Party on Waste (LAGA), our partner firms process the bottom ash in such a way that it can be used, for instance, as a building material in road construction: examples include as a base layer under concrete, asphalt or paving, as a substructure for a road embankment or in noise barriers with a mineral surface cover. The use of bottom ash thus conserves natural resources such as gravel and sand and helps to reduce the area of countryside used for open-pit mining of these materials. Moreover, the bottom ash is so unreactive that there is little risk of leachate or gases being produced when it is used properly. The metal remaining in the bottom ash is separated and recycled. This metal removal is stipulated in the contracts with our partner firms that recover the bottom ash.

Other residues include fly ash and filter dust, which arise from the combustion of waste and

are captured by the flue gas cleaning process. Fly ash is classified as waste requiring particular monitoring. EEW ensures that the boiler and filter dust is securely stored underground and is thus permanently removed from the environmental cycle. This ash can be used, for example, to fill in and shore up cavities in mines, especially in old salt domes, since these form a solid geological barrier. EEW anticipates that sufficient cavities are available for the coming years. In this area, EEW works only with certified recycling operators who have specialised in safe backfilling.

The revised German Sewage Sludge Ordinance has turned our attention to another raw material: phosphorus. With the planned construction of sewage sludge mono-incineration plants, we are laying the necessary groundwork for the recovery of phosphorus from sewage sludge ash. The permitting processes for the plants are already underway. Moreover, with a partner, we are developing an innovative and sustainable solution for phosphorus recycling. Phosphorus plays an active role in metabolic processes in the human body. As a component of DNA, it is essential for the growth of

organisms. It is also an important element for the formation of teeth and bones. In addition, phosphorus is crucial to plant health and development and is thus an indispensable mineral in agricultural fertilisers. Yet phosphorus cannot be synthesised and the world's limited natural reserves are unevenly distributed. The European Commission has declared phosphorus a critical raw material since May 2014. By building sewage sludge mono-incineration plants with downstream phosphorus recycling, we want to make a contribution to conserving this vital resource.

Emissions

During thermal waste recovery, emissions occur which contain carbon dioxide, sulphur dioxide, dust and soot, as well as nitrogen oxides, heavy metal vapours and unburnt hydrocarbons. Our goal is to continuously further reduce these emissions and thus contribute to improving air quality. We want to achieve this through modern technology and optimal plant operations. In accordance with the 17th ordinance implementing the Federal Immission Control Act (17. BlmSchV), our plants have to comply with strict emission limits. As such, the hazardous constituents arising from the combustion of waste are filtered out of the exhaust gas stream in a multistage purification process, thus removing the bulk of the environmentally harmful substances contained in the flue gas. To do this, we use similar technology in all of our plants. Via continuous measurements and regular self-monitoring, we check whether the emissions from the flue gas cleaning plants conform with the law. To do this, we use a measuring technology certified by the German Technical Inspection Association (TÜV) and the German Environment Agency, which is inspected and calibrated by external experts at predetermined intervals. By closely monitoring the flue gas cleaning and the observed levels, EEW is able to not only comply with the statutory requirements, it is also below the emission thresholds. We conduct special training to raise our employees' awareness for further emission reductions. More-

over, we are working on further reducing the CO_2 emissions that are not classified as climateneutral through the use of new technologies and processes. The success of our measures is reflected in EEW's emissions footprint.



Facts and figures

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Sustainability goals

GRI Content Index

Membership of associations

Independent Auditor's Limited
Assurance Report

Publication details

Overview of key figures

GRI indicators	Economic key figures	Unit	2017	2018
	Direct economic value generated and distributed ¹			
201-1	Direct economic value generated (revenues)	EUR k	545,777	552,831
	Economic value distributed ²	EUR k	456,788	464,120
	annual financial statements of the EEW Group. outed comprises: cost of materials, personnel expenses, other operating expenses, income taxes	and net income.		
	·	and net income.		
	outed comprises: cost of materials, personnel expenses, other operating expenses, income taxes	and net income.	22.0	18.0

¹The term "significant sites" refers to all of the EEW Group's plant sites. The term "local" applies to a radius of less than 50 km from the plant sites.

Environmental key figures	Unit	2017	2018
Energy consumption within the organisation			
Total electricity consumption ¹	MWh	23,449	13,422² ✓
Total heating oil consumption	MWh	54,134	56,507 🗸
Total gas consumption	MWh	121,460	138,300² 🇸
Total electricity sold ³	MWh	1,645,458	1,699,186 🇸
Total heat sold ³	MWh	775,778	775,058
Total steam sold ³	MWh	1,902,987	1,875,172
	Energy consumption within the organisation Total electricity consumption Total heating oil consumption Total gas consumption Total electricity sold ³ Total heat sold ³	Energy consumption within the organisation Total electricity consumption Total heating oil consumption MWh Total gas consumption MWh Total electricity sold ³ MWh Total heat sold ³ MWh	Energy consumption within the organisation Total electricity consumption Total heating oil consumption MWh 54,134 Total gas consumption MWh 121,460 Total electricity sold ³ MWh 1,645,458 Total heat sold ³ MWh 775,778

¹ Total amount of electricity obtained from the power grid.

EEW Sustainability Report 2018 Facts and figures

² At the beginning of 2018 a combined heat and power (CHP) plant started operations at the Heringen site to meet the site's demand for electricity and heat. This resulted in an increase in gas consumption compared with 2017. By contrast, purchases of electricity from the grid declined.

³ Figures excluding the company headquarters (EEW GmbH).

	CO ₂ emissions of the organisation ¹			
305-1	Total volume of the direct CO ₂ emissions (Scope 1) ²	t CO ₂	2,380,034	2,416,161 🎸
305-2	Total volume of the indirect CO ₂ emissions (Scope 2) ³	t CO ₂	14,309	12,833 🗸

1 This report does not yet take into account further CO2 reductions or savings resulting from thermal waste recovery or the further processing of recovered products at EEW or third parties.

² The CO₂ emissions in Scope 1 comprise the emissions resulting from the combustion of waste as well as the consumption of heating oil and natural gas in the waste-fired boilers (auxiliary firing). At the Heringen site, the gas volumes required to operate the steam superheater were also allocated to Scope 1. To calculate the emissions from waste combustion, the volume of combusted waste was multiplied by the emission factor of 1,060 kg CO₂/t of waste (empirical figure from the German Interest Group for Thermal Waste Treatment Plants in Germany [ITAD]). The biogenic proportion of waste for the Breisgau, Delfzijl, Göppingen, Großräschen, Hanover, Helmstedt, Leudelange, Neunkirchen, Premnitz, Stapelfeld and Stavenhagen sites was obtained from the German Environment Agency's register of guarantees of origin for electricity from renewable energy sources (HKNR). The figures have been verified by accredited environmental verifiers. For all other sites, the arithmetical average of the biogenic proportion of the above-mentioned sites in accordance with HKNR (50.86%) was used. To calculate the emissions from heating oil consumption, the values for the medium density of 0.84 kg/l and the calorific value of 42.6 MJ/kg were taken from the specifications for extra-light heating oil published by BP Europa SE (version dated 1 March 2013). A figure of 74 t CO₂/TJ was used as the emission factor (from: "CO₂-Emissionsfaktoren für fossile Brennstoffer "CO₂ emission factors for fossil fuels"), German Environment Agency, 9/2017, p. 35). To calculate the emissions from natural gas consumption, first the gas consumption was converted into kWh (density of 0.8 kg/m³ in accordance with DEFRA Conversion Factors 2019; the calorific value for high calorific natural gas of 10.42 kWh/kg taken from "Erdgas. Zahlen, Daten, Fakten" ["Natural gas: numbers, dates, facts"], BDEW, 1/2017, p. 4). A value of 0.201 kg CO₂/kWh was used as the emission factor (from: "Entwicklung der spezifischen Kohlendiowic-Emissionen des deutschen Strommi

³ The Scope 2 CO₂ emissions contain the emissions resulting from electricity purchases as well as the consumption of heating oil and natural gas at EEW's 18 plant sites and company headquarters in Helmstedt. To calculate the emissions from purchased electricity, the consumption figure was multiplied by an emission factor of 486 g CO₂/kWh (from: "Entwicklung der spezifischen Kohlendioxid-Emissionen des deutschen Strommix in den Jahren 1990–2018" ("Development of the specific carbon dioxide emissions in the German electricity mix from 1990 to 2018"), German Environment Agency, 4/2019, p. 10. To calculate the emissions from heating oil onsumption density of 0.84 kg/l and the calorific value of 4.26 M/kg were taken from the specifications for extra-light heating oil published by BP Europa 5E (version dated 1 March 2013). A figure of 74 t CO₂/TJ was used as the emission factor (from: "CO₂-Emissionsfaktoren für fossile Brennstoffe" ["CO₂ emission factors for fossil fuels"], German Environment Agency, 9/2017, p. 35). To calculate the emissions from natural gas consumption, first the gas consumption was converted into kWh (density of 0.8 kg/m³ in accordance with DEFRA Conversion Factors 2019; calorific value for high calorific natural gas of 10.42 kWh/kg taken from "Erdgas. Zahlen, Daten, Fakten" ["Natural gas: numbers, dates, facts"], BDEW, 1/2017, page 4). A value of 0.201 kg CO₂/kWh was used as the emission factor (from: "Entwicklung der spezifischen Kohlendioxid-Emissionen des deutschen Strommix in den Jahren 1990–2018" ["Development of the specific carbon dioxide emissions in the German electricity mix from 1990 to 2018"], German Environment Agency 4/2019, p. 16).

6	EEW Sustainability Report 2018 Facts and figures	1

GRI indicators	Environmental key figures	Unit	2017	2018
	Nitrogen oxides (NO $_{x}$), sulphur oxides (SO $_{x}$) and other significant air emissions 1			
305-7	Total dust ²	mg/Nm³	0.46	0.5
	Total carbon ³	mg/Nm³	0.36	0.2
	Hydrogen chloride⁴	mg/Nm³	4.37	4.4
	Sulphur dioxide ⁵	mg/Nm³	10.87	11.3
	Nitrogen dioxide ⁶	mg/Nm³	139.60	134.9
	Mercury ⁷	μg/Nm³	1.71	1.6
	Carbon monoxide ⁸	mg/Nm³	10.72	8.8
	Ammonia ⁹	mg/Nm³	1.42	1.3
² Limit value in accordance v ³ Limit value in accordance v ⁴ Limit value in accordance v ⁵ Limit value in accordance v ⁶ Limit value in accordance v ⁸ Limit value in accordance v	nted in the table are the weighted averages of the respective emission values of all the EEW Ene with 17th ordinance implementing the Federal Immission Control Act (17. BImSchV) (daily average with 17. BImSchV (daily average) 2017 and 2018: 10 with 17. BImSchV (daily average) 2017 and 2018: 10 with 17. BImSchV (daily average) 2017 and 2018: 50 with 17. BImSchV (daily average) 2017 and 2018: 200 with 17. BImSchV (daily average) 2017 and 2018: 30 with 17. BImSchV (daily average) 2017 and 2018: 30 with 17. BImSchV (daily average) 2017 and 2018: 50 with 17. BImSchV (daily average) 2017 and 2018: 10			
	Waste by type and disposal method			
306-2	Total weight of hazardous waste ¹ , of which	t	278,186	267,01
	recovered via backfilling of mines	t	278,186	267,01
	Total weight of non-hazardous waste, of which	t	1,241,380	1,146,26
	recycled and reclaimed metals and metal compounds	t	112,853	114,62
	recovered as landfill construction material or sent	t	1,015,674	1,031,63

¹ Includes, amongst other things, mercury, cadmium and lead

GRI indicators	Social and compliance key figures	Unit	2017	2018
	Information on employees and other workers			
102-8	Total number of all employees	Number	1,069	1,090
	Female	Number	186	187
	Male	Number	883	903
	Temporary employees	Number	63	68
	of whom female	Number	10	16
	of whom male	Number	53	52
	Employees in Germany	Number	954	976
	of whom female	Number	170	176
	of whom male	Number	784	800
	Temporary employees in Germany	Number	56	63
	of whom female	Number	10	16
	of whom male	Number	46	47

GRI indicators	Social and compliance key figures	Unit	2017	2018
	Employees in the Netherlands	Number	65	65
	of whom female	Number	6	5
	of whom male	Number	59	60
	Temporary employees in the Netherlands	Number	6	4
	of whom female	Number	0	0
	of whom male	Number	6	4
	Employees in Luxembourg	Number	50	49
	of whom female	Number	10	6
	of whom male	Number	40	43
	Temporary employees in Luxembourg	Number	1	1
	of whom female	Number	0	0
	of whom male	Number	1	1
	Full-time employees¹	Number	832	843
	of whom female	Number	115	116
	of whom male	Number	717	727
	Part-time employees¹	Number	36	45
	of whom female	Number	25	31
	of whom male	Number	11	14

¹The information refers to the permanent workforce at the EEW Group, excluding the Delfzijl, Leudelange and Rothensee sites, which do not use SAP as a reporting tool.

GRI indicators	Social and compliance key figures	Unit	2017	2018
	Collective bargaining agreements ¹			
102-41	Employees covered by collective bargaining agreements	%	85.1	85.2
	¹ The information refers to the permanent workforce at the EEW Group, excluding the Delfzijl,	Leudelange and Rothensee sites, wh	nich do not use SAP as a reporting	tool.
	New employee hires and employee turnover ¹			
401-1	New employees			
	Total	Number (%)	66 (6.6)	62 (6.1)
	Age			
	Less than 30 years old	Number (%)	17 (1.7)	19 (1.9)
	30–50 years old	Number (%)	37 (3.7)	33 (3.2)
	More than 50 years old	Number (%)	12 (1.2)	10 (1.0)
	Gender			
	Female	Number (%)	10 (1.0)	14 (1.4)
	Male	Number (%)	56 (5.6)	48 (4.7)
	Region			
	Germany	Number (%)	56 (5.6)	52 (5.1)
	Netherlands	Number (%)	8 (0.8)	6 (0.4)
	Luxembourg	Number (%)	2 (0.2)	4 (0.6)

¹ The information refers to the permanent workforce at the EEW Group. Temporary employment relationships are not taken into account.

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GRI indicators	Social and compliance key figures	Unit	2017	2018
	Employee turnover ²			
	Total	Number (%)	44 (4.3)	42 (4.2)
	Age			
	Less than 30 years old	Number (%)	2 (0.2)	4 (0.4)
	30–50 years old	Number (%)	22 (2.2)	15 (1.6)
	More than 50 years old	Number (%)	20 (1.9)	23 (2.3)
	Gender			
	Female	Number (%)	6 (0.6)	7 (0.7)
	Male	Number (%)	38 (3.7)	35 (3.5)
	Region			
	Germany	Number (%)	41 (4.0)	35 (3.5)
	Netherlands	Number (%)	1 (1.0)	6 (0.4)
	Luxembourg	Number (%)	2 (0.2)	5 (0.5)

 $^{^{\}rm 2}$ The employee turnover figures refer exclusively to permanent employment relationships.

GRI indicators	Social and compliance key figures	Unit	2017	2018
	Diversity of governance bodies and employees			
405-1	Individuals within the governance bodies			
	Gender			
	Female	%	11.0	11.0
	Male	%	89.0	89.0
	Age			
	Less than 30 years old	%	0.0	0.0
	30–50 years old	%	44.0	44.0
	More than 50 years old	%	56.0	56.0
	Employees covered by collective bargaining agreements			
	Gender			
	Female	%	18.6	19.5
	Male	%	81.4	80.5
	Age			
	Less than 30 years old	%	17.4	15.7
	30–50 years old	%	43.5	45.8
	More than 50 years old	%	39.1	38.5

GRI indicators	Social and compliance key figures	Unit	2017	2018
	Trainees			
	Gender			
	Female	%	26.7	22.5
	Male	%	73.3	77.5
	Age			
	Less than 30 years old	%	96.7	96.7
	30–50 years old	%	3.3	3.3
	More than 50 years old	%	0.0	0.0
	Employees not covered by collective bargaining agreements			
	Gender			
	Female	%	8.2	9.0
	Male	%	91.8	91.0
	Age			
	Less than 30 years old	%	0.0	0.0
	30–50 years old	%	43.3	38.0
	More than 50 years old	%	56.7	62.0
	Senior managers			
	Gender			
	Female	%	3.4	3.6
	Male	%	96.6	96.4

GRI indicators	Social and compliance key figures	Unit	2017	2018
	Age			
	Less than 30 years old	%	0.0	0.0
	30–50 years old	%	27.6	17.9
	More than 50 years old	%	72.4	82.1
	Incidents of discrimination and corrective actions taken			
406-1	Total number during the reporting period	Number	0	C
	Average hours of training per year			
404-1	Average number of hours, by			
	gender			
	Female	Number (h)	12.5	14.0
	Male	Number (h)	15.0	16.0
	Employees receiving regular performance reviews			
404-3	Percentage of all employees, by			
	gender ¹			
	Female	%	83.3	83.2
	Male	%	83.3	83.2
	Senior managers	%	100.0	100.0
	Employees not covered by collective bargaining agreements	%	100.0	100.0
	Trainees	%	100.0	100.0

¹The Großräschen, Stapelfeld, Stavenhagen and Premnitz sites do not have regular reviews for employees covered by collective bargaining agreements.

GRI indicators	Social and compliance key figures	Unit	2017	2018
	Types and rates of injury, occupational diseases, lost days, rate of illness and number of work-related fatalities ¹			
403-2	Occupational disease rate	%	0.0	0.0
	Lost day rate ²	LTI	2.3	2.3 🗸
	Rate of illness²	%	5.5	5.5 🗸
	Types of injury			
	Employees of EEW			
	Fractures	Number	2	3
	Crushing injuries	Number	1	0
	Cuts	Number	1	0
	Eye injuries	Number	0	1
	Torn ligaments	Number	0	1
	Loss of a body part	Number	1	0
	Work-related fatalities	Number	0	0
	Employees of partner firms			
	Fractures	Number	2	2
	Cuts	Number	2	2
	Burns	Number	0	1
	Scalding	Number	1	0
	Crushing injuries	Number	0	1
	Work-related fatalities	Number	0	1

GRI indicators	Social and compliance key figures	Unit	2017	2018
	Injury rate			
	Employees of EEW ³	TRI	2.9	2.8
	Employees of partner firms	TRI	4.9	6.7
	¹ This information relates to the EEW Group and employees of partner firms. ² This information relates to employees of the EEW Group. ³ Does not include first-aid incidents (recorded in first-aid register).			
	Sites assessed for risks related to corruption			
205-1	Total number during the reporting period	Number (%)	0 (0.0)	0 (0.0)
	Confirmed incidents of corruption and actions taken			
205-3	Total number of confirmed incidents of corruption during the reporting period	Number	0	0
	Total number of confirmed incidents in which employees were dismissed or disciplined for corruption	Number	0	0
	Total number of confirmed incidents when contracts with business partners were terminated or not renewed due to violations related to corruption	Number	0	0
	Public legal cases regarding corruption brought against the organisation or its employees during the reporting period and the outcomes of such cases	Number	0	0
	Legal actions for anticompetitive behaviour, antitrust and monopoly practices			
206-1	Total number of legal actions during the reporting period	Number	0	0

GRI indicators	Social and compliance key figures	Unit	2017	2018
	Non-compliance with environmental laws and regulations			
307-1	Total monetary value of significant fines for non- compliance with environmental laws and/or regulations	EUR	0	O
	Non-monetary sanctions for non-compliance with environmental laws and/or regulations	Number	0	C
	Sites with local community engagement, impact assessments and development programmes			
413-1	Percentage of sites (administrative and plant sites) with implemented local community engagement, impact assessments, and/or development programmes, including the use of			
	environmental impact assessments and ongoing monitoring	%	100.0	100.0
	public disclosure of results of environmental impact assessments	%	100.0	100.0
	works councils, occupational health and safety committees and other worker representation bodies to deal with impacts	%	100.0	100.0
	Political contributions			
415-1	Total monetary value of political contributions	EUR		0

GRI indicators	Social and compliance key figures	Unit	2017	2018
	Complaints concerning customer data			
418-1	Substantiated complaints received concerning breaches of customer privacy	Number	0	0
	Received from outside parties and substantiated by the organisation	Number	0	0
	From regulatory bodies	Number	0	0
	Identified leaks, thefts or losses of customer data	Number	0	0
	Fines and non-monetary sanctions			
419-1	Disclosure of significant fines and non-monetary sanctions for non-compliance with laws and/or regulations in the social and economic area, including:			
	Total monetary value of significant fines	EUR	0	0
	Total number of non-monetary sanctions	Number	0	0

Sustainability goals

Operational goal	Time frame	Measures
Area of action "strengthening relationships"		
Acting with integrity as the foundation of our business		
Ensure compliant behaviour	Ongoing	Carrying out role-oriented compliance training
Include top 20 suppliers or customers	End of 2019	Establishment of a standardised "know your customer" process in advance of contract conclusion with new suppliers
Qualifying and empowering employees		
Promote women's participation in the company (increase the share of women by five per cent [baseline year 2018])	2020	 Establishment of a programme for recruiting and promoting women (addressing women specifically at trade fairs and in networks)
Promote young talent throughout the company and prepare them for future leadership positions	Ongoing	Encouraging participation in the "Leadership Passport" programme
Developing partnerships		
Systematise stakeholder management	2020	Development of a company-wide policy on stakeholder management
Increase customer satisfaction and loyalty	Ongoing	Determining customer satisfaction via a customer satisfaction survey (last occurred in 2018)
		Holding four regional customer events in 2019
		 Measuring success via renewed customer satisfaction survey in 2020
Strengthen interfaces in the sales area with the aim of creating synergies and identifying or eliminating any problems of understanding	Ongoing	 Establishing up to six "exchange days" on which employees from material flow management and sales management each spend a day in the other unit as well as in the units imports and Commercial and Municipal Sales.

Operational goal	Time frame	Measures
Area of action "taking on challenges"		
Efficiently managing resources		
Optimise overall equipment effectiveness (OEE) at EEW's plants	2027	Increasing time availability in defined steps to increase OEE
Reduce the total number of kilometres driven annually in the EEW fleet	Ongoing	Greater use of digital methods (e.g. web conferences, teleconferences)
		 Optimisation of meeting management (e.g. holding meetings in central locations with good rail connections, grouping meetings on one day)
		Making use of rail travel more attractive
Securing a successful future with sustainable innovations		
Phosphorus recovery from sewage sludge ash	2022	Participation in the development of an innovative process to reclaim phosphorus from sewage sludge ash
		 Support the establishment of a plant of this type in Helmstedt
Industrial recovery of carbon dioxide (carbon capture and utilisation [CCU])	2023	Implementation of a pilot project at the Delfzijl site
Finding answers to global megatrends		
General low-paper execution of company-wide business processes	2022	Converting business processes to low-paper ordering and invoicing
		 Reduction of paper consumption in internal business processes

Operational goal	Time frame	Measures
Area of action "delivering results"		
Economic impact of our plants on the local communities		
Increase the power generated by renewable energies at the plant sites	End of 2020	Installation of potentially two more photovoltaic systems at EEW plant sites
Promote e-mobility within the group	Expected	Acquisition of two electric vehicles for the EEW vehicle pool
	2019	• Installation of four EV charging stations at the Helmstedt site
Reduce accident figures by 30 per cent (baseline year 2018: 12)	End of 2021	 Further development of partner firms with regard to occupational safety (supplier evaluation)
		 Carrying out focal campaigns at plant sites to reduce own hazards and accidents
Create a sustainable structure to reduce hazards at plant sites	End of Q1 2020	Early changeover from OHSAS 18001 to ISO 45001
Advancing environmental protection through innovative solutions		
Increase share of renewable energies in use of energy	Ongoing	 Increased purchasing of electricity and gas based on renewable energies
		 Promotion of captive-use generation from photovoltaics (in connection with expansion or new construction)
Reduce backfilling in mines by three per cent (baseline: relative filter dust share in 2019)	End of 2023	Use of new recycling processes for filter dust management



GRI Content Index

GRI 102-55

This report was prepared in accordance with the GRI Standards: Core option. For the Materiality Disclosures Service, GRI Services reviewed that the GRI Content Index is clearly presented and the references for disclosures 102-40 to 102-49 align with appropriate sections in the body of the report. This service was performed on the German version of the report.

GRI Standard		Disclosure	Reference	Comment
GRI 101: Foundat	tion 2016			
GRI 102: General	disclosure	es 2016		
Organisational p	rofile			
GRI 102: General	102-1	Name of the organisation	Company portrait (pp. 8–10)	
disclosures 2016	102-2	Activities, brands, products and services	Company portrait (pp. 8–10)	-
	102-3	Location of headquarters	Company portrait (pp. 8–10)	
	102-4	Location of operations	Company portrait (pp. 8–10)	
	102-5	Ownership and legal form	Company portrait (pp. 8–10)	
	102-6	Markets served	Company portrait (pp. 8–10)	
	102-7	Scale of the organisation	Company portrait (pp. 8–10)	
	102-8	Information on employees and other workers	Table of key figures (pp. 61–62)	
	102-9	Supply chain	Company portrait (pp. 8–10)	
	102-10	Significant changes to the organisation and its supply chain		This report is the first one the company has prepared. Therefore, no significant changes in comparison with the previous report are disclosed here.

GRI Standard		Disclosure	Reference	Comment
	102-11	Precautionary principle or approach	Our strategy: the umbrella for all sustainability activities (pp. 11–15)	
	102-12	External initiatives	Developing partnerships (pp. 28–31)	
	102-13	Membership of associations	Membership of associations (pp. 90–91)	
Strategy				
GRI 102: General disclosures 2016	102-14	Statement from senior decision maker	Foreword by the Board of Management (pp. 4–5)	
Character and int	tegrity			
GRI 102: General disclosures 2016	102-16	Values, principles, standards and norms of behaviour	Acting with integrity as the foundation of our business (pp. 21–23) Further information at: https://www.eew-energyfromwaste.com/en/about-us/our-values.html	
Governance				
GRI 102: General disclosures 2016	102-18	Governance structure	Effectively managing sustainability in the company (pp. 16–17) Further information at: https://www.eew-energyfromwaste.com/en/about-us/management.html	

GRI Standard		Disclosure	Reference	Comment
Stakeholder enga	igement			
GRI 102: General disclosures	102-40	List of stakeholder groups	Developing partnerships (pp. 28–31)	
2016	102-41	Collective bargaining agreements	Table of key figures (p. 63)	
	102-42	Identifying and selecting stakeholders	Developing partnerships (pp. 28–31)	
	102-43	Approach to stakeholder engagement	Developing partnerships (pp. 28–31)	
	102-44	Key topics and concerns raised	Our strategy: the umbrella for all sustainability activities (pp. 11–15)	
			Developing partnerships (pp. 28–31)	
Reporting praction	:e			
GRI 102: General disclosures	102-45	Entities included in the consolidated financial statements	About this report (p. 2)	
2016	102-46	Defining report content and topic boundaries	Our strategy: the umbrella for all sustainability activities (pp. 11–15)	
	102-47	List of material topics	Our strategy: the umbrella for all sustainability activities (pp. 11–15)	
	102-48	Restatements of information		This report is the first one the company has prepared. Therefore, no changes in comparison with the previous report are disclosed here.

GRI Standard		Disclosure	Reference	Comment
1	.02-49	Changes in reporting		This report is the first one the company has prepared. Therefore, no changes in comparison with the previous report are disclosed here.
1	.02-50	Reporting period	About this report (p. 2)	
1	.02-51	Date of most recent report		This disclosure is not applicable because this report is the first one the company has prepared.
1	.02-52	Reporting cycle	About this report (p. 2)	
1	.02-53	Contact point for questions regarding the report	Publication details (p. 94)	
1	.02-54	Claims of reporting in accordance with the GRI Standards	About this report (p. 2)	
1	.02-55	GRI Content Index	GRI Content Index (pp. 76–88)	
1	.02-56	External assurance	Independent Auditor's Limited Assurance Report (pp. 92–93)	

GRI Standard		Disclosure	Reference	Comment
GRI 200: Econom	nic topics			
Economic perfor	mance			
GRI 103: Management	103-1	Explanation of the material topic and its boundary	What guides us (p. 48)	
approach 2016	103-2	The management approach and its components	Economic impact of our plants on the local communities (pp. 49–51)	
	103-3	Evaluation of the management approach		
GRI 201: Eco- nomic perform- ance 2016	201-1	Direct economic value generated and distributed	Table of key figures (p. 58)	
Procurement pra	ctices			
GRI 103: Management	103-1	Explanation of the material topic and its boundary	What guides us (p. 20)	
approach 2016	103-2	The management approach and its components	Developing partnerships (pp. 28–31)	
	103-3	Evaluation of the management approach		
GRI 204: Procurement practices 2016	204-1	Proportion of spending on local suppliers	Table of key figures (p. 58)	

GRI Standard		Disclosure	Reference	Comment
Anticorruption				
GRI 103: Management	103-1	Explanation of the material topic and its boundary	What guides us (p. 20)	
approach 2016	103-2	The management approach and its components	Acting with integrity as the foundation of our business (pp. 21–23)	
103	103-3	Evaluation of the management approach	(PP:)	
GRI 205: Anticorruption	205-1	Sites assessed for risks related to corruption	Table of key figures (p. 69)	
2016	205-3	Confirmed incidents of corruption and actions taken	Table of key figures (p. 69)	
Anticompetitive	behaviour			
GRI 103: Management	103-1	Explanation of the material topic and its boundary	What guides us (p. 20)	
approach 2016	103-2	The management approach and its components	Acting with integrity as the foundation of our business (pp. 21–23)	
	103-3	Evaluation of the management approach		
GRI 206: Anticompetitive behaviour 2016	206-1	Legal actions for anticompetitive behaviour, antitrust and monopoly practices	Table of key figures (p. 69)	

GRI Standard

Disclosure

GRI Standard		Disclosure	Reference	Comment
GRI 300: Environ	mental to	pics	_	
Materials				
GRI 103: Management	103-1	Explanation of the material topic and its boundary	What guides us (p. 34)	
approach 2016	103-2	The management approach and its components	Efficently managing resources (pp. 35–38)	
	103-3	Evaluation of the management approach	What guides us (p. 48)	
			Advancing environmental protection through innovative solutions (pp. 52–55)	
GRI 301: Materials 2016	301-1	Total weight of the waste volumes used	Table of key figures (p. 58)	
Energy				
GRI 103: Management	103-1	Explanation of the material topic and its boundary	What guides us (p. 34)	
approach 2016	103-2	The management approach and its components	Efficiently managing resources (pp. 35–38)	
	103-3	Evaluation of the management approach	What guides us (p. 48)	
			Advancing environmental protection through innovative solutions (pp. 52–55)	
GRI 302: Energy 2016	302-1	Energy consumption within the organisation	Table of key figures (p. 59)	

Emissions			
GRI 103: Management approach 2016	103-1	Explanation of the material topic and its boundary	What guides us (p. 48)
	103-2	The management approach and its components	Advancing environmental protection through innovative solutions (pp. 52–55)
	103-3	Evaluation of the management approach	30t0tion3 (pp. 32-33)
GRI 305: Emissions 2016	305-1	Total volume of the direct CO₂ emissions (Scope 1)	Table of key figures (p. 59)
	305-2	Total volume of the indirect CO ₂ emissions (Scope 2)	Table of key figures (p. 59)
	305-7	Nitrogen oxides (NO _x), sulphur oxides (SO _x) and other significant air emissions	Table of key figures (p. 60)
Effluents and wa	ste		
GRI 103: Management	103-1	Explanation of the material topic and its boundary	What guides us (p. 34)
approach 2016	103-2	The management approach and its components	Efficiently managing resources (pp. 35–38)
	103-3	Evaluation of the management approach	Securing a successful future with sustainable innovations (pp. 39–41)
			Finding answers to global megatrends (pp. 42–45)
GRI 306: Effluents and waste 2016	306-2	Waste by type and disposal method	Table of key figures (p. 60)

Reference

Comment

GRI Standard		Disclosure	Reference	Comment
Environmental c	ompliance			
GRI 103: Management approach 2016	103-1	Explanation of the material topic and its boundary	What guides us (p. 48)	
	103-2	The management approach and its components	Advancing environmental protection through innovative solutions (pp. 52–55)	
	103-3	Evaluation of the management approach		
GRI 307: Environmental compliance 2016	307-1	Non-compliance with environmental laws and regulations	Table of key figures (p. 70)	
GRI 400: Social t	opics			
Employment				
GRI 103: Management approach 2016	103-1	Explanation of the material topic and its boundary	What guides us (p. 20)	
	103-2	The management approach and its components	Qualifying and empowering employees (pp. 24–27)	
	103-3	Evaluation of the management approach		
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	Table of key figures (pp. 63–64)	

GRI Standard		Disclosure	Reference	Comment
Occupational hea	alth and sa	afety		
GRI 103: Management approach 2016	103-1	Explanation of the material topic and its boundary	What guides us (p. 20) Qualifying and empowering employees (pp. 24–27)	
	103-2	The management approach and its components		
	103-3	Evaluation of the management approach		
GRI 403: Occupational health and safety 2016	403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	Table of key figures (pp. 68–69)	
Training and edu	cation			
GRI 103: Management approach 2016	103-1	Explanation of the material topic and its boundary	What guides us (p. 20) Qualifying and empowering employees (pp. 24–27)	
	103-2	The management approach and its components		
	103-3	Evaluation of the management approach		
GRI 404: Training and education 2016	404-1	Average hours of training per year per employee	Table of key figures (p. 67)	
	404-3	Percentage of employees receiving regular performance reviews	Table of key figures (p. 67)	

GRI Standard		Disclosure	Reference	Comment
Diversity and eq	ual opport	unity		
GRI 103: Management	103-1	Explanation of the material topic and its boundary	d its boundary Qualifying and empowering employees (np. 24–27)	
approach 2016	103-2	The management approach and its components		
	103-3	Evaluation of the management approach		
GRI 405: Diversity and equal opportunity 2016	405-1	Diversity of governance bodies and employees	Table of key figures (pp. 65–67)	
Non-discriminat	ion			
GRI 103: Management approach 2016	103-1	Explanation of the material topic and its boundary	What guides us (p. 20) Qualifying and empowering employees (pp. 24–27)	
	103-2	The management approach and its components		
	103-3	Evaluation of the management approach		
GRI 406: Non-discrimin- ation 2016	406-1	Incidents of discrimination and corrective actions taken	Table of key figures (p. 67)	

GRI Standard		Disclosure	Reference	Comment
Local communit	ies			
GRI 103: Management approach 2016	103-1	Explanation of the material topic and its boundary	What guides us (p. 20) Developing partnerships (pp. 28–31)	
	103-2	The management approach and its components		
	103-3	Evaluation of the management approach		
GRI 413: Local communities 2016	413-1	Sites with local community engagement, impact assessments and development programmes	Table of key figures (p. 70)	
Political influen	ce			
GRI 103: Management approach 2016	103-1	Explanation of the material topic and its boundary	What guides us (p. 20) Acting with integrity as the foundation of our business (pp. 21–23) Developing partnerships (pp. 28–31)	
	103-2	The management approach and its components		
	103-3	Evaluation of the management approach		
GRI 415: Political influence 2016	415-1	Political contributions	Table of key figures (p. 70)	

GRI Standard		Disclosure	Reference	Comment
Customer privac	y			
GRI 103: Management approach 2016	103-1	Explanation of the material topic and its boundary	What guides us (p. 20)	
	103-2	The management approach and its components	Acting with integrity as the foundation of our busines (pp. 21–23)	
	103-3	Evaluation of the management approach	(pp. LI L3)	
GRI 418: Customer privacy 2016	418-1	Complaints concerning customer data	Table of key figures (p. 71)	
Socioeconomic c	ompliance			
GRI 103: Management approach 2016	103-1	Explanation of the material topic and its boundary	What guides us (p. 20)	
	103-2	The management approach and its components	Acting with integrity as the foundation of our business (pp. 21–23)	
	103-3	Evaluation of the management approach	(pp. L1 L3)	
GRI 419: Socioeconomic compliance 2016	419-1	Fines and non-monetary sanctions	Table of key figures (p. 71)	

Membership of associations

GRI 102-13

EEW Energy from Waste is a member of various associations. Their bodies are platforms for the representation of interests at the political level and for various research areas.

BDE: The Federation of the German Waste, Water and Raw Materials Management Industry (BDE) was founded in 1961 as an association of the privately owned urbancleaning sector (VPS). Today, with 750 member companies of all sizes, BDE is the strongest interest group representing the private waste management, water and raw-materials management sectors in Germany and Europe and is committed to ensuring reliable framework conditions. The association has a cross-industry network of more than 500 experts, who in more than 30 working groups discuss current developments and work on solutions.

BDEW: The German Association of Energy and Water Industries (BDEW) represents the interests of its 1,800 municipally and privately owned member companies in the energy and water sector vis-à-vis policymakers, the expert community, the media and the public. It supports its member companies in all important political, legal, economic, technical and communication issues. BDEW is based in Berlin and has an office in Brussels which represents the interests and goals of the association at the European and international levels.

VKU: The German Association of Local Utilities (VKU) represents the interests of municipally owned utility and waste management entities in Germany. The 1,458 member companies in VKU are mainly active in the energy supply, water, wastewater, waste management and urban-cleaning segments. Since 1912 the Waste Management and City Cleaning (VKS) association had represented the interests of its members. In 2003 it merged with VKU.

ITAD: The Interest Group for Thermal Waste Treatment Plants in Germany (ITAD) pursues a host of different activities and objectives. It advocates on behalf of thermal waste treatment plant owners and operators in their relations with the public, policymakers, public authorities and other interest groups. ITAD supports research projects aimed at optimising thermal waste treatment and intensively engages in public relations in order to represent the advantages of thermal waste treatment as compared to other methods of waste disposal.

DGAW: The German Waste Management Association (DGAW) is made up of representatives of private and municipal waste management companies; politics; administration; science; plant and mechanical engineers, production engineers and operating companies; and citizens' initiatives. Beyond that, there is close collaboration with or mutual

membership of all important organisations in the raw-materials industry. DGAW offers its members independent and informative exchange of knowledge and know-how on the industry's various topics.

DWA: The German Association for Water, Wastewater and Waste (DWA) brings together various players from the worlds of business, research and local politics who are closely involved with water and waste. The nationally and internationally active technical and economic professional organisation has provided a wide variety of services for these industries since 1948. It offers a network for specialists and managers, supports scientific research, compiles relevant information in magazines, books and publications, contributes to standardisation work, acts as a political, economic and scientific advisor and promotes vocational and further training in the water and waste sectors.

DPP: The German Phosphorus Platform (DPP) consolidates the knowledge and experience of players from the relevant industries, from public and private organisations and from research and development facilities with the aim of establishing sustainable use of the valuable vital element phosphorus.

VIK: The roughly 300 members of the German Association of Industrial Energy Consumers

(VIK) are industrial and commercial operations that share a common interest: energy. The member companies account for around 80% of industrial energy consumption and approximately 90% of industrial captive-use power generation in Germany.

KRAFTWERKSSCHULE E.V. (KWS PowerTech

Training Centre): With its vocational and further training offerings, KWS offers its member firms and other energy companies the opportunity to provide, adapt and expand the occupational qualifications of their plant employees. The offerings include certificate courses, officially recognised training programmes, individually tailored and training measures as well as measures to reintegrate people into the workforce.

Independent Auditor's Limited Assurance Report

The assurance engagement performed by Ernst & Young (EY) relates exclusively to the German PDF version of the Sustainability Report 2018 of EEW Energy from Waste GmbH. The following text is a translation of the original German Independent Assurance Report.

To EEW Energy from Waste GmbH, Helmstedt

We have performed a limited assurance engagement on the disclosures marked with the symbol vin the Sustainability Report of EEW Energy from Waste GmbH for the reporting period from 1 January 2018 to 31 December 2018 (hereafter "report").

Our engagement exclusively relates to the information marked with the symbol \checkmark in the German PDF version of the report. Our engagement did not include any prospective disclosures or disclosures for prior years. The report is published as a PDF version at https://www.eew-energyfromwaste.com/en/service/information-material.html.

Management's responsibility

The legal representatives of EEW Energy from Waste GmbH are responsible for the preparation of the report in accordance with the Sustainability Reporting Standards of the Global Reporting Initiative (hereafter "GRI criteria") and for the selection of the information to be assessed.

This responsibility includes the selection and application of appropriate methods to prepare the report as well as making assumptions and

estimates related to individual disclosures, which are reasonable in the circumstances. Furthermore, the legal representatives are responsible for such internal controls that they have considered necessary to enable the preparation of a report that is free from material misstatement, whether due to fraud or error.

Auditor's declaration relating to independence and quality control

We are independent from the Company in accordance with the provisions under German commercial law and professional requirements, and we have fulfilled our other professional responsibilities in accordance with these requirements.

Our audit firm applies the national statutory regulations and professional pronouncements for quality control, in particular the by-laws regulating the rights and duties of Wirtschaftsprüfer and vereidigte Buchprüfer in the exercise of their profession [Berufssatzung für Wirtschaftsprüfer und vereidigte Buchprüfer] as well as the IDW Standard on Quality Control 1: Requirements for Quality Control in audit firms [IDW Qualitätssicherungsstandard 1: Anforderungen an die Qualitätssicherung in der Wirtschaftsprüferpraxis (IDW OS 1)].

Auditor's responsibility

Our responsibility is to express a limited assurance conclusion on the disclosures marked with the symbol \checkmark in the report

based on the assurance engagement we have performed.

We conducted our assurance engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): Assurance Engagements other than Audits or Reviews of Historical Financial Information, issued by the International Auditing and Assurance Standards Board (IAASB). This Standard requires that we plan and perform the assurance engagement to obtain limited assurance about whether the disclosures marked with the symbol \checkmark in the report of the Company have been prepared, in all material respects, in accordance with the GRI criteria. This does not mean that a separate conclusion is expressed on each disclosure marked. In a limited assurance engagement the assurance procedures are less in extent than for a reasonable assurance engagement and therefore a substantially lower level of assurance is obtained. The assurance procedures selected depend on the auditor's professional judgment.

Within the scope of our assurance engagement, which has been conducted between May and September 2019, we performed amongst others the following assurance and other procedures:

 Inquiries of employees concerning the sustainability strategy, sustainability principles and sustainability management of EEW Energy from Waste GmbH,

- Inquiries of employees responsible for the preparation of information marked with the symbol in the report in order to assess the sustainability reporting system, the data capture and compilation methods as well as internal controls to the extent relevant for the limited assurance engagement,
- Identification of likely risks of material misstatement in the report,
- Inspection of the relevant documentation of the systems and processes for compiling, analyzing and aggregating sustainability data in the reporting period and testing such documentation on a sample basis,
- Analytical measures at group level and on the level of selected sites regarding the quality of the reported data,
- Critical review of the draft report to assess plausibility and consistency with the information marked with the symbol <.

Assurance conclusion

Based on our assurance procedures performed and assurance evidence obtained, nothing has come to our attention that causes us to believe that the disclosures marked with the symbol in the report of the Company for the period from 1 January 2018 to 31 December 2018 have not been prepared, in all material respects, in accordance with the relevant GRI criteria.

Intended use of the assurance report

We issue this report on the basis of the engagement agreed with EEW Energy from Waste GmbH. The assurance engagement has been performed for the purposes of the Company and the report is solely intended to inform the Company as to the results of the assurance engagement and must not be used for purposes other than those intended. The report is not intended to provide third parties with support in making (financial) decisions.

Engagement terms and liability

The "General Engagement Terms for Wirtschaftsprüfer and Wirtschaftsprüfungsgesellschaften [German Public Auditors and Public Audit Firms]" dated 1 January 2017 are applicable to this engagement and also govern our relations with third parties in the context of this engagement (www.de.ev.com/generalengagement-terms). In addition, please refer to the liability provisions contained there in no. 9 and to the exclusion of liability towards third parties. We assume no responsibility, liability or other obligations towards third parties unless we have concluded a written agreement to the contrary with the respective third party or liability cannot effectively be precluded.

We make express reference to the fact that we do not update the assurance report to reflect events or circumstances arising after it was issued unless required to do so by law. It is the sole responsibility of anyone taking note of the result of our assurance engagement summarized in this assurance report to decide whether and in what way this result is useful or suitable for their purposes and to supplement, verify or update it by means of their own review procedures.

Munich, 3 December 2019

Ernst & Young GmbH
Wirtschaftsprüfungsgesellschaft

Nicole Richter, Wirtschaftsprüferin (German Public Auditor)

Hans-Georg Welz, Wirtschaftsprüfer (German Public Auditor)

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