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Energy from Waste

Sustainability Report 2021

Let’s talk about:tomorrow

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Everybody is talking about sustainability: we are working on it

GRI 102-14

How do we develop sustainable relationships? Which technologies do we need in order to achieve ambitious climate targets? How do we reduce CO_2 emissions? How can we protect valuable resources? As one of the leading European companies in the thermal utilisation of waste and sewage sludge, we consider it our responsibility to make an important contribution both to climate protection and to the strengthening of the circular economy. That is why we talk about tomorrow, initiate discussions and develop innovative technologies for a liveable future jointly with our partners.

These days, demonstrably sustainable action is a key economic success factor for companies. In 2021 we were able to successfully place a green bond of over 400 million euros on the capital market and have received clear feedback from investors that all of our business areas and the projects associated with them are contributing to climate protection and resource conservation and are therefore actively supporting the UN climate goals.

With the Taxonomy Regulation, an EU-wide classification system for ecologically sustainable economic activities has been created for the first time with the objective of expanding sustainable investments and supporting the implementation of the European Green Deal. We welcome the EU's initiative and will, jointly with industry associations, lobby for the inclusion of thermal waste utilisation in the taxonomy. Because that is not only necessary, but also the right thing to do.

Sustainability is part of our core business and therefore an integral part of our business strategy. In the context of our sustainability approach, we have defined three strategic subject areas and launched numerous projects in order to further expand our commitment to sustainability:

> We are developing ground-breaking **INNOVATIONS FOR THE FUTURE:** the environmentally friendly treatment of municipal sewage sludge makes it possible to recover the vital phosphorus contained therein. The maximum recycling of road construction waste containing tar returns raw materials that are becoming increasingly scarce, such as gravel, to a new use. In addition, we take advantage of the possibilities of digitalisation for our maintenance and process optimisation.

> We are committed to **STRENGTHENING THE CIRCULAR ECONOMY** by transforming the residues from waste treatment into important raw and valuable materials, further advancing the chemical recycling and reducing ammonia through the incineration of wastewater.

> Our responsible **APPROACH TO CLIMATE CHANGE** is characterised by the fact that we will, in future, be capturing CO_2. In doing so, we contribute towards reducing the greenhouse effect. Furthermore, we are reducing our climate impact by reducing our own energy demand and are aiming for a climate-neutral plant operation in the long term.

It is our clear objective to advance the sustainable development of our company, of our industry and of society. We consider this to be our duty. This applies both to the company as a whole as well as to us as the executive management in particular. It is up to us to align the business activities of EEW in such a way that they demonstrably and effectively contribute towards sustainable development.

Our descendants have a right to expect that we leave behind a healthy and liveable world for them. The enormous efforts required to protect the climate and resources can only be achieved if we take joint action, by working together and by quickly developing goal-oriented solutions. That is why we are committed to dialogue: in dialogue with our customers, business partners, politicians, media representatives, companies and the public, we find answers to the pressing questions of our time. Please share your ideas, questions and expectations with us openly and let us jointly shape the path to more sustainability. In short: let's talk about tomorrow.

Bernard M. Kemper
Chief Executive Officer (CEO)

Markus Hauck
Chief Financial Officer (CFO)

Dr Joachim Manns
Chief Operating Officer (COO)

EEW is leading the way
We are backing it up

Our world is undergoing profound change. With the great challenges of our time in mind, many leading companies consider it their responsibility to harmonise their economic success with social and ecological aspects. The objective is to provide a positive contribution to society and to the environment. With the growing awareness for health, prosperity, climate and resource protection, corporate commitment in the area of sustainability is becoming increasingly essential also from an economic perspective.

We, as Beijing Enterprises Holdings Limited (BEHL), care about the well-being of people as well as social and environmental progress. We attach great importance to the successful development of our shareholdings in harmony with the sustainable development of both society and the environment. As a result, sustainability is firmly anchored in our organisation and situated at the highest level.

In order to leverage synergies and accelerate our efforts in the area of sustainability, we established the Sustainable Development Committee in 2021. We welcome the fact that the CEO and Chairman of the EEW Board of Management, Mr Bernard M. Kemper, is also part of this newly created body. Because together with EEW, we rely on exchange and mutual learning.

In particular, we support an EEW lighthouse project to reduce CO_2 emissions. EEW will capture CO_2 in its own plants so that it can be used as a valuable material in the industry or permanently withdrawn from the atmosphere. This way, climate protection and economic success go hand in hand. And that is exactly the right path. Because we are convinced that companies can only be successful in the long term when economic, ecological and social objectives are given equal priority in their daily work. The discourse with all relevant stakeholder groups plays a decisive role in the sustainable development of a company. In dialogue, different perspectives are discussed, different interests are reconciled and that which is feasible is made possible. We achieve sustainable goals – together.

XIONG Bin
Chief Executive Officer
Beijing Enterprises Holdings Limited

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With the Sustainability Report 2021 we provide comprehensive information about our economically, environmentally and socially responsible conduct and about the socioeconomic impact of our business activities. We make our understanding of sustainability transparent and present our goals and measures. In doing so, we want to reach our internal and external stakeholders as well as interested members of the public. As a key communication medium, our sustainability report is published annually to provide transparent information about our progress in these activities.

Goals and content

In 2018 EEW Energy from Waste (EEW) completed an extensive process to strategically implement sustainability. The results of that process form the basis for this reporting. The primary focus is on:

> strategically deriving the material sustainability issues and areas of action

> establishing specific sustainability goals in the identified areas of action

> incorporating stakeholders' perspectives by ascertaining their views and expectations of our 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 subchapter within the three main chapters.

The three main chapters are bookended by the introductory chapter, "Anchoring sustainbility", and the concluding section of the report, "Facts and figures", which contains the key figures relevant to the report. Since 2020 we have also added a chapter on our EEW Art initiative to the report. This offers an opportunity for artists who engage with our company and its business operation in creative ways to present their work.

External review of the content

Selected content of EEW Energy from Waste GmbH's Sustainability Report 2021 was verified by the independent audit firm EY in accordance with the International Standard on Assurance Engagements (ISAE) 3000 Revised ("limited assurance"). The verified information is indicated accordingly using a ✓ in the text of the report as well as in the overview of key figures.

International standards and frameworks

We incorporate internationally recognised standards and frameworks in our sustainability reporting. Our focus is on the sustainability reporting standards (SRS) of the Global Reporting Initiative (GRI) – referred to as GRI Standards – as well as the United Nations Sustainable Development Goals (SDGs).

GRI sustainability reporting standards

The GRI Standards are designed to enhance the global comparability of non-financial information published by organisations in their corporate reporting. With the help of the GRI Standards, organisations can report on the relevant economic, environmental and social impacts associated with their own business activities. The published information enables various stakeholders to assess the sustainability performance of the reporting organisation and compare the performance of various organisations.

This report was prepared in accordance with the GRI Standards (Core option). For the sake of clarity, references to the GRI indicators are included underneath the headings in this report and apply to the text in the respective section. The corresponding GRI content index is separate from the Sustainability Report 2021. It can be downloaded from our company's website as an independent document.

The information provided relates to the 2021 financial year (1 January 2021 to 31 December 2021) of EEW Energy from Waste GmbH. Events or results from outside this reporting period and details which do not relate to EEW Energy from Waste GmbH are marked as such. The sustainability report is published in German and English. It is available as a hard copy and as a PDF which can be downloaded from the company's website.

Sustainable Development Goals (SDGs)

The Sustainable Development Goals (SDGs) are a key component of the 2030 Agenda for Sustainable Development, which was adopted by the member states of the United Nations in 2015. The SDGs are designed to lead to greater environmental and climate protection, prosperity, social justice, self-determination and peace around the world by 2030.

There are 17 SDGs containing a total of 169 targets. Analyses accompanying the materiality and strategy process show that our business activities particularly support seven SDGs and 15 associated targets (see pp. 8–9). We make a positive contribution in these areas. The fold-out section of the cover shows which SDGs these are. This fold-out design also allows the measures and projects marked in the report to be linked with the respective SDGs. The SDGs are indivisible and interdependent. Consequently, it is possible that a measure or a project contributes to the achievement of several SDGs at the same time. For reasons of clarity, we have therefore only marked the SDG on which we have the greatest influence in our business activities.

Our contribution to the SDGs
The triangular colour markings in the right margin show the respective SDGs. The mouseover mechanism also allows to assign the measures and projects marked in the report to the SDGs.

Our commitment to the Sustainable Development Goals

Our sustainability management is geared towards supporting the global 2030 Agenda for Sustainable Development and helping to achieve the 17 Sustainable Development Goals. Our analyses show that our business activities contribute towards seven of these SDGs and 15 of the associated targets. We make a considerable positive contribution in these areas.

SDG 5 | Gender equality

We constantly promote equality and equal opportunities for women and men within our workforce.

> **SDG 5.5** | We encourage our female staff in particular and actively support them in taking on managerial roles at our company.

> **SDG 5.c.** | We are not just dedicated to promoting gender equality: we have also set corresponding targets and embedded structures within our organisation.

SDG 4 | Quality education

We are tackling the challenges associated with the digital transformation, increasing technologisation and demographic change by providing high-quality vocational and further training.

> **SDG 4.3** | We ensure equal opportunities within our workforce by offering all employees the same opportunities to access high-quality vocational and further training.

> **SDG 4.4** | We encourage and train our employees to fill leadership positions and help our young performers in particular to develop in this connection.

SDG 7 | Affordable and clean energy

Our thermal treatment of waste generates energy which substitutes fossil fuels and helps to ensure a supply of affordable and more sustainable energy.

> **SDG 7.2** | We use the energy released by waste combustion to generate electricity, heat and process steam so that we can provide industry and households with energy from renewable sources.

> **SDG 7.3** | We regularly calculate energy usage at our sites so that we can identify energy savings potential and improve the energy efficiency of our internal operations.

SDG 9 | Industry, innovation and infrastructure

With innovative solutions, we contribute to environmentally sound waste management and supply climate-friendly energy.

> **SDG 9.4** | We constantly optimise our internal processes and plant operations and invest in developing sustainable services and environmentally friendly technologies.

> **SDG 9.5** | As part of our innovation management process, we continuously press ahead with our technological research and work with our partners to develop innovative solutions for our sector.

SDG 11 | Sustainable cities and communities

We offer local authorities and industrial companies reliable waste management and energy supply security.

> **SDG 11.6** | By treating waste inputs to a reliable standard of quality in accordance with all the relevant regulations, we reduce emissions which can harm both the environment and health. In doing so, we contribute towards a high quality of life in cities and communities.

SDG 12 | Responsible consumption and production

We play a key role in a sustainable circular economy with our thermal waste recovery.

> **SDG 12.2** | By producing energy from waste, we help to make sustainable and efficient use of natural resources.

> **SDG 12.4** | We treat waste inputs with the greatest care at our modern plants. By doing so, we ensure that our emissions do not have any negative effects on human health or the environment.

> **SDG 12.5** | We produce energy from waste which is not suitable for high-quality recycling. We are conducting research into solutions on both the input and output side which will enable us to close other loops and regain raw materials.

> **SDG 12.6** | We ensure transparency for our stakeholders by engaging in dialogue with them on a regular basis and publishing sustainability information periodically.

SDG 13 | Climate action

We want to achieve climate-neutral operations by 2030 and climate-positive plant operations by 2040.

> **SDG 13.2** | We have set ourselves the goal of operating in a climate-neutral fashion by 2030. To achieve this, we will develop and implement a climate road map in conjunction with our stakeholders.

> **SDG 13.3** | We raise our employees' awareness of climate protection so that we can achieve more together. We constantly expand our institutional capacities and capabilities for dealing with climate change and its consequences.

Jointly anchoring sustainability

Sustainable activity is of fundamental importance for our environment, for society and for the economy. In the transformation process from waste disposal to a circular economy, the waste management sector has made a significant contribution to achieving climate protection goals over the past two decades.

As one of the leading European companies in the thermal utilisation of waste and sewage sludge, we consider it our responsibility to strengthen the circular economy and to set an example in terms of sustainability. With our work, we create the basis for the recycling of valuable materials contained in residual waste and thereby promote the recovery of metals and substitute construction materials from incineration residues. We destroy and permanently eliminate hazardous pollutants, fall well below the legal emission limits in most cases and conserve primary energy resources. In the future, the valuable resource phosphorus will be recovered from the sewage sludge ashes of our sewage sludge mono-incineration plants and returned to the cycle. We develop innovative technologies in research cooperation that are designed to be sustainable and future-oriented.

We know that the challenges of our time are great. We can only master them together. In dialogue with our employees, customers, suppliers, politicians, businesses and scientists, we develop ideas and solutions for a sustainable future worth living in.

We are looking forward to the constructive exchange.

Let’s talk about:tomorrow

The EEW Executive Management, Bernard M. Kemper (CEO), Markus Hauck (CFO), and Dr Joachim Manns (COO), explain the importance of sustainable commitment at EEW and how the company actively promotes both climate protection and resource conservation as part of the circular economy. Please read what is motivating us.

“We are developing technologies that are of benefit to both our environment and society at large.”

Dr Joachim Manns | COO EEW

How do we become more and more sustainable?

Bernard M. Kemper | To set the scene, here are a few facts about our company first. We thermally utilise 4.7 to 4.8 million tonnes of waste per year from household collection or the commercial sector, which is usually already collected separately or reaches us after sorting. In other words, we only accept waste that can no longer be recycled, sorted or treated – a very important aspect. From this waste that can no longer be recycled, we produce energy. We convert it into electricity and supply district heating – thanks to the biogenic content of the utilised waste, this is also green energy. Ultimately, thermal utilisation also produces residual materials, to which we certainly do not turn a blind eye. Quite the opposite: we invest in research and seek sustainable solutions in dealing with them.

What is EEW doing for the circular economy?

Dr Joachim Manns | A good example of our commitment to resource conservation is the topic of phosphorus recycling. Groundwater is an increasingly valuable good that is becoming more and more scarce. The decades-long practice of using sewage sludge as fertiliser in agriculture has led to soil and groundwater pollution. With the thermal mono-incineration of sewage sludge, that problem has been solved. At the same time, we secure the vital resource of phosphorus with this method so that it is returned to the cycle again.

“Sustainability is a contract with the future. And firmly anchored in our organisation.”

Bernard M. Kemper | CEO EEW

Markus Hauck | In addition, we can make a big contribution towards closing climate-harmful landfills in Europe. At present, more than half of all waste in Europe still ends up in landfills. That’s irresponsible!

Dr Joachim Manns | At present, there are two major fields of activity: climate, CO_2 emissions and energy efficiency on the one hand, and the whole area of the circular economy on the other. We are the industry that interconnects these two fields of activity.

Bernard M. Kemper | And circular economy does not just mean accepting waste, utilising it thermally and generating energy from it; within this value creation chain, residual materials such as flue gases or CO_2 emissions are also generated. We are at the heart of climate policy and climate management. There, it is imperative to think about causalities, i.e. about cause and effect.

Dr Joachim Manns | After all, these are also the strategic goals we are striving for in the future. That is why we are looking at both the processes before and after incineration to see how we can further optimise them in terms of the climate and the circular economy.

The capital markets have understood. But when do politics react?

Markus Hauck | By now, it is also enormously important for the entire banking world to know our sustainability goals, to track them and to be able to reflect them in their committees when making lending decisions. The banks offer us better conditions when we fulfil certain criteria – the ESG criteria[1] from our sustainability report. This then opens up completely different possibilities for us. The capital markets have understood what we do and what contribution we are making to sustainable development. But politics, especially politics in Brussels, “taxonomy” is the keyword here, unfortunately are not at that stage yet.

Bernard M. Kemper | How do our employees see this?

Markus Hauck | I think our employees are engaging more and more with our sustainability goals and our contributions to sustainable development.

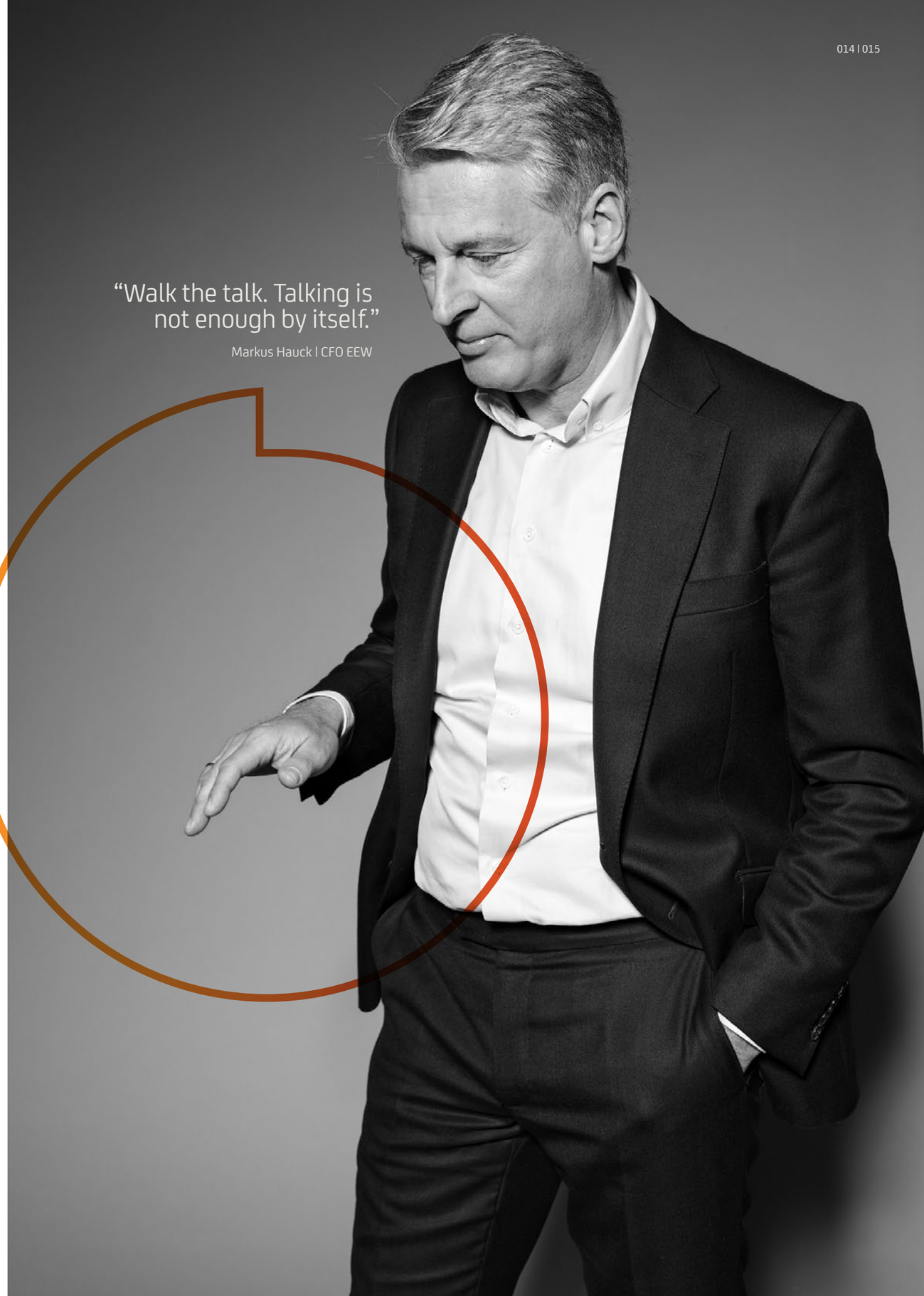
Dr Joachim Manns | I would put it even more strongly because I know that we now have a growing number of employees who are really excited to work on sustainability issues. And do it out of conviction. By now, one’s own contribution to sustainability has moved much more into the focus of one’s own perception. We also notice this in the fact that our sustainability report is more and more becoming the actual document in which we account for what we have done and what we are intending to do.

What changes do we bring about?

Bernard M. Kemper | People produce waste, both the industry as well as each and every individual. At present, we have hardly any influence on the input because it is supplied by many. But we have considerable influence on the output, i.e. in what form and to what extent emissions and residual materials are generated.

Markus Hauck | We have launched several research collaborations to strengthen the circular economy. We are, for example, working with TU Bergakademie Freiberg on turning our residues into valuable raw materials again.

[1] ESG: Environment-Social-Governance



“Our strategy is clear: we are doing significantly more for less environmental impact.”

Markus Hauck | CFO EEW

The future is created in dialogue.

Dr Joachim Manns | It is very important that we engage more in dialogue. Because what we are doing and how we are doing it is not sufficiently known. We have to talk about the fact that we are a very important part of the implementation of the circular economy and that we are also a very important part of the implementation of the energy transition and climate protection.

Markus Hauck | We will intensify this dialogue. And do so with all stakeholders. We have to ask everyone to join in – whether it is the municipalities, the employees, the banks or our suppliers. We need to push that dialogue and, at the end of the day, also make things happen.

Bernard M. Kemper | Let’s talk about tomorrow today. The seriousness to not only talk about things, but to also substantiate what has been said, is quite crucial. And that is exactly what we measure ourselves by. Both with this report and also going forward.

Click here to watch the video of the conversation about tomorrow.

Dr Joachim Manns | What is also pioneering is that we can and will capture CO_2 from our waste treatment plants and either store it permanently or make it usable. By looking at what waste is delivered to us and what can be made from it, we are not only influencing recycling at the end of the process, but already way before, i.e. in front of the bunker’s edge.

Bernard M. Kemper | And I am quite certain that we have the support of all the employees in our company in this. Because we combine performance and credibility. And that is the best way to address these topics.

Markus Hauck | “Walk the talk” is the motto with regard to legal provisions. This “Walk the talk” is also more and more becoming part of the reporting. As a result, a sustainability report now replaces brochures. But we, of course, agree that it takes more than a pretty publication. It is essential that we act according to our mindset and bring it into the company so that it becomes our DNA.

From waste to energy: our company portrait

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

EEW Energy from Waste (EEW) is one of Europe's leading companies in the thermal recovery of waste and sewage sludge. To use the energy contained in these resources sustainably, we develop, build and operate state-of-the-art recovery plants. We thus play a critical role in a closed-loop and sustainable circular economy.

EEW Energy from Waste:
leading in thermal waste treatment, groundbreaking in the recovery of sewage sludge and environmentally friendly when it comes to energy supply

In 2021 we operated 17 plants at 15 sites in Germany as well as one site in the Netherlands and one in Luxembourg. With a market share of around 16.1 per cent as measured by technical plant capacity (0.1 per cent up on the previous year), we are the market leader in Germany. As the only operator of an energy-from-waste (EfW) plant in Luxembourg, our market share there is 100 per cent. In the Netherlands, we currently account for 7 per cent of the market.

Our company is headquartered in Helmstedt, Germany. In the year under review, we employed a total of 1,217 people at our headquarters and our sites (reporting date: 31 December 2021). Every day, our team works to further develop energy from waste as an integral component of the energy and heat transition.

Our range of services focuses on:

> the thermal recovery of municipal and commercial waste and sewage sludge,

> the use of energy from waste to generate electricity, heat and steam,

> the safe disposal and utilization of residual materials and the recovery of raw materials, such as metals and phosphorus.

The combined annual recovery capacity at our 17 plants amounts to around 5 million tonnes of waste. By utilising the energy contained in this waste, we generate process steam for industrial plants, district heat for residential areas and eco-friendly electricity. The electricity produced alone is enough to supply 720,000 households for a year (based on an average consumption of 3,500 kilowatt-hours for a four-person household). As the waste contains approximately 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 recovery of energy from waste inputs at EEW's plants leads to a smaller carbon footprint because converting the energy contained in the waste into process steam, electricity and district heating substitutes the use of fossil fuels such as oil or natural gas.

As well as recovering energy as part of the thermal waste treatment process, we reclaim raw materials which can be used as recycled feedstock. The largest share is made up of the bottom ash generated by the combustion process. This can be used in road construction, for example, instead of primary materials like sand and gravel.

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 boiler ash and filter dust, which are both waste products from multi-level flue gas cleaning (see p. 91). State-of-the-art flue gas cleaning technology captures harmful substances from the flue gas and permanently removes them from the biosphere. Environmentally friendly uses of boiler ash and filter dust include filling in salt galleries during the stowing of underground mines.

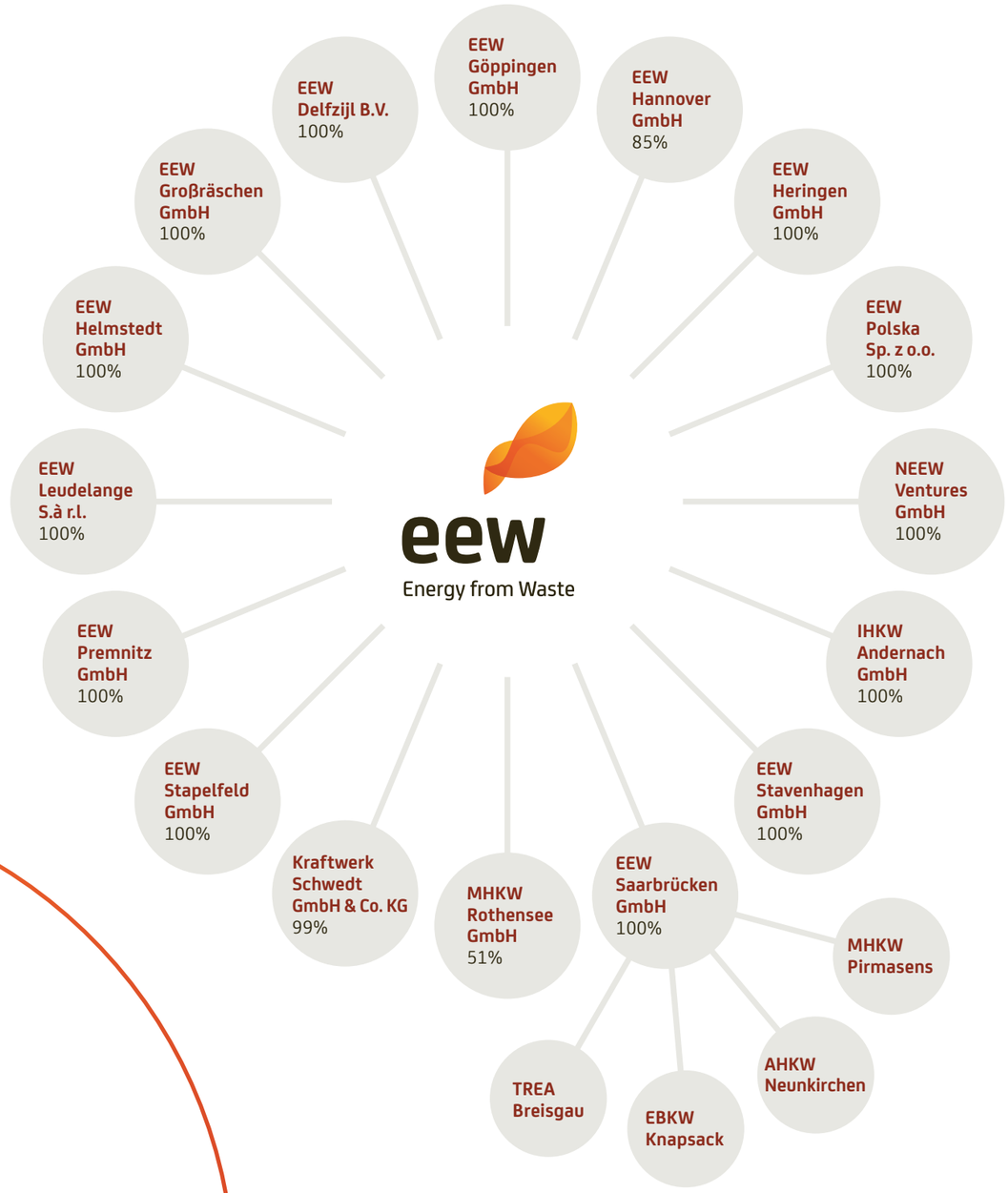
In connection with the amended German Sewage Sludge Ordinance (AbfKlärV), we also serve local authorities as a partner for thermal sewage sludge recovery. We are developing tailor-made solutions for the resource-efficient recovery of this waste product which is generated during wastewater treatment. Especially at existing EEW sites, these will result in productive synergies with existing waste recovery plants which we will utilise at our sites in Helmstedt, Magdeburg, Stapelfeld and Stavenhagen as well as the one in the Dutch city of Delfzijl.

With our present network of 17 energy-from-waste plants at 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 corporate structure

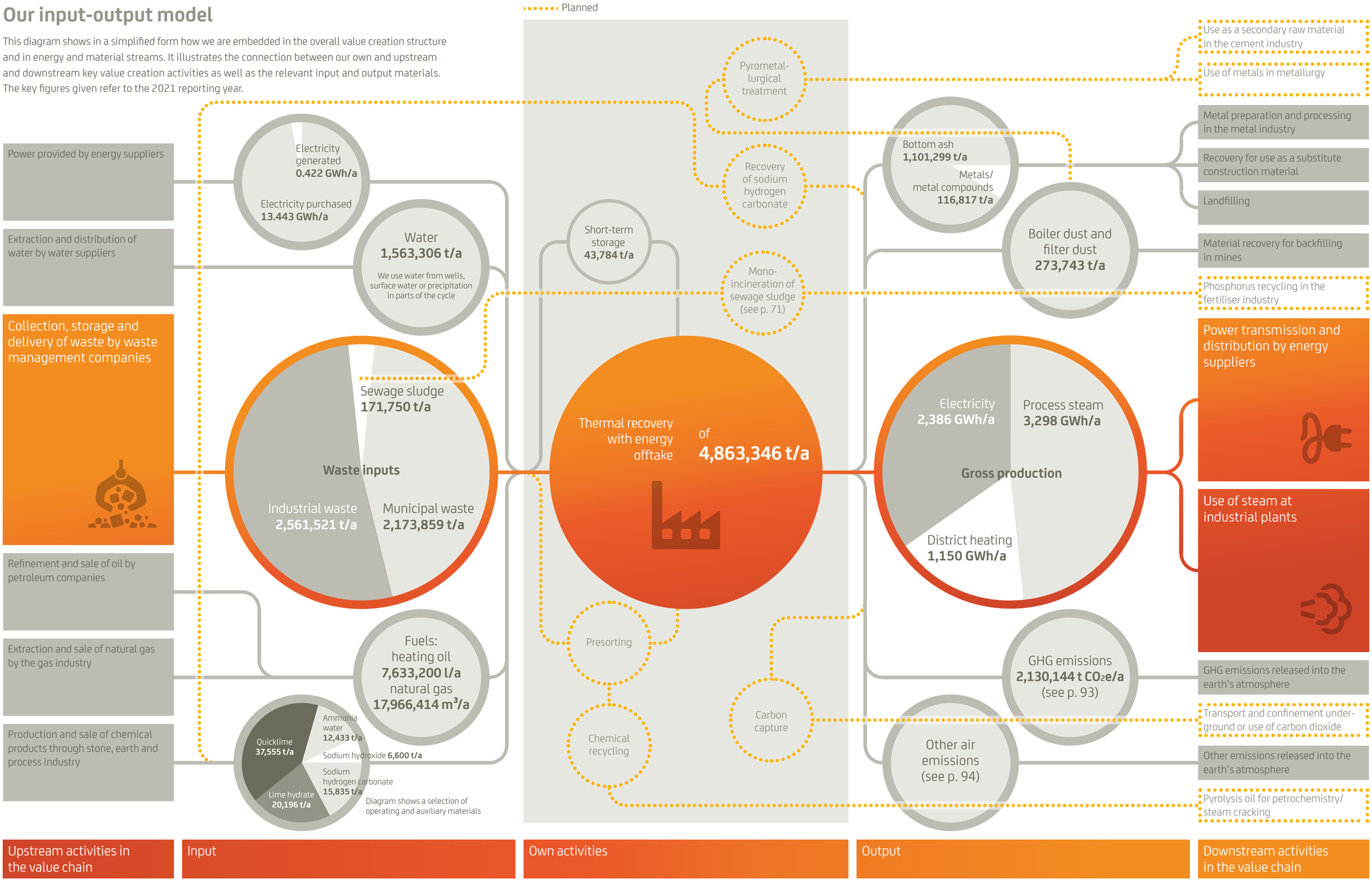
The EEW Group is led by the Board of Management of EEW Holding GmbH. EEW Holding GmbH possesses more than 99 per cent of the shares in EEW Energy from Waste GmbH, including indirect investments. Since 2016 the sole shareholder of the EEW Group has been Beijing Enterprises Holdings Limited (BEHL).

Our corporate structure



Our input-output model

This diagram shows in a simplified form how we are embedded in the overall value creation structure and in energy and material streams. It illustrates the connection between our own and upstream and downstream key value creation activities as well as the relevant input and output materials. The key figures given refer to the 2021 reporting year.



Our strategy: the umbrella for all sustainability activities

GRI 102-11 | 102-44 | 102-46 | 102-47

We launched the strategic implementation of sustainability at EEW in 2018. Our goals were 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 involvement 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 ascertain their views of our company as well as their concerns and potential challenges. Accordingly, we see stakeholder dialogue as essential to our long-term business success. As such, we also included stakeholders in the development of our sustainability strategy and sought out their external assessments (for instance as part of our materiality analysis).

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 forms the umbrella for all our sustainability activities. For the mandatory company-wide 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 deadlines for reaching 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”, from p. 28). By doing this, we ensure that the material topics are always the focus of our sustainable conduct.

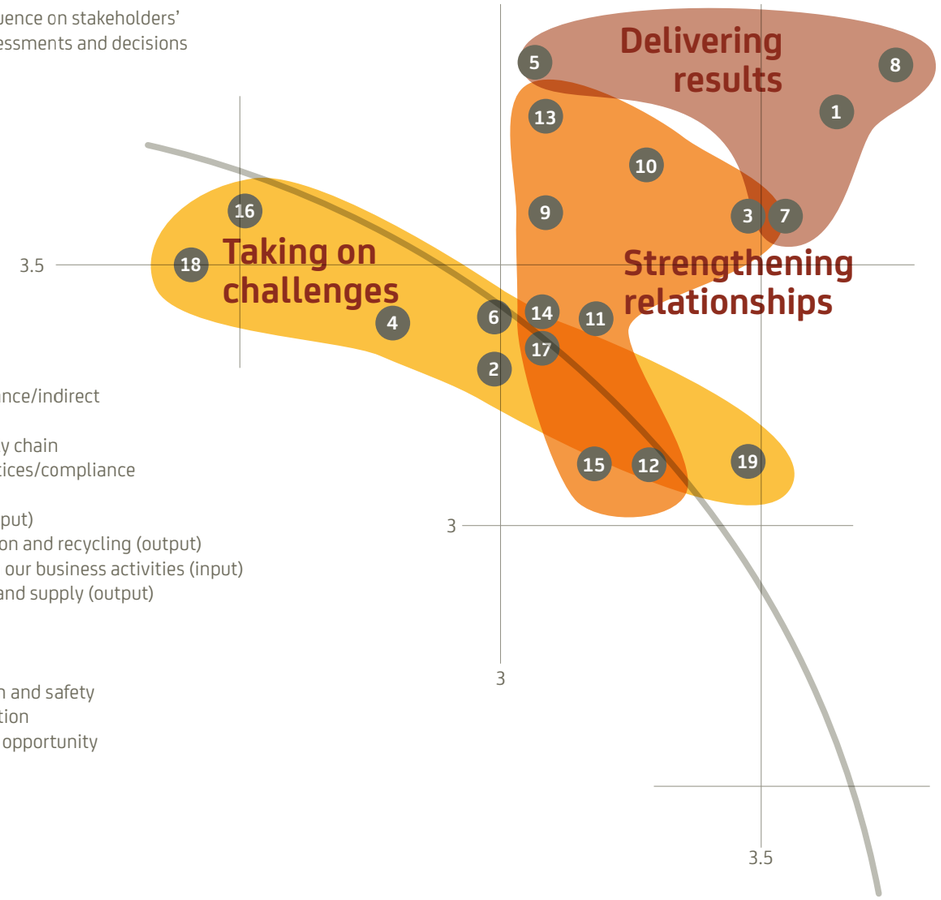
An extensive materiality analysis with stakeholder involvement formed a key part of our process for the strategic implementation of sustainability. By identifying key sustainability topics, we paved the way for focusing on the right areas in both our day-to-day work and our reporting. A detailed description of our 2018 materiality analysis – focusing in particular on the process – can be found in the EEW Sustainability Report 2018 on pages 12 and 13. This formed the basis for the materiality matrix shown on the next page. In 2022 we plan to scrutinise our existing key topics and conduct a new materiality analysis which takes into account the GRI Standards updated in October 2021.

We completed an internal strategy process in early 2021 for the strategic further development of sustainability at our company. This resulted in three strategic focus topics: “innovations for the future”, “strengthening the circular economy” and “dealing with climate change” (please also refer to page 21 of the EEW Sustainability Report 2020). As a first step, relevant measures and projects were assigned to the three strategic focus topics.

As the next step, clear action steps will be defined that will drive our company’s advances in these subject areas in the coming years.

In this report, we show in the introduction to each of the main chapters (“Strengthening relationships”, “Taking on challenges” and “Delivering results”) how we are already contributing to the strategic focus topics as well as which topics our company will focus on until 2025.

Our materiality analysis



Economy
1 Economic performance/indirect economic effects
2 Procurement/supply chain
3 Fair operating practices/compliance

Environment
4 Use of resources (input)
5 Resource reclamation and recycling (output)
6 Energy efficiency in our business activities (input)
7 Energy generation and supply (output)
8 Emissions (output)

Employees
9 Employment
10 Occupational health and safety
11 Training and education
12 Diversity and equal opportunity

Society
13 Customers
14 Local communities
15 Partnerships
16 Innovations

Global challenges
17 Dealing with climate change
18 Dealing with scarce resources
19 Dealing with the digital transformation

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

Based on the three areas of action derived from our materiality analysis (2018), we developed a road map with precisely defined goals. In doing so, we were also guided by the SDGs set out in the 2030 Agenda for Sustainable Development. 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. Deadlines were set for achieving these goals and which measures will be used to reach them. To ensure efficient steering, 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.

Our mission statement: the common thread of 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. Here you can find our sustainability mission statement in German:

One aspect of our understanding of corporate responsibility is that we make an important contribution to decarbonisation as part of a sustainable circular economy. 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.

> We see ourselves as an employer that offers its members of staff long-term job prospects, attractive continuing education opportunities and extensive occupational health and safety programmes.

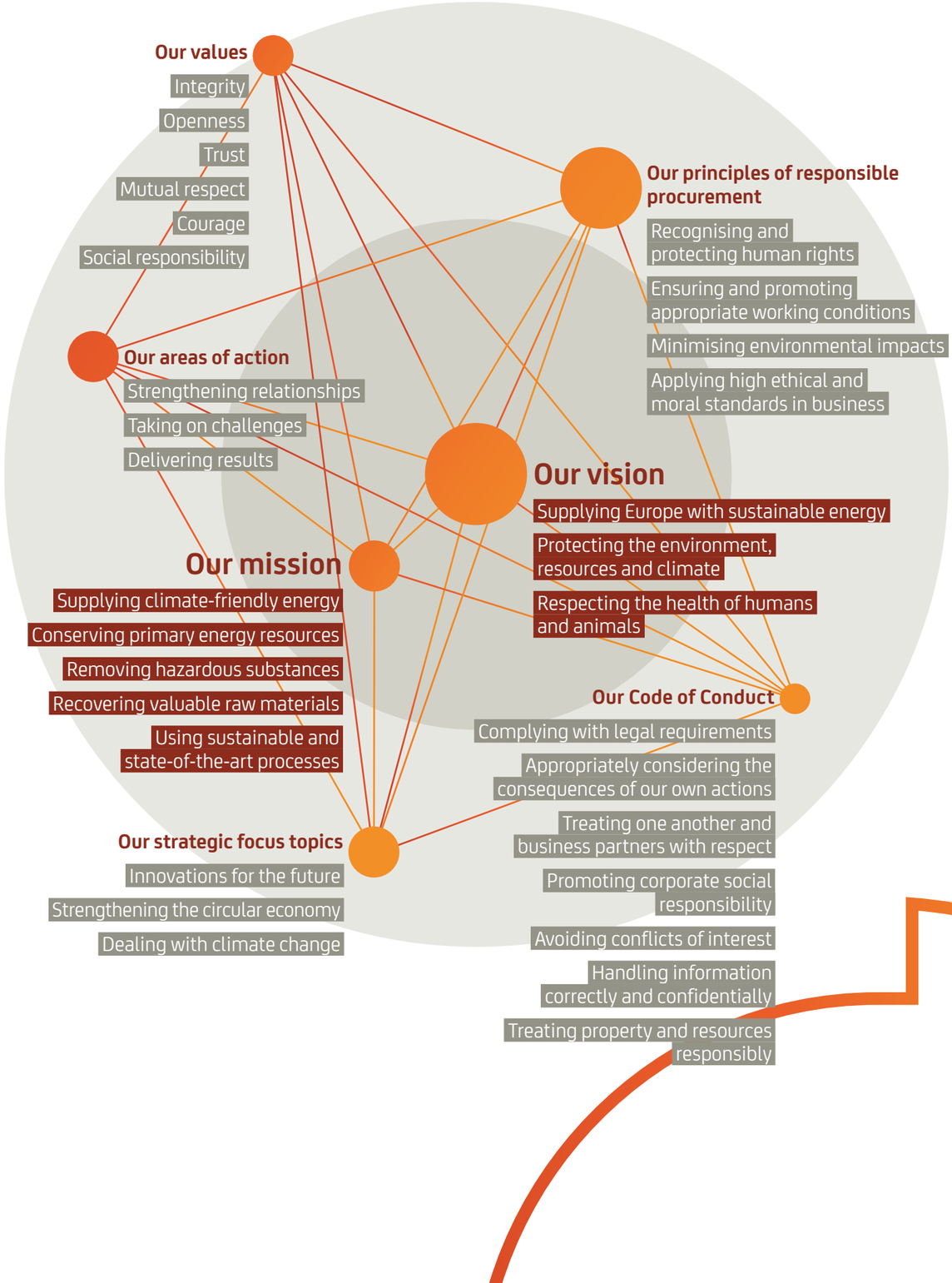
> We continuously work on increasing energy efficiency in our own processes, further reducing emissions, and using and recovering resources responsibly.

> We are an economically strong player embedded in local communities. To foster long-lasting partnerships, we strengthen regional infrastructure and promote cooperation with local suppliers.

> We engage in regular and open dialogue with all relevant stakeholder groups to take external expectations into account, 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 risks – especially those associated with our material topics – are effectively reduced. We have introduced important management systems at all our plants and administrative sites and had these externally certified. These include ISO 9001 (quality management), ISO 14001 (environmental management), ISO 50001 (energy management) and ISO 45001 (occupational health and safety management).



Effectively managing sustainability in the company

GRI 102-18

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

We therefore work continuously on establishing an efficient governance structure for company-wide sustainability management. Sustainability management is responsible for regularly evaluating the material topics, pursuing the goals and measuring our progress towards reaching our targets. Furthermore, the sustainability management team is in charge of the envisaged future implementation and realisation of ongoing 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

Since 2019 an internal steering committee has coordinated the company's sustainability activities. This central body is made up of one representative from each of the departments Chair, Finance and Technology as well as a member of the technical management team at 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.

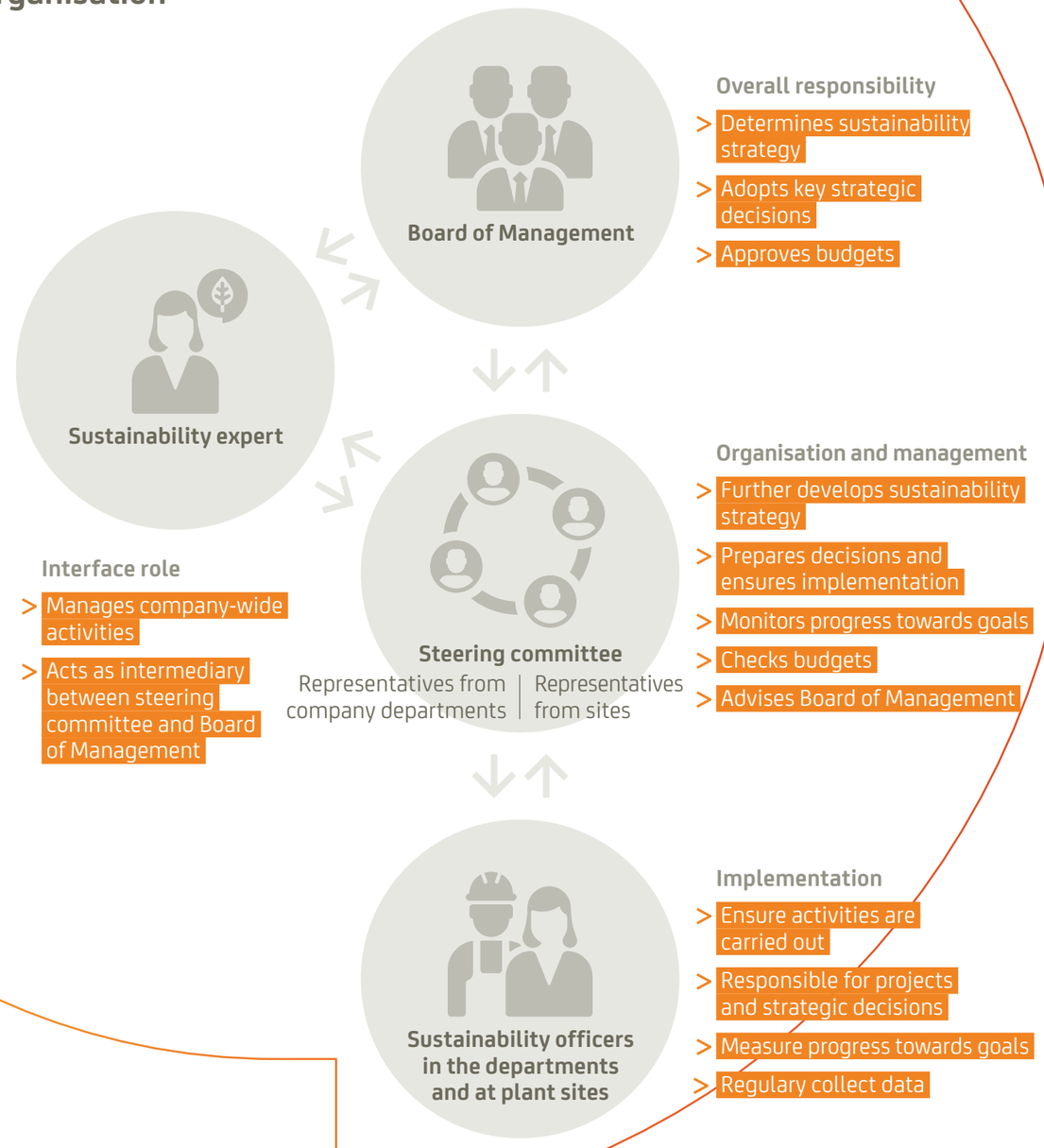
The Sustainability Officer is responsible for the company-wide management of sustainability activities and liaises between the steering committee and the Board of Management.

Implementation

To ensure the practical implementation of sustainability activities, sustainability officers are appointed within the departments and at the 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.

We also intend to introduce process instruction for our internal sustainability management, building on the established certified management systems in the areas of quality, the environment, energy, and occupational health and safety. Such a process description would set out all of the strategic and organisational decisions taken thus far and make them accessible to all employees.

Our sustainability organisation



Strengthening and expanding relationships

Sustainability goals cannot be achieved alone. It takes the discourse with business partners, the authorities, the economy, politics, science, the region's citizens and our employees in order to work out solutions and to make decisions that are supported by everybody.

Good business relationships and societal acceptance are the prerequisites for successful entrepreneurial activity. That is why we seek the exchange with all relevant stakeholders and cultivate our relationships, which often last for decades. We always strive for fair and trusting cooperation that is based on compliance with existing laws and on voluntary arrangements. In order to strengthen and expand our relationships, we demand this not only of ourselves, but also of our stakeholders. This is how the future is being created.

Let’s talk about: opportunities and the courage to pursue them

Our employees are the most important resource at EEW. In a conversation about sustainable human resources development, Jennifer Adermann (Team Lead Business Partner Controlling EEW) and Andreas Echternach (Head of Human Resources Management EEW) exchange views on how talent is individually promoted and commitment is demanded at EEW. They talk about important changes in the world of work and their own aspiration to provide committed employees with long-term prospects.

> “Trust is the basis for self-directed work.”
>
> Jennifer Adermann | Team Lead Business Partner Controlling EEW

How do we attract and retain the most competent people?

Andreas Echternach | So, Ms Adermann, how have the first 100 days in your new position been?

Jennifer Adermann | Definitely very interesting. I have to face new challenges and prove myself in new areas of responsibility. But I was accepted well – everything went quite smoothly.

Andreas Echternach | Let’s take a look back at your career. Back then, you started as a trainee in the dual study programme at EEW, correct?

Jennifer Adermann | Yes, I was one of the first at EEW to have the opportunity to do a dual course of study in business administration. My studies and apprenticeship ran in parallel for four years, and thanks to numerous internships I was able to really get to know the company from the ground up. In addition, I got the opportunity to work in England for three months as part of the dual course of study.

Andreas Echternach | During that time, there was a game-changing situation. Your boss at the time, the head of Controlling, came up to me and said: “We have to find a way for Ms Adermann to be able to study at our company and earn money at the same time. She shows so much potential and passion; we have to come up with something so that she doesn’t switch to another company.” So we created a construct especially for you, one where you worked during the non-lecture time and that way were able to earn money during your course of studies.

Jennifer Adermann | That’s exactly how it happened. I didn’t have to take out a student loan, stood on my own two feet financially, could concentrate on my studies and also gained important practical experience.

Andreas Echternach | That is my general aspiration in human resources. We don’t need to bring in experienced potential candidates from outside, but can rather promote and retain our own staff. “Cultivate the relationship with the employees and nurture them” – just like we did with you. We have to make sure that, right from the start, we promote and motivate people with potential so that their career takes place with us and their professional life with us remains interesting. I think a lot of people are not aware that human resource development has a lot to do with sustainability. We, the workforce, are an essential resource of our company. And sustainable practices mean nurturing the human resource, caring for it, and allowing it to grow and flourish accordingly.

Jennifer Adermann | There are really a lot of continuing training opportunities at EEW. But you also really have to bring your own initiative to take advantage of them.

> “There are not many women working in our industry. It is time for that to change.”
>
> Andreas Echternach | Head of Human Resources Management EEW

Quota woman? Women’s quota!

Andreas Echternach | I always say, “Make yourselves visible and stake your claim.” And that is exactly what you have done. Or did you have the feeling that you were favoured as the only female applicant when filling your new position?

Jennifer Adermann | No, nobody voiced that, and I don’t think my gender played a role either. I am convinced that my education and qualifications were the decisive factor.

Andreas Echternach | With your education and your commitment, you have already paved the way for your career. And let’s be clear about that: you didn’t get your position to satisfy some quota, but rather because you earned it. But the topic of the women’s quota is on our minds more than ever. We are looking specifically at how we can attract women to join EEW, are repositioning ourselves in employer branding and are active in social networks frequented by women. After all, a woman needs to know what opportunities are available with us.

“Hybrid working is the future.
For EEW as well.”

Jennifer Adermann | Team Lead Business Partner
Controlling EEW

“Our employees are our most important resource. We need to nurture them, care for them, and let them flourish.”

Andreas Echternach | Head of Human Resources Management EEW

Jennifer Adermann | As you say, a lot has happened in that regard. But there is still room for improvement.

How is our work environment changing?

Andreas Echternach | Do you have any new ideas for the work at EEW?

Jennifer Adermann | In my opinion, we already have very good working conditions and a high degree of flexibility at EEW. This enables me, as a manager, to grant my employees leeway. During the pandemic, for instance, in Controlling, we worked completely from home at times. That worked. Firstly because we were provided with the necessary technology, but also because we adapted to it. Not all staff were immediately happy about it, but ultimately it helped us move forward.

The main thing is that it works and that the work is done well. I am definitely in favour of continuing the hybrid form of working at EEW. This is also in view of the fact that it is our goal that more women take on responsibility and enter leadership positions. It's easy to comprehend that family and work can be combined better when you can save long commuting times to the workplace.

Andreas Echternach | How does that work in your team? Is working on-site necessary or is the communication via video conference sufficient?

Jennifer Adermann | We communicate a lot with the colleagues at the facility sites. In that respect, it was quite a change for some colleagues to pick up the phone more often or to arrange for video conference meetings instead of meeting in person at the facility. But that worked, too. I think when you know each other and are proactive in approaching others, there are no problems.

Andreas Echternach | We will definitely integrate working from home into our working concept even after the coronavirus pandemic. First, we want to find out, as part of a twelve-month pilot project, how well this works. Then we will see whether working from home will, for example, be limited to two days or whether a day-independent arrangement is also possible in the long term. I think that will be an important learning process for us.

Jennifer Adermann | That is good and important. For me, the decisive factor is having trust in the employees. That includes them working from home, if possible.

"At EEW, we have very good working conditions. But there is, of course, always room for improvement."

Jennifer Adermann | Team Lead Business Partner Controlling EEW

Andreas Echternach | Trust is a good keyword. Because giving employees leeway is always also a sign of appreciation.

Jennifer Adermann | A trusting relationship works when there is an open and honest exchange with each other. Once you have defined a direction as a team, it is, of course, necessary that everyone sticks to what has been agreed upon.

A trusting relationship requires dialogue.

Andreas Echternach | For us in the Human Resources Management, the exchange is also of enormous importance. We are open to ideas and suggestions for change in order to become better and better. If something is bothering you or you need something, do not hesitate to contact us. We will then together look at how something new can be realised.

Jennifer Adermann | I'll gladly accept that offer. We are, after all, currently working on how we can develop ourselves further as a business partner. And it definitely makes sense to do this hand in hand with the HR department. I am looking forward to the exchange.

"A career doesn't happen by itself. Make yourselves visible and stake a claim."

Andreas Echternach | Head of Human Resources Management EEW

Click here to watch the video of the conversation about: opportunities and the courage to pursue them.

Acting with integrity: the basis of our business

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

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 further strengthen EEW's trustworthiness.

The materiality analysis conducted in 2018 showed that this topic is particularly relevant when it comes to preserving integrity and protecting EEW from risks.

Fair operating practices/compliance

At EEW, our values, our corporate directives and the associated fixed rules form the foundation for acting with integrity and compliance. Our Code of Conduct lays down the overarching values which guide our behaviour: the free democratic basic order, human rights and fundamental rights. We aim to avert risks, for example through having established preventive measures to combat corruption and anticompetitive behaviour and through responsible data handling practices. We have an internal system of corporate values and compliance rules in place to ensure that human rights are upheld. Finally, we believe acting responsibly and with integrity also means transparently disclosing the influences that our business operations have on the environment and society. As a critical-infrastructure company, we also believe we have a responsibility to ensure that waste is recovered as prescribed by law.

We implement compliance throughout the company and thus in 2021 also created the framework for legally compliant conduct at all levels. 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. Furthermore, we mean to avoid immediate or direct consequences, such as losing public acceptance or the trust of our stakeholders and especially our business partners. We also aspire to protect ourselves from damage to our reputation, which would negatively impact the recruitment of skilled employees for our company, for example. Acting with integrity and in conformity with the law is also crucial for environmental and climate protection. For instance, cleansed flue gas from the combustion process is emitted at our plants and we produce residues which are recovered in accordance with the legal requirements. Any substantial breach of the permitted emission limits and/or illegal disposal of residues would represent a violation which would harm the environment and the climate. Such incidents would also be pursued by the relevant authorities. Furthermore, as a result, we would no longer be considered reliable as per public procurement law and would therefore run the risk of being excluded from public tenders. We counteract these risks with our compliance requirements.

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. This is based on our Code of Conduct, which is binding for all employees.

We also sensitise employees to recognise potentially improper conduct and report it via the appropriate channels, for example by using the whistle-blower hotline. Moreover, when employees are unsure about something, such as invitations or gifts, they can make specific enquiries to ensure they act in accordance with the rules.

Furthermore, we have set mechanisms to identify potentially undesirable developments in good time. With these, we focus in particular on areas involving third-party contact where there are the greatest potential risks. These are primarily sales and procurement as well as the service areas of energy management, IT and financial departments. Should any relevant incidents occur, these are promptly dealt with and resolved.

In the reporting period, one critical incident was uncovered which infringed the protection of non-smokers. The individual responsible for violating the rules received a warning. There were no significant fines or non-monetary penalties imposed on EEW in 2021 for non-compliance with existing laws and regulations. Moreover, there were no cases brought through dispute resolution procedures or settled via appropriate mechanisms.

An important basic instrument for meeting all national and EU-level statutory requirements is our internal compliance management system (CMS). It is applied across the company and contains responsibilities as well as steering mechanisms. The Board of Management has overall organisational responsibility for ensuring we conduct our business activities in compliance with the law. At divisional level, the respective department heads or site managers are responsible. They report to the Board of Management on compliance with both internal standards and legal requirements. This ensures that the Board of Management is informed immediately of any known violation of the statutory regulations and any case of corruption or anticompetitive behaviour. The Chief Compliance Officer coordinates all processes and tasks pertaining to compliance.

Our own compliance directive – our Code of Conduct – stipulates that compliance with all statutory requirements is mandatory. The Code sets out the overarching norms of behaviour and thus represents the main guidance for the conduct and decision-making of all employees at the company. The Code of Conduct applies to all employees at EEW companies. It is available in German and contains general conduct requirements as well as clear provisions on dealing with business partners, especially with regard to competition law and the prevention of cases of corruption. Moreover, the Code specifies how to deal with information and the company's property and resources. In addition, it contains rules on avoiding conflicts of interest. We incorporated new content into the Code of Conduct in the year under review. This included adding a section on corporate social responsibility to the conduct requirements which contains details of our values and the resulting obligations. A paragraph about lobbying was added to the information about dealing with business partners. This describes the obligation to comply with the corresponding rules. Additional information about the German Trade Secrets Protection Act (GeschGehG) was inserted in the section on the confidential treatment of information.

The implementation of the Code of Conduct at EEW is the responsibility of all employees, especially the managers and ultimately the Board of Management. Any violations are reported to the Chief Compliance Officer, who further investigates and reports to the Board of Management. Employees who notice a breach of the Code of Conduct are encouraged to inform their managers or the Chief Compliance Officer, either by telephone or in writing, with their name or anonymously. The Chief Compliance Officer investigates, evaluates and researches all tips. Violations of the Code of Conduct result in disciplinary measures, labour law sanctions and, if appropriate, further legal steps.

The Code of Conduct 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 health, safety, environment and quality (HSEQ) management system. All of these are summarised in the company policy. The company policy aims to facilitate ongoing performance improvements in the management of health and safety concerning work, the environment, quality and the use of energy. By defining role specifications, procedures and instructions for each management area, we want to achieve that processes within the company and relating to partner firms or other interested parties comply with the relevant legislation. This is also verified by means of internal and external audits.

We treat our stakeholders' data responsibly. Technical and organisational measures ensure the security of the personal data which we collect, store, process and disseminate. All of these measures are implemented by the IT department and by all relevant IT service providers. In addition, we observe the fundamental data protection principle of data minimisation. We also have an external data protection officer who is responsible for ensuring compliance with applicable data protection regulations. On request, this data protection officer can produce documentation showing that no justified complaints were made during the period under review concerning violations of data pertaining to employees, customers or other relevant stakeholders.

For us, respecting human rights is one of the foundations of lawful and responsible conduct, in accordance with Article 1 of the Basic Law for the Federal Republic of Germany. With this in mind, we are preparing to comply with the requirements of the German Supply Chain Due Diligence Act (LkSG) which will apply to EEW as of 2024. Our supplier code of conduct forms the basis for all relationships with suppliers and rests on principles including those set out in the United Nations Global Compact (UNGC). It contains explicit requirements to ensure that human rights are respected and the legal consequences of violations. If we learn of infringements of human rights by suppliers or customers, we terminate the contractual relationship or refrain from concluding any new contracts with those particular suppliers or customers. We are not aware of any human rights violations by suppliers or customers in 2021 so far.

Maintaining compliance: implemented measures and mechanisms

As a key element of good corporate management, compliance is a permanent task. Not only can laws and framework conditions change; we also want to achieve and continually uphold awareness of compliance among all EEW employees.

To support employees in complying with statutory regulations and in dealing with legal risks, we have established measures and instruments and review these regularly. Upon joining the company, all employees are made aware of lawful conduct via their employment contracts. Contracts with managers additionally contain individual contractual provisions relating to competition law. As part of our e-learning offerings, we also educate employees with respect to certain aspects of legally compliant conduct. In 2021, for example, more than 93 per cent of all employees underwent training on the topics of working hours, occupational health and safety, data protection and the German General Act on Equal Treatment (AGG). We aim to train all of our employees on certain aspects of legally compliant conduct. We succeeded in doing this at three of our sites in 2021.

Staff from departments which we have identified as being particularly relevant receive special training, for example on competition law and corruption prevention. These departments include Sales, Treasury and Procurement. The training focuses on how to deal with potential risks which apply especially to these departments but can have effects on the entire company.

Managers play an especially important role with regard to compliant behaviour. They are expected to act as role models by strictly adhering to the applicable rules and continuously conveying the importance of compliance to their employees. Moreover, they are instructed to keep an eye on the compliant conduct of their employees.

Staff members can report infringements of statutory regulations or internal rules anonymously 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. People from outside the company can report potential violations by telephone (+49 5351 18-0), email (info@eew-energyfromwaste.com) or letter. If a suspected rule violation is reported, various parties look into the matter. 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. For this reason, we are monitoring the latest legislative procedures and assess them in ongoing dialogue with authorities, political decision makers, and associations at national and European level. An overview of the legislation and regulations which are currently relevant for us can be found in figure "Selection of legislation and regulations which are relevant for us". Dialogue with the permitting authorities is primarily carried out by the sites, while political communication is increasingly being conducted at the overarching company level, but also at the plant sites at the local level. We regularly engage in these discussions, which are very important to us.

Selection of legislation and regulations which are relevant for us

Sewage Sludge Ordinance (AbfKlärV)	Ordinance on facilities for handling substances that are hazardous to water (AwSV)	Supply Chain Due Diligence Act (LkSG)	Directive 2010/75/EU on industrial emissions (IED)
Waste Water Ordinance (AbwV)	17th Ordinance on the Implementation of the Federal Immission Control Act (17. BImSchV)	Renewable Energy Sources Act (EEG)	42nd Ordinance on the Implementation of the Federal Immission Control Act (42. BImSchV)
Hazardous Substances Ordinance (GefStoffV)	Greenhouse Gas Emissions Trading Act (TEHG)	13th Ordinance on the Implementation of the Federal Immission Control Act (13. BImSchV)	Transparency Register and Financial Information Act (TraFinG)
44th Ordinance on the Implementation of the Federal Immission Control Act (44. BImSchV)	Fuel Emissions Trading Act (BEHG)		

Qualifying and empowering employees

GRI 103-1 | 103-2 | 103-3 | 403-1 | 403-2 | 403-3 | 403-4 | 403-5 | 403-6 | 403-7

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

In our materiality analysis (2018), we identified four central topics and corresponding goals which are particularly relevant for us as an employer.

Employment

We want to recruit and retain skilled employees by offering attractive working conditions. We want to keep our staff turnover rate low through a high level of employee satisfaction.

Vocational and further training

With systematic vocational training and employee development, we safeguard the quality of our services. We encourage talented employees and utilise modern working methods.

Occupational health and safety

We protect our own employees and partner companies' staff from workplace hazards and promote their health. We do this by raising their awareness of occupational health and safety and safety-conscious behaviour.

Diversity and equal opportunity

To promote diversity and achieve equal opportunity, we do not just comply with legal requirements such as those of the German General Act on Equal Treatment (AGG). We also want to establish an open corporate culture which is shaped by appreciation and mutual respect. In 2022 we plan to sign the Charta der Vielfalt (Diversity Charter).

Through our 2018 stakeholder survey and other means of dialogue with our relevant stakeholders, we have determined which current challenges are associated with our goals. These include, among other things, digitalisation and demographic change. We meet these challenges by exploring them intensively, taking them into account in our human resources strategy and further strengthening our measures accordingly. Following revision of the corporate strategy in 2019 we also used this in late 2020 as the foundation for redefining our human resources strategy in close coordination with the bodies representing employees. We presented this strategy to the Supervisory Board – whose members include staff representatives – and the Central Works Council. We started implementing our new human resources strategy and the resulting measures in 2021. The objectives are to preserve the high level of employee satisfaction, be a competitive employer, keep the fluctuation rate at a sustained low level and further minimise illness-related absences as well as overtime. Since 2021 the associated KPIs have been continuously collected and made available with the aid of a business analysis tool in the form of an HR report. As well as offering us an interactive visualisation, this allows us to evaluate and steer measures.

These steps derived from our human resources strategy also protect our company from economic, ecological and social risks. By, for example, instilling an understanding and awareness of occupational health and safety in our employees and staff from partner firms, we prevent accidents and thus protect their health and ensure freedom from bodily harm. This also prevents 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 with employees from other companies, we want to make sure that they comply with our high safety standards. We abide by the country-specific standards that apply at our sites in Germany, the Netherlands and Luxembourg.

Firmly embedded in the strategy: management, responsibilities, communication

To steer our management approach, we use various instruments within the company. To further strengthen our zero-accident strategy, we transitioned in 2020 from the occupational health and safety management standard OHSAS 18001 to ISO 45001. After obtaining matrix certification in 2020 we successfully completed certification again in 2021. In conjunction with this, several sites were certified. Selected sites will be audited in the following years, what matrix certification refers to. This system primarily serves to reduce accidents and minimise lost time. In addition to external certifications, our day-to-day work is guided by internal directives. These are binding for all employees and include guidelines on leadership and collaboration. This guidance sets out how we want to treat one another, communicate and behave within the company. It focuses on openness and honesty, constructive feedback, responsible behaviour, team spirit, courage and dialogue. Moreover, we endorse the principles of health management which were jointly developed with trade unions and the Central Works Council. These in turn form the basis for locally adopted agreements regarding, for example, flexible working hours.

What is more, we have implemented further directives and process instructions which apply to our policy on occupational health and safety; environment and quality policy; the development, introduction and continuous improvement of the integrated health, safety, environment and quality (HSEQ) 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. The release of water-polluting substances, unpleasant odours and fires, for example, can cause damage to equipment and interfere with operations at our plants. They also pose a risk for the environment. If an accident occurs at one of the plant sites despite all our prevention efforts, this is reported to the specialist Health, Safety & Quality (HSQ) department and to the internal controlling unit 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.

Responsibilities are clearly defined within our company. As a central function, the Human Resources Management department reports to the Chair of the Board of Management. It is made up of teams dedicated to business partners' human resources, staff development including vocational and further training, health management, and HR controlling/interface management. The overarching management of all topics relating to occupational health and safety and environmental protection is the responsibility of the HSQ department. This department reports to the Managing Director responsible for technology. It advises the respective 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 HSQ, the plant sites also have employees who are directly responsible for the implementation of corporate goals at operational level. These include trained safety specialists, technical administrators, environmental protection officers and other officers in the areas of waste, pollution control, water protection and hazardous materials. This means that topics relating to a specific facility can be handled in a decentralised fashion at the respective site.

Providing employees with comprehensive information is important to achieve that occupational health and safety is upheld at our plants every day. However, that is not all: it is also crucial to incorporate their experiences and input. At our company, this is done via employer-employee committees at all sites. The two most important bodies are the occupational health and safety committee at the company level and the committee for health, safety, the environment and quality at divisional level. Each committee represents 100 per cent of employees at that level. Moreover, employee interests at the individual sites are also represented at the occupational health and safety committee meetings that are held each quarter at all our sites. These committees also take the interests of employees and partner firms into account, but they are not directly involved. The quarterly meetings are attended by company representatives as well as health and safety officers, company doctors and occupational health physicians.

Pursuing goals: measures at the sites

For central topcis which are particularly relevant for us 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 HSQ department.

Employment

We create an attractive working environment for our employees to achieve a long-lasting commitment to our company. We offer a wide range of company benefits – including preventive healthcare – and allow flexible working-time models and remote working under works agreements. At many sites, we also have a cafeteria, subsidise public-transport tickets and contribute towards childcare 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 Human Resources Management department regularly engages in discussions with employee representatives. Moreover, we have committees for vocational and further training, demography and digitalisation and new technologies. In addition, there are meetings between the technical directors and works managers at our plant sites and the central Technology department as well as meetings of production managers and maintenance managers. We also use employee surveys to gauge the current mood and identify potential improvements. From these findings, we derive optimisation measures, such as programmes to further increase employer attractiveness. Since 2021 we have been presenting ourselves as an employer via a corporate profile on the social networks XING and LinkedIn.

To solicit and realise specific recommendations from employees, we have an internal idea management programme in place. It encourages employees to contribute ideas to, for example, improve the working environment, implement raw material and energy savings, optimise plants, increase occupational health and safety, and achieve greater customer satisfaction. In 2021 the outcomes included a strip lighting solution for large-scale construction sites developed by employees because conventional strip lighting cannot handle the tough conditions at an energy-from-waste plant. As well as saving time and money, this strip lighting makes work easier. Developed by a member of staff at one plant, this idea was also implemented at other sites within the Group. Idea management at EEW is regulated by a central works agreement on idea management, which was updated in 2019.

Vocational and further training

Guided by Personnel Development, employees from various sites, departments and hierarchy levels have developed a set of skills and values which together form the EEW competency model. This was rolled out, backed by corresponding measures, in the third quarter of 2021. Based on this model, we have developed and introduced a self-assessment test for staff to evaluate their own skills. With the results of this analysis we want to tailor employees' training to their individual needs. Establishing the competency model also put in place a fundamental framework providing guidance on values and training.

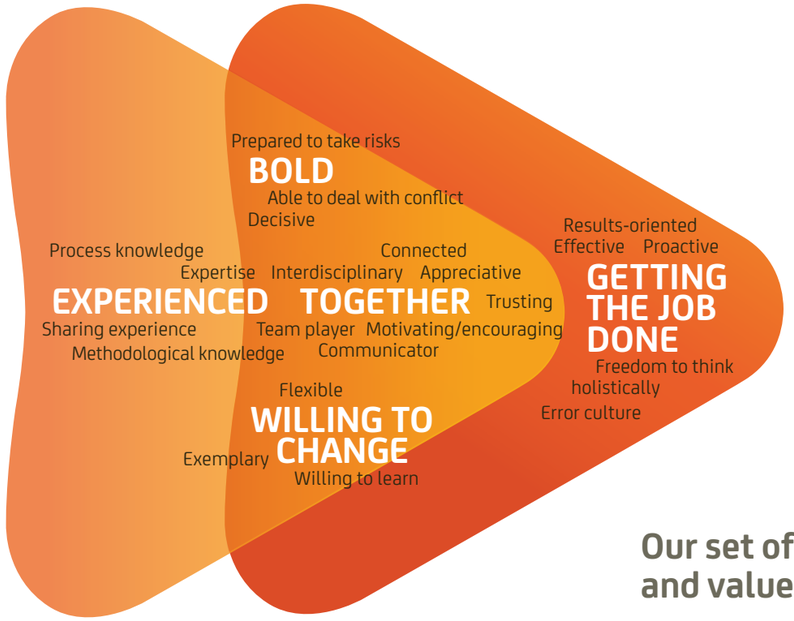
We have trained **73** apprentices in 7 professions. Of these, **19** successfully completed their training in 2021. **16** were taken on.

All managers also went through a 270-degree feedback process aimed at strengthening their skills. They receive feedback from the commercial and technical directors and plant, unit, department or team managers. Furthermore, all employees are given regular feedback during staff appraisals. Managers liaise with staff members to work out which aspects should be targeted with continuing professional development. On request, Personnel Development provides assistance. Our EEW qualification programme includes subject-specific offerings on topics like thermal waste recovery or labour law along with seminars and e-learning modules to aid personal development, such as self-management, communication or work-life balance.

We also offer company-wide vocational and further training at our training centre in Helmstedt. Our facility is therefore an important anchor in the regional training landscape which strengthens EEW's position as an attractive employer as well. This status was also confirmed by a commendation for "special services for vocational training in the final examination" which was awarded to us by the Braunschweig Chamber of Commerce in December 2021.

In 2022 we intend to introduce a talent management tool as a new instrument for steering succession planning for leadership and key positions. With this tool, we aim to always have an overview of the current training status of our employees, enhance their skills and develop potential as appropriate. We are particularly keen to train young employees to take on leadership positions, so that we will always be able to rely on our own skilled personnel. To create a pool of high-performing young employees, we have a programme at our headquarters to prepare trainees for their career.

We also have a development programme for talented young staff members with leadership potential. We intend to introduce additional customised programmes for future leadership positions at the master and shift manager levels. In addition, we have established a special development programme for young engineers in order to fill leadership positions left vacant.



Our set of skills and values

Occupational health and safety

Each of our sites is supervised by an occupational health physician. Moreover, we involve the occupational medicine service in the identification and elimination of hazards in the workplace. Staff at the various sites can contact the occupational health physicians directly. At our plant sites, it is extremely important to us to raise awareness of occupational health and safety intensively among our own staff as well as employees of partner firms. To do this, we implement a wide variety of measures which are mandatory for both employee groups. For example, we conduct basic training in occupational health and safety once a year. Mandatory safety inspections take place regularly and courses are held to train first-aiders. Flyers and our instructional film on occupational health and safety educate employees about potential hazards and show preventive measures. The film is available in 15 different languages. In the reporting year, we ran poster campaigns at our sites to highlight the danger of falling down stairs and to urge people to protect their hands. There is at least one safety specialist at each site. EEW has provided the safety experts with training and continuing education as required. The current training cycle for safety specialists was successfully completed in June 2021. In compliance with the applicable COVID-19 regulations, it was possible to provide practical training in classroom sessions. This helped to keep occupational health and safety at EEW at a high level.

Depending on the risk assessment for the particular workplace, we provide employees with personal protective equipment along with information material on how to use it. We complete risk assessments covering mental stress at all workplaces based on a central works agreement with a view to making ongoing improvements. These are evaluated by the local 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 health and safety measures is additionally important to prevent accidents. Employees can submit such tips at any time by contacting managers, Human Resources Management or the Works Council.

When selecting partner firms, we also take adherence to occupational health and safety standards into account. When work is carried out, compliance with the standards is monitored by our employees on-site. Once the work has been carried out, we evaluate the companies using a school-style grading system. If we consider awarding a subsequent contract, we can thus see immediately whether our standards were met.

Since 2013 we have presented our Safety Award as an additional incentive to prevent workplace accidents of all kinds. We present this each year to the plant site which has improved the most as regards various aspects of occupational health and safety based on an evaluation using a points system. In the year under review, the plant in Göppingen was commended for its occupational health and safety performance in 2020.

Occupational health promotion

A working environment that promotes and maintains health is the foundation for our employees' work, their performance and thus also for our company's success. Therefore, together with the Central Works Council, we have revised and renegotiated the central works agreement on the principles of health management. It has been in force since January 2021 and defines how health management is developed and implemented at EEW.

The health promotion measures and programmes are developed and implemented both centrally and at the individual sites. The Health Task Force is responsible for central health management. It is made up of the head of the HSQ department, the head of Human Resources Management, the coordinating occupational health physician, three representatives of the Central Works Council and the health coordinator. The Local Health Steering Committee is the body with oversight at the sites.

Based on the central works agreement, employees are offered, for example, flu vaccinations and colon cancer prevention. In the course of the COVID-19 pandemic, we added extensive company-wide coronavirus protection measures to our offering. As well as providing face masks and lateral flow tests for staff to use at home, we built up a vaccination programme including boosters. We also made it possible for employees to work remotely. By setting up a central crisis unit and local crisis teams and implementing emergency plans at all sites, we ensured that we can respond to the current situation flexibly.

In February 2022 we intend to sign the Luxembourg Declaration of the European Network for Workplace Health Promotion. This is based on the occupational health management concept, which serves as the starting point for various measures.

Diversity and equal opportunity

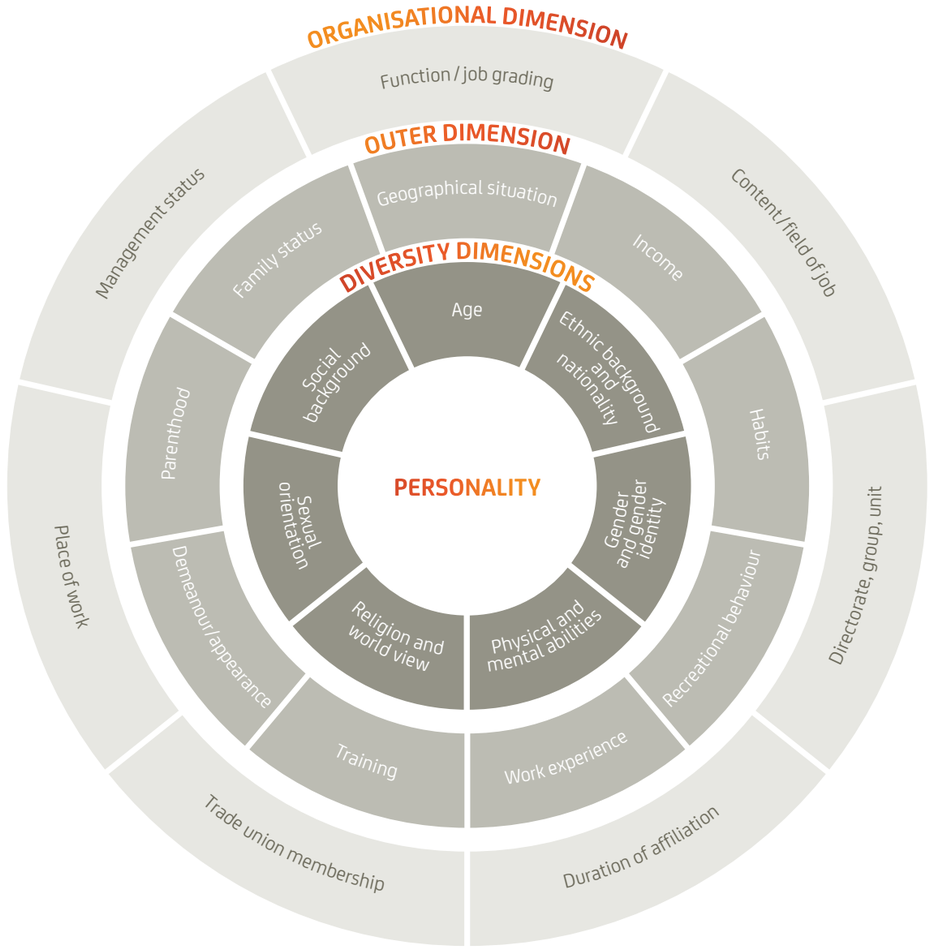
It is important to us that our working environment is characterised by integration, mutual appreciation and equal opportunities and that no form of discrimination or harassment is tolerated. We therefore prioritise the continuous promotion of gender equality within our workforce.

We have appointed an equal opportunities officer as per the German General Act on Equal Treatment (AGG) and consider it our duty to provide equal opportunities in all areas of our responsibility and to oppose and prevent any form of discrimination and harassment. If an employee feels they are being discriminated against, they can contact the equal opportunities officer to express their concerns. Each concern will be investigated. If there are reasonable grounds to believe that a violation of the prohibition of discrimination has occurred, appropriate and reasonable measures are taken, including warnings or transfers. Besides, a mandatory annual online training course informs all employees on the topics of respect, fairness and mutual respect.

Increasing the share of women to take up managerial positions is another key aspect of equal opportunities. For that reason, we have set ourselves the goal of increasing the absolute number of women in managerial positions from five in 2019 to ten by the end of 2023. To attract more female skilled workers to our company in the future, we have launched a programme which specifically aims to address women in connection with our recruitment activities. For instance, we work with women's networks and associations. We also specifically address women in our job advertisements. In connection with our talent management tool, we want to analyse the potential of existing female employees and involve them in a mentoring scheme. Six women held managerial positions in the year under review.

In 2022 we plan to sign the Charta der Vielfalt (Diversity Charter). After analysing the dimensions of the diversity circle, we will develop additional measures to foster recognition, appreciation and diversity even more strongly at our company.

Diversity Charter



Based on Gardenswartz and Rowe's FOUR LAYERS OF DIVERSITY

Developing partnerships

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Our plant operations and the associated transformation of the energy contained in waste into heat, electricity and steam have effects on the environment and affect 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, consumers, unions, political decision makers and the public. By interacting with these 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 trust in our business activities. Relevant, sometimes local stakeholders are regularly identified as part of strategy workshops and during the preparatory work for new projects and invited to engage in dialogue with us regularly.

As part of our materiality analysis (2018), we derived four material topics and the associated goals with respect to the involvement of our stakeholders.

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 the supplier's working and production conditions into account.

Customers

Solid and trusting customer relationships are an important foundation for our economic success. We openly communicate with our customers, maintain personal contact, transparently share information and take a solution-oriented approach to handling potential conflicts.

Local communities

At our sites, we are a strong partner of the regional economy. As part of the local communities, we take responsibility for the economic, social and environmental development in the area – by awarding contracts to local suppliers, providing long-term jobs and protecting the environment in the region.

Partnerships

We establish collaborations with research institutes and maintain existing partnerships, are active in various industry associations and engage in dialogue on the circular economy.

Our stakeholders see us as a reliable and fair partner. This is shown by the results of the 2018 stakeholder survey. In the view of stakeholders, we are an important player for the local economy and, especially in less economically developed regions, we contribute to regional structural change. It is also seen positively that we maintain long-standing partnerships and provide financial support to social projects in the vicinity of our plant sites. The Marketing & Communications department and local managers decide which projects to support with the aid of our Donation and Sponsorship Directive. Employees can suggest causes to donate funds to from our payroll giving scheme (see p. 55); the final decision is made by the Central Works Council.

Furthermore, stakeholders accredit us with 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 and energy sector. With regard to external communication, positive mention is made of our personal approach to stakeholders. However, survey respondents would like to see stronger public communication. As a leading company in the sector, we would like to ensure our external communications clearly present the advantages of thermal waste recovery for the environment and society in the future. The next systematic stakeholder survey is scheduled for 2022.

Strengthening relationships: expanding stakeholder management

With their visions, 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, as part of our materiality analysis in 2018 we carried out a stakeholder survey and began establishing systematic stakeholder management, which we want to further develop throughout the company. Our stakeholder management centres on the stakeholder engagement policy, which comes into effect in 2022. The various specialist departments are responsible for the involvement of stakeholders. The Board of Management is involved in critical decisions, e.g. concerning relationships with specific suppliers.

Suppliers

We work with our suppliers on the basis of clear standards and guidelines set out in the respective contracts. Our general procurement conditions apply to the procurement of external services such as purchase agreements, contracts for work, construction services, planning or expert opinions. The principles of responsible procurement are an integral element of tenders and all contracts. All business partners and suppliers are obligated to comply with these criteria and the relevant laws and regulations 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, we expect the supplier to take corrective action. We reserve the right to terminate contracts if suppliers cannot prove that they are complying with our principles. Currently, the rate of recognition by suppliers is 100 per cent.

We take a number of steps to ensure that employees of partner companies working at our sites comply with occupational health and safety, respect the environment, use energy efficiently and meet quality standards. Partner firms' employees are only allowed to work on-site if they submit a positive self-assessment on the topics of occupational health and safety and environmental protection. An induction video also familiarises suppliers with our occupational health and safety regulations. When a contract is awarded, only those contractors who have successfully completed an online test on safe working behaviour are allowed access to our plants. Both the candidate and the relevant managers at the sites are informed if the test is completed successfully. 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 system. This is based on the ISO standards for quality, the environment, energy, and occupational health and safety management as well as for the compliance management system. External parties can lodge complaints with our plant managers, procurement managers and technical managers on-site. Employees can express their concerns via a whistle-blower report relating to, for example, accounting, internal invoice control, and auditing or if they suspect infringements of the Code of Conduct. Staff also have the option of anonymously reporting suspected cases via a form on the intranet. In addition, they can write to or phone our Chief Compliance Officer, who investigates all suspected cases (see the chapter "Acting with integrity: the basis of our business", from p. 38). Throughout this process, the provisions of data protection legislation are complied with at all times.

Entering into dialogue: interactions with our stakeholders

Procurement/supply chain

We regularly review our working relationships with suppliers. In 2018 we set up an internal portal to record feedback whenever a delivery is made or a service is provided. Our employees use this portal to evaluate suppliers on the basis of quality, occupational health and safety, and environmental protection. The Technology and Procurement departments use this information for meetings with suppliers and contract award decisions, so that suitable responsible suppliers can be selected for projects. By the end of 2021 around 2,850 qualified supplier evaluations had been carried out in our system.

For new-build projects, a further important selection criterion comes into play, namely life cycle costing. The average life cycle for new-build projects is 25 years. In addition to investment costs, efficiency and consumption costs are crucial, in particular the consumption of operating resources, energy efficiency and the degree of effectiveness, which we calculate and assess in advance. In order to minimise the impact of our business activities on the environment, we also consider the local proximity of suppliers to our sites. As such, in 2021 the suppliers contracted for around 26 per cent of our procurement spending were based less than 50 kilometres from our respective site (with the exception of new-build projects). This local proximity means shorter delivery routes and lower greenhouse gas emissions.

Customers

Capacity utilisation at our EfW plants is largely dependent on waste deliveries from our customers. This waste mainly comes from municipal entities and commercial waste management firms. In isolated cases, consumers also dispose of refuse with us. We also serve customers from other countries, such as Italy, Great Britain, Ireland, Poland, Belgium and France, where insufficient or no recovery capacities are available. They export waste to our plants. However, following the severe flooding in North Rhine-Westphalia in 2021 we substantially reduced the volume of imported waste until the end of the year. This quickly freed up capacity, allowing us to process waste from the flooded areas because a large quantity of waste had to be cleared as quickly as possible. We received and processed approximately 50,000 tonnes of bulky waste from the flooded areas by the end of the year.

It is important to us that our customers are satisfied and want to continue working with us. To ensure this, we quantitatively and qualitatively measure customer satisfaction using surveys. The most recent survey took place in 2017. One of the key findings of this survey was the wish for a digital customer portal. In our view as well, such a tool offers benefits for everyone involved. After a concept development phase, in 2019 we started preparations for the launch of the portal, which was scheduled to take place that year. Due to internal reorganisation measures and the highly complex interfaces and processes, we postponed the start-up of the customer portal until mid-2022. A test phase was completed with selected customers in February and March 2022. Following the launch of the portal, we would like to carry out our next customer survey to solicit initial feedback and additional suggestions. Moreover, the Sales department receives valuable feedback during customer meetings. This is where we got the idea to launch partner dialogue events and hold these biennially. In 2019 we invited our customers to the first four events – in Kassel, Stuttgart, Hanover and Berlin – where we discussed selected topics. Due to the pandemic, we did not hold any partner dialogue events in 2021. However, we plan to reintroduce them in 2023.

Local communities

We engage in dialogue with local communities, provide support to society via donations and sponsorship, and strengthen trust in our business operations through transparent communication. Moreover, we offer individual plant tours and a look behind the scenes at our plants.

When development projects at our sites are planned, we involve the public as early as possible. We are currently pursuing new-build projects at our Helmstedt, Stapelfeld, Magdeburg, Stavenhagen and Delfzijl sites. Licensing procedures are also under way relating to pollution control in Großräschen and Heringen.

In Stapelfeld, EEW is planning a new facility to replace the existing energy-from-waste (EfW) plant as well as a new sewage sludge mono-incineration plant. These new construction projects aim to secure waste recovery capacity and energy supply in the region while offering solutions to implementing the new legal framework for sustainable sewage sludge recovery. To this end, the Magdeburg site will be expanded to add an EfW line with integrated sewage sludge mono-incineration. More information about the construction project in Stapelfeld can be found here in German:

In Stavenhagen, we laid the foundations for a sewage sludge mono-incineration plant in November 2021. After receiving approval to build the plant in 2021 we initiated a neighbourhood dialogue process in October 2021 concerning the further development of the Stavenhagen site. Our aim was – and remains – to provide local people with comprehensive and transparent information about the project's progress, answer questions and engage in dialogue. As part of this, residents were invited to find out about emergency management procedures at the substitute fuel plant and gain an insight into the process of flue gas cleaning and emissions monitoring. We also set up the website www.energie-zukunft-stavenhagen.de, which we use to provide updates on the Stavenhagen sewage sludge mono-incineration plant project. The next neighbourhood dialogue is scheduled for mid-2022 along with an open day. During the licensing procedure, we started providing comprehensive information about the construction project to policymakers, the media and the general public. The website can be found here in German:

Commercial operations at another thermal recovery plant for sewage sludge in Helmstedt, Lower Saxony, are due to commence in 2022. Following the insolvency of the main contractor in 2021 we decided to finish building this mono-incineration plant ourselves. The original start-up date was pushed back as a result. More information about the construction project in Helmstedt can be found here in German:

We plan to build a new mono-incineration plant for sewage sludge in the Dutch city of Delfzijl as well.

In Großräschen and Heringen, we are modifying our plant permits to suit new market requirements as part of licensing procedures with public involvement. In light of the COVID-19 pandemic, we debuted the use of online consultation for the project in Heringen and were thus able to enter into dialogue with policymakers, the media and the public regarding our plans. This instrument has since become an established component of the EEW Group's communications toolbox.

For our active and transparent public relations work, we use this set of instruments which each project team can deploy to customise its approach to the various target groups. For the construction projects, for instance, dedicated websites are available that contain key information about the project and integrate real-time images. Such sites have been created for the projects in Helmstedt and Stapelfeld: www.energie-zukunft-stapelfeld.de and www.energie-zukunft-helmstedt.de (available only in German).

In Premnitz, we successfully completed our replacement investment project in April 2021 and put the second line at the grate combustion plant into operation. During the construction work, we provided the public with transparent information about our plans and involved them in a decision on the plant's design. Residents were able to vote on which artwork should decorate the exterior walls at the top of the EfW plant's bunker, an area covering more than 2,000 square metres. In May 2020 the Premnitz-based facade artist Marco Brzozowski started work on the largest painting in Brandenburg. After 186 days of working on the project, he single-handedly completed the "Havelspaziergang" mural, which celebrates Premnitz's 100 plus years as a site of industry and links it with Westhavelland Nature Park. More information about the construction project in Premnitz can be found here in German:

With our corporate social responsibility activities at our sites, we want to contribute to local residents' quality of life. One way of doing this is with our payroll giving initiative, which enables our employees to round their monthly salary down to the nearest whole euro and donate the cents to charity. The funds raised are given to local organisations and initiatives. In the year under review, for instance, staff from Knapsack plant donated €2,450 to the Hürther Tafel food bank. In Göppingen, €2,450 went to the children's charity Aktion Rückenwind, which helps low-income families and their children.

At Christmas, we also launched the EEW wish tree campaign. With the help of our employees, we were able to make 265 wishes submitted by 19 locally active organisations come true. Those chosen focus on protecting and supporting disadvantaged children.

Partnerships

Across sites, we interact with policymakers, in industry and specialist associations and through cooperative partnerships with research facilities, such as Technische Universität Braunschweig. We invite policymakers and other stakeholders to parliamentary evenings in Berlin or plant visits and, furthermore, take part in various political events at the state, national and EU level.

Since autumn 2018 we have been hosting the Dialogforum.Zukunft event series at irregular intervals. We have thus established a platform in Berlin where we can regularly meet with representatives from politics, science and business to discuss current topics relating to the circular economy. With this dialogue forum, we want to contribute to a better understanding of efficient and sustainable intermeshing of the environment, economy and society. Owing to the COVID-19 pandemic, Dialogforum.Zukunft could not take place in 2021. We plan to relaunch the event series in the first half of 2022.

Steps on the way to our sustainability goals

Acting with integrity: the basis of our business
Ongoing target

Ensure compliance

> Regularly conduct role-related compliance training sessions for relevant departments and staff (in implementation phase)

> Regularly conduct e-learning sessions on compliance for particularly relevant departments and staff (in implementation phase)

Qualifying and empowering employees
Target for 2023

Increase the absolute number of women in managerial positions

(from five women in 2019 to ten women by the end of 2023 – only applies to EEW Energy from Waste GmbH)

> Targeted mentoring programme (in preparation phase)

> Analyse potential using talent management tool in connection with annual succession planning (in preparation phase)

> Design attractive and modern job advertisements that appeal to the target group, e.g. with photos of women in technical settings (in preparation phase)

Acting with integrity: the basis of our business
Target for 2022

Include the top 20 suppliers or customers

> Establish an internal portal for qualified evaluations of suppliers (in implementation phase)

> Regular customer contact, e.g. via dialogue at events, surveys and incorporating key accounts into the launch of the customer portal (in implementation phase)

Qualifying and empowering employees
Ongoing target

Promote talented young employees throughout the company and prepare them for future leadership positions

> Encourage participation in the “Leadership Passport” programme for acting and potential managers (in implementation phase)

> Run the “Master Passport” programme for the master and shift manager levels

> Develop “Skill Builder” (in preparation phase)

> Talent management tool for succession planning and development (in preparation phase)

Developing partnerships
Target for 2022

Systematise stakeholder management

> Develop a company-wide policy on stakeholder management (in preparation phase)

The dialogue with our stakeholders has changed significantly as a result of the COVID-19 pandemic. In addition, current legislative developments such as the BAT requirements affect our communications. The associated questions impact on the process of systematising our stakeholder management. As a result, we have adjusted the time frame for this operational target.

Developing partnerships
Ongoing target

Increase customer satisfaction and loyalty

> Regularly assess customer satisfaction via a customer satisfaction survey (next survey planned for 2022)

> Introduce a customer portal (in test phase)

> Regular customer events (next events planned for 2022)

Attainment status in the 2021 reporting year

 partially fulfilled

 largely fulfilled

 completely fulfilled

Taking on challenges and shaping the future

The challenges in climate protection and resource conservation are immense. We, as one of the leading players in the field of thermal utilisation of waste and sewage sludge, are facing up to these challenges and, in exchange with customers, municipalities, industry and science, are developing new technologies that minimise our ecological footprint and strengthen the circular economy.

Despite the continuing COVID-19 pandemic, we have also managed to further expand our commitment to sustainability in 2021. We have launched ground-breaking research collaborations and implemented innovative projects. In doing so, we are always in dialogue about tomorrow and are already today developing new ideas for tomorrow. In order to master the challenges ahead of us, we are focusing, in particular, on two areas of strategic emphasis:

We are developing pioneering **innovations for the future** that ensure the environmentally compatible recycling of municipal sewage sludges and guarantee the maximum recycling of road construction waste containing tar. Furthermore, we take advantage of the possibilities of digitalisation to maintain our locations more efficiently and to continuously optimise our processes.

We are committed to **strengthening the circular economy**[1] by transforming residues from waste treatment into important raw materials and valuable substances, further advancing chemical recycling, and reducing ammonia through wastewater incineration.

In the following, you will learn more about specific projects, facts and figures as well as sustainable innovations that turn challenges into opportunities and solutions for the future.

[1] For further measures to strengthen the circular economy, see the chapter “delivering results”.

Let’s talk about: the cycle of things

With the objective of converting flue gas cleaning residues, i.e. the residues from the thermal utilisation of waste, into valuable secondary raw materials, we launched a research cooperation with the Institute for Non-Ferrous Metallurgy and High Purity Materials (INEMET) and the Chair of Building Chemistry and Construction Composite Materials at the TU Bergakademie Freiberg in 2021. In an interview, Prof. Alexandros Charitos (Director of INEMET) and Sebastian Heinemann (Senior Manager Corporate Development EEW) explain the high relevance of the project as well as the target-oriented research activities.

How can we turn residues into raw materials again?

Sebastian Heinemann | As in many leading companies, sustainability is also a focal point at EEW. That is why we have launched numerous research projects. At present, the most important one is a project for the recycling of residues. The central question, with which we approached the TU Bergakademie Freiberg, was: how can we turn the residues from thermal waste treatment into valuable raw materials again? The task was to jointly develop a concept and process that would ultimately recover precisely those substances that are being landfilled to date.

Prof. Alexandros Charitos | We are very pleased to have been awarded the contract and are looking forward to developing solutions jointly with you that will take us forward sustainably. As researchers, we see chemical elements in these residues that we extract so that they can be used again in the cement industry, the metal industry and the chemical industry. The crucial thing about this is that this project is not just a pipe dream, but rather research that will lead to implementation.

Sebastian Heinemann | Would you mind explaining your approach to us? How did you approach the subject?

Prof. Alexandros Charitos | At first, we analysed the residues chemically and saw that they contained calcium, silicate, sulphur and chlorine. As a researcher, it immediately comes to mind to make a calcium aluminium silicate phase out of it that is free of sulphur and chlorine. And then you ask yourself the question: how do I achieve that? Maybe through a combination of hydrometallurgical and pyrometallurgical processes? In water, we can dissolve and remove the chlorides, and in fire,

“No one can master the challenges in climate protection and resource conservation by themselves. For that, you need an excellent team.”

Sebastian Heinemann | Senior Manager Corporate Development EEW

“We have to rethink tomorrow.”

Prof. Alexandros Charitos | Director of INEMET

“We want to get to market quickly with our process. Because it is important to strengthen the circular economy now.”

Sebastian Heinemann | Senior Manager Corporate Development EEW

i.e. in pyrometallurgy, we can decompose the sulphates. Following this logic, you then say, okay, out of sulphur I make sulphuric acid, a very important chemical for the fertiliser industry. From chlorine, I will try to make hydrochloric acid or important salts like calcium chloride. And the remaining calcium aluminium silicate phase is a wonderful raw material for the production of cement, through the use of which CO_2 emissions can be saved in cement production. This creates a multi-win-win situation – both for the environment and for companies.

The project is picking up speed.
With enthusiasm and a high level of commitment.

Sebastian Heinemann | How do you assess the development of the project?

Prof. Alexandros Charitos | Our simulations and preliminary tests show that we are on a very good track. We have become more and more excited about this project and its applicability. The very good course of the project is, of course, also due to the great cooperation with EEW. Each month, we are looking forward to the joint project meetings. In the exchange with you, we learn a lot about the dusts and can build on this with our ideas. I have to say that is really fun!

Sebastian Heinemann | This enthusiasm and the high level of commitment in your team can also be clearly felt. The very pleasant and constructive atmosphere in our coordination meetings shows that everyone is 100 per cent on board.

Prof. Alexandros Charitos | The project is led by two scientific staff members from different areas of specialisation. Mr Gabriel Braga Clemente Carneiro is employed with us at the Institute of Non-Ferrous Metallurgy and High Purity Materials. The second one in the team, Ms Sandra Waida, works at the Institute of Ceramics, Refractories and Composites. Her task consists of specifying the product properties in such a way that it will actually be possible to generate a marketable product from the cleaned dust. Here, too, it becomes apparent once again that our process is scalable and can be implemented in the near future.

Sebastian Heinemann | This application-oriented research was also a decisive aspect for us, as we want to be the first to market with the process in a timely manner. It is about strengthening the circular economy both now and in the medium term, not just in the distant future. And that is what we are succeeding in doing when we cooperate with institutes like yours. During the interaction, thoughts and processes are being developed that advance us quickly. In a later project phase, we want to jointly develop the conceptual design of a pilot facility. The plan is to realise this new type of facility at several EEW sites. And that, as you said earlier, is definitely not a pipe dream.

“This research project is not a pipe dream, but will lead to implementation.”

Prof. Alexandros Charitos | Director of INEMET

The future is created when new paths are embarked on together.

Prof. Alexandros Charitos | Both our organisations need to look to the future, and it definitely needs to be more sustainable. Both the topics of circular economy and recycling are the order of the day. This means that we have to rethink tomorrow. EEW is embarking on new paths, and we are delighted to be embarking on this new path jointly with you. And we do, of course, have our sights set on the medium-term goal of hitting the start button and, if I may say so, getting our new recycling plant up and running.

Sebastian Heinemann | I am certain that we will succeed in doing so within a few years and that we will make yet another contribution to strengthening the circular economy as the EEW Group with the new type of plant for the recycling of residues. Because that has been the crucial missing link in the chain to date.

Click here to watch the video of the conversation about: the cycle of things.

Efficiently managing resources

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By transforming waste into energy, we make an important contribution to protecting the climate and conserving resources. Thermal recovery reduces waste volumes by 90 per cent while simultaneously producing electricity, steam and heat. To do this, our plants require energy as well as operating and auxiliary materials.

As part of our recent materiality analysis (2018), we therefore identified two material topics and the associated goals.

Use of resources

The waste we process contains 50 per cent biogenic material on average. 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 at our plants and buildings and by making growing use of alternative sources of energy in the form of green electricity and green gas.

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 its 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 efficiency (OEE). It provides information about the energy availability and time availability of a plant as well as its quality. A high OEE (maximum 100 per cent) enables a high throughput of waste. To ensure constant supply, we focus our efforts on keeping the number of unplanned operational interruptions and thus the use of oil or gas as low as possible. This keeps the OEE of our plants at a constantly high level. Despite all efforts, however, technical events, such as a bunker fire, cannot be ruled out. In 2021, we fell short of our ambitious target of achieving an OEE of 92.4 percent by around two percentage points. This is mainly due to reduced work availability caused by unplanned operational interruptions. By 2026 we want to increase the time availability to 93 per cent and thus further increase the OEE.

The volume of operating and auxiliary materials used during combustion also provides information about how optimally a particular facility's combustion, flue gas and exhaust gas cleaning processes are running. Therefore, when we measure our environmental performance, we also regularly ascertain the consumption of operating materials, with the aim of further reducing their use in the interests of minimising waste and making our resource consumption even more efficient while ensuring there is no negative effect on emission limits.

The amount of energy we consume annually during our business activities depends on various parameters of daily plant operations, especially the calorific value of the waste. Some of these parameters fluctuate, especially due to external non-plannable factors, such as the characteristics of the waste or changing weather conditions. For instance, wet weather makes the waste damper, lowering its calorific value. Furthermore, depending on the concentration of substances – especially sulphur and mercury – in the waste, heating oil or natural gas are used during combustion to prevent high concentrations of pollutants being emitted from the stack.

To measure our energy consumption, we use benchmark KPIs for energy. Our measurements showed that we further reduced the captive electricity used to operate our plants in 2021. By using 89.5 kilowatt-hours per tonne of waste, we outperformed our KPI for captive electricity use of 98.3 kilowatt-hours per tonne of waste. We were unable to achieve our target of 2.1 cubic metres of natural gas per tonne of waste. Due to downtime and operating problems at the plants in Schwedt, Stapelfeld, Andernach and Heringen, consumption stood at 3.7 cubic metres per tonne of waste. Meanwhile, at 1.7 litres per tonne of waste, oil consumption also exceeded the target figure of 1.1. There were several reasons for this, including unplanned downtime, a shortage of waste and the avoidance of emissions.

Managing resource and energy consumption: structures and responsibilities

We want to prevent our 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 internal operations. Clear internal structures and management instruments support us in doing this. The environmental management system ISO 14001 and the energy management system ISO 50001 are the basis for this, supplemented by various internal standards and directives (see also chapter "Advancing environmental protection through innovative solutions", from p. 90).

We carry out annual energy assessments at all our plant sites and analyse the use of operating resources. In flue gas cleaning, the volume of operating resources consumed depends largely on the composition of the waste. Since compliance with emission limits has top priority for us and this requires operating resources, continuously reducing their usage is a secondary objective for us. However, where this is a possibility, we work to optimally exploit the reactivity of the operating resources.

We measure our progress in this area using defined target KPIs for each individual plant because the specific nature of the facilities affects the KPIs. The target KPIs contribute to the ongoing decrease in consumption of operating resources and to more energy-efficient operations at the plants. We regularly review the fulfilment of these KPIs. 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 OEE, i.e. 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. The award takes into account the maintenance and investment costs per tonne of waste throughput, the 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 the year under review, the plants in Hanover and Andernach received the Performance Award for 2020.

Moreover, we believe that clearly defined responsibilities are a key prerequisite for achieving progress. Accordingly, the departments at company headquarters as well as the managers at each site and their employees are responsible for implementing energy efficiency in their own processes and conserving natural resources in plant operations. At each plant site, we have an environmental protection manager, a legally mandated pollution control officer as well as a waste management officer, an officer for the prevention of water pollution and a safety adviser for the carriage of dangerous goods. They are in close contact with the employees on-site and the departments HSEQ and Environment & Permits at company headquarters.

Moreover, communication between the plant sites is important to share experiences relating to facility performance and optimisation potential as well as to pass on know-how and findings regarding plant operations. We have established well-defined formats for this communication, such as technical forums. These are held four times a year, involving plant managers and other participants. The production and maintenance managers also meet twice a year and there are other forms of dialogue such as monthly conference calls between the various maintenance managers. 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.

For process- and waste-related reasons, residues of approximately 32 per cent remain following thermal recovery at our plants. Bottom ash accounts for some 75 per cent of this figure. It contains substances including fused iron and non-ferrous metals. Other by-products are boiler ash and filter dust from flue gas cleaning. The central Residues department monitors all of these waste materials and manages downstream activities for bottom ash, boiler ash and filter dust. A large proportion of these residues are reused as recycled metals, for landfill construction or as backfilling materials in mines. In the future, recycled phosphorus is expected to be utilised as well.

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, deliveries of waste are subject to monitoring. We use random sampling to check whether they contain contractually compliant waste. By doing so, we ensure that the European Waste Catalogue (EWC) codes in the customers' declaration analyses correspond to the waste actually received and comply with the specifications of the relevant EEW plant's permit. Since the waste recovery occurs usually 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 information collected on the various waste types and using the calculation rules established by the German Environment Agency (UBA). Accredited environmental verifiers assess and certify the calculation of this proportion each year for all of EEW's plants listed in the UBA's Register of guarantees of origin (HKNR) on the basis of the German Renewable Energy Sources Act (EEG) and Renewable Energy Sources Ordinance (EEV) (see also chapter "Advancing environmental protection through innovative solutions", from p. 90).

We continuously work on making our plant operations as efficient as possible. By adapting our maintenance strategy, we reduce unplanned downtime and thus also the number of plant start-up and shutdown processes. This enables us to reduce the consumption of operating materials, such as those used in restarting the plant. Through preventive maintenance, we also save fossil fuels (usually heating oil), which are needed in the event of plant malfunctions to ensure that our customers' energy supply is not disrupted. In administration, we also pay attention to resource consumption and recycling.

Additionally, there are various projects which aim to close loops and reuse substances. For example, we are working on recycling sodium hydrogen carbonate from flue gas cleaning residues internally at our own processing facility and subsequently reusing this for thermal recovery at our plants. This will make it possible to substitute the externally sourced feedstock in the future. We plan to commission a processing facility of this kind at our site in Delfzijl in 2026. Details of other projects to prevent waste and strengthen the circular economy can be found in the chapters "Securing a successful future with sustainable innovations" from p. 68 and "Advancing environmental protection through innovative solutions" from p. 90.

Energy efficiency in our business activities

As part of our energy management and associated auditing, we regularly define the biggest consumers of energy at our sites and the factors which influence how much they use. While taking commercial aspects into account, we then identify and assess ways to make savings. The respective site's energy team – whose members include a technical administrator and the production and maintenance managers – is responsible for collecting and analysing details of energy usage. Monitoring the total energy demand at all sites in this way between 2013 and 2021 enabled us to reduce the power needed in both absolute and specific terms. Between 2013 and 2021 the specific savings came to approximately ten kilowatt-hours per tonne of waste throughput.

Based on all our findings, we develop measures in order to operate our plants and sites in an energy-efficient manner. At the corporate headquarters in Helmstedt, the IT infrastructure in particular consumes a lot of electricity. Since 2019 we have been able to generate some of that electricity ourselves thanks to a photovoltaic installation on the roof of our administrative building. In 2021 these solar panels generated 85,325 kilowatt-hours, which supplied 16.6 per cent of the electricity needed at the headquarters. In connection with the COVID-19 pandemic, we continued to offer the option of working from home which was introduced in 2020. This enabled us to protect employees' health and conserve resources at the same time. Especially at our administrative site in Helmstedt, many employees took advantage of the opportunity to work from home. This also eliminated their commutes.

In the reporting year, we reduced energy use in Knapsack by altering the geometry of the flue gas ducts on both lines. The redesign began in 2020 and saves us 480 megawatt-hours per annum, which is more than expected. This figure is roughly equivalent to the annual electricity consumption of 380 two-person households.

Enhancing effectiveness

As well as striving to further reduce our captive energy usage, we are constantly working to enhance the efficiency of our plants and thereby increase their energy output.

For instance, we upped the energy output at our Premnitz site by installing and commissioning turbine 5 during the construction of a new facility to replace the existing one. Approximately 4,233 megawatt-hours more electric power can now be decoupled at the site than was possible with the previous turbines 3 and 4.

Regular servicing as part of a major turbine inspection also improves effectiveness. Major inspections were conducted, for example, at our sites in Göppingen and Andernach in the year under review.

In our development of a renewed concept for flue gas cleaning at the plant site in Helmstedt, we are not just considering how to improve the capture of pollutants. We are also working to cool the flue gas from 230 degrees Celsius to 140 degrees Celsius and preheat the condensate. With a maximum dry flue gas flow rate of 105,000 standard cubic metres per boiler, this corresponds to a thermal output of approximately 7.4 megawatts per flue gas cleaning line or a total of 22.2 megawatts for three lines. This energy recovery means that more electricity can be generated following the renewal based on degrees of effectiveness in the system as a whole.

Securing a successful future with sustainable innovations

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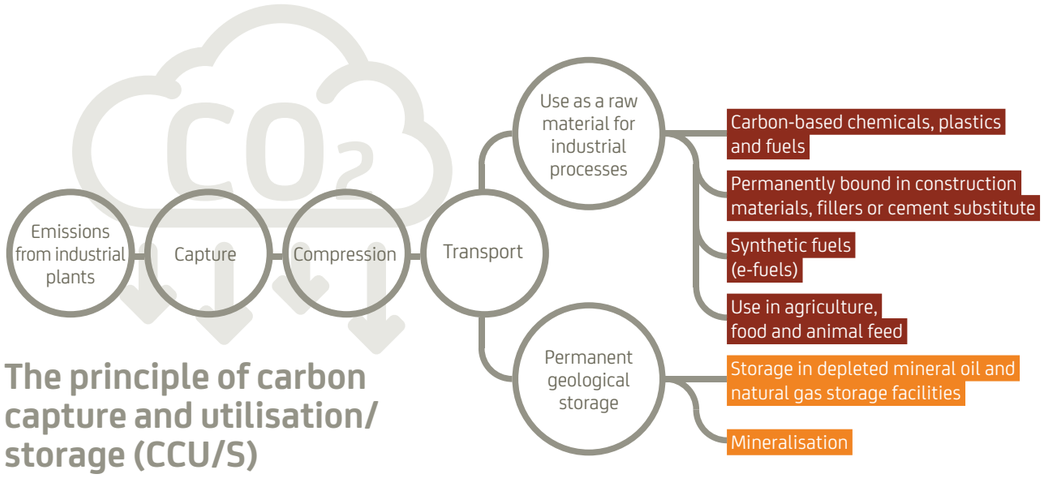
We have further developed the thermal recovery of non-recyclable waste to make it a highly efficient process. First, the energy inherent in the waste is released as heat. This is then used to produce steam for electricity, district heating and process steam. Through innovative solutions, we contribute to environmentally sound waste management and produce energy that is not based exclusively on fossil fuels. Looking ahead, we act for the long term and are already addressing the challenges of tomorrow with progress and vision, for example in sewage sludge recovery.



The principle of carbon capture and utilisation/ storage (CCU/S)

This is because, like our stakeholders, we believe innovations are a crucial driver in creating added value for the company, society and the environment. Accordingly, innovations are among the central topics that we identified in our recent materiality analysis (2018).

Innovation

We see sustainable innovations as an important key for the energy transition as well as for protecting resources, the environment and the climate. Innovations are therefore also an important factor for continually reducing our carbon footprint and thereby contributing towards decarbonisation.

Our goal is for our fleet operations to be climate-neutral by 2030 and climate-positive by 2040. Our actions rest on our endorsement of the 2015 Paris Agreement and its goal of limiting global warming caused by human activities to well below 2 degrees Celsius compared with pre-industrial times. With this in mind, we continuously work on optimising our plant operations and invest in the development of new products and technologies.

Our stakeholders do not only see innovations as a material topic, they also believe we have great potential when it comes to the development of new technologies and processes. We will accordingly take their expectations into account in our future endeavours.

Our stakeholders see strong innovation potential especially in carbon capture and utilisation (CCU) and carbon capture and storage (CCS). Our other main innovation projects right now are entering into the production of e-fuels from hydrogen and CO_2 and the development of high-temperature heat storage systems. We also aim to utilise and reclaim new resources and tap into new national markets. In many countries around the world – including in Europe – a considerable amount of untreated waste still ends up in landfills because there is often a substantial shortage of capacity in energy-from-waste (EfW) plants. In 2020 we found industrial partners in Poland. These partners aim, among other things, to use steam in their processes which is generated from substitute fuels rather than fossil fuels. We want to submit the permit application in 2022 for the construction of an EfW plant.

In our projects, we act with foresight and consider potential future developments relating to climate protection at both national and European level, such as those regarding the upcoming phase-out of coal power and political efforts to make non-climate-neutral CO_2 emissions more expensive. By achieving climate-neutral operations, we want to contribute to Germany reaching its goal of a 65 per cent reduction in greenhouse gas emissions by 2030 (compared to 1990). Sewage sludge combustion, for example, is an area where we are currently planning and building new plants. It is nearly climate-neutral because the fuel is purely of biogenic origin. By constructing sewage sludge mono-incineration plants, we are also making an important contribution towards a circular economy and resource conservation.

Managing innovation development: responsibilities and coordination

The Business Development department and the new Innovation unit established within the Technology department in 2021 bear chief responsibility for innovation management. These departments have the task of recognising technical and organisational growth and innovation potential, evaluating it and initiating projects. In 2020 we additionally established a sales and marketing unit for sewage sludge, since this topic has become increasingly important in our business development.

The Technology road map serves as our tool for planning, prioritising and presenting further technical development and for monitoring and documenting successes. We have established a standardised process for the organisational implementation and completion of R&D projects. This is set out in the management handbook. Project profiles and a points system enable us to identify their importance and priority level. Using the scrum method from agile project management, we introduced a new process. This will ensure that technology R&D projects will be regularly reviewed and progressed by the Innovation unit in the future. Our road map contained 24 projects in 2021.

As part of one of these initiatives, we are collaborating with the Institute of Power Plant Engineering and Heat Transfer at Leibniz University Hannover. Using a high-speed camera, the project sets out to photograph waste when it enters the combustion process so that characteristic patterns can be identified with the aid of artificial intelligence. We want to try to improve management of the combustion process on the basis of this data. The Federal Ministry of Education and Research is providing funding for the initiative.

When deciding whether a new project will be initiated or implemented, sustainability is an important criterion which must be met based on various parameters. For each innovation project, the Board of Management allocates financial resources for the project's development and implementation. Based on this, we create led project teams which include managers from the necessary departments. The heads of the Innovation and Business Development departments are responsible for steering the project teams. At periodic meetings of a steering committee, the status quo and next steps are discussed and decided upon.

The company's suggestion system enables our employees to actively contribute towards ongoing improvements in day-to-day operations and thereby help to improve our firm's competitiveness with lasting effect. A central works agreement sets out the process for submitting suggestions, their assessment by review boards and the payments made for staff ideas. More than 80 ideas submitted using the online tool were implemented in the year under review.

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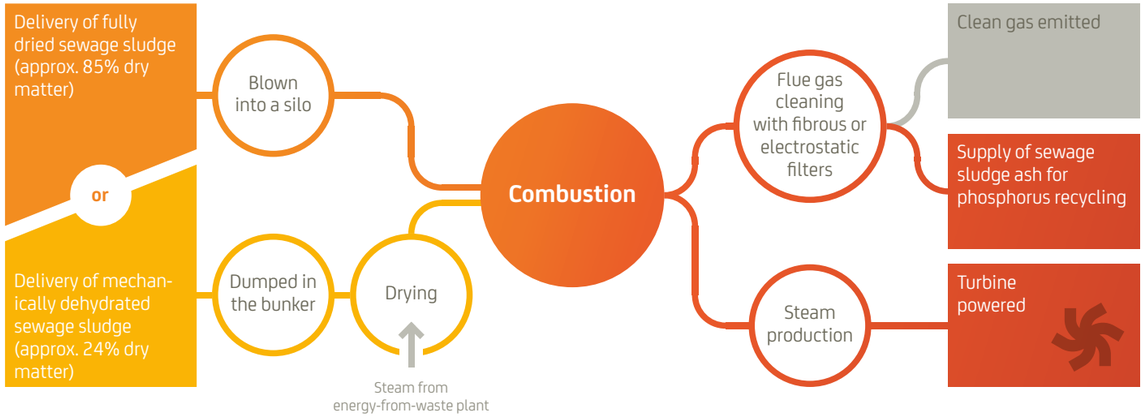
projects on our Technology road map

How our sewage sludge mono-incineration plants work



Shaping the future: strategy, projects, research

As the market leader, we operate the most energy-from-waste (EfW) plants in Germany. Featuring state-of-the-art technology, we have developed reference models for EfW facilities and sewage sludge mono-incineration plants. They describe our technical design principles for new construction projects in Europe and Asia. Our plants enable the full energy potential of waste to be tapped reliably in the best way possible. 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, among other things, combustion and flue gas cleaning.

Based on our expertise, we issued the world's first bond for a thermal waste recovery company in June 2021. The EEW Bond worth over €400 million met with high demand from investors. The proceeds of the issue will primarily be used for sustainable investments (and reinvestments) in the circular economy and the energy efficiency of our plant fleet.

In order to continuously further optimise our plants – especially with regard to the best possible environmental protection – we are working on new technologies and patent applications. We are also developing new processes, sometimes in collaboration with partners from the scientific community, to reclaim valuable resources such as phosphorus or sodium hydrogen carbonate.

Sodium hydrogen carbonate ($NaHCO_3$) has become one of the most important adsorbents for flue gas cleaning. It is highly reactive, efficient and procedurally simple to handle. We are therefore equipping partly our existing plants and all our new facilities with this technology. Moreover, we are the first company worldwide planning a large-scale pilot plant by 2025 to recover sodium hydrogen carbonate from flue gas hydrogen cleaning residues using an innovative salt metathesis process and thereby keep it within the cycle. Firstly, this will make us independent of the tight global market for sodium hydrogen carbonate. Secondly, it enables us to reduce the volume of residual materials and conserve resources.

What is more, the process requires CO_2 as an operating material to enable the recovery of the sodium hydrogen carbonate. We can thus use captured CO_2 and further

reduce our CO_2 emissions. In the next few years, we intend to create the technical framework necessary to construct the world's first pilot plant at our site in Delfzijl and initiate the licensing procedure.

In 2020 we started to apply the stricter standards contained in the European Union's Best Available Techniques (BAT) Reference Document for Waste Incineration (BREF WI) at our sites. We have set up a project group to develop a strategy for implementation, which is due to be completed by the end of 2023, and are identifying what action needs to be taken at each specific site. Based on these needs, we are investing in process engineering and measuring technology at the sites to adjust the plants to the European Commission's new BAT conclusions on the available techniques which are the best for preventing or minimising impacts on the environment. For instance, we have started planning new flue gas cleaning systems at our site in Helmstedt to replace the old ones by 2025. At the same time, centrally standardised management systems are being devised for all sites.

Eliminating pollutants is also an issue in sewage sludge drying. This is because the drying process produces exhaust air which is saturated with water vapour and contains hazardous substances. This is usually condensed for heat utilisation. We have designed a reference model for treating this condensate from sewage sludge drying.

Monitoring process quality is another step towards plant optimisation. It allows better assessment of the dirt build-up in the boiler, enabling more efficient online planning of cleaning. It is used at the Hanover site, among others. We are also continuing to work with the Fraunhofer-Gesellschaft on a process to detect impurities in the waste bunker using specialised sensor technology. The finished pilot system is currently being tested and optimised in a laboratory.

In 2021 we also worked on the improved regulation of selective non-catalytic reduction systems for the denitrification of flue gases in boiler furnaces. The aim is to minimise excess ammonia and ensure compliance with limits in the stack. This goal is to be achieved with the help of artificial intelligence.

In addition to the ongoing optimisation of our plant operations, we are also focusing on new technologies for the future. One important area is sewage sludge recovery. The 2017 revision of the German Sewage Sludge Ordinance (AbfKlärV) contains extensive provisions on the recovery of phosphorus from sewage sludge and sewage sludge combustion ash, which will be mandatory as of 2029. We are already thinking ahead: at various plant sites, we are investing in the construction of sewage sludge mono-incineration plants and plan 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 contained in sewage sludge as well as any possible pathogens while preventing medication residues from entering the environment, which can otherwise cause resistances to develop. Simultaneously, the inorganic pollutants present in the flue gas, such as heavy metals, sulphur dioxide and hydrochloric acid, can be effectively captured by the flue gas cleaning system. The use of sewage sludge mono-incineration 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 protection through innovative solutions", from p. 90).
In Helmstedt, we started construction of a sewage sludge mono-incineration plant in 2019. Building work in Stavenhagen commenced in 2021 after approval was granted. We also plan to expand and further develop this innovative sewage sludge recovery at our Stapelfeld and Delfzijl sites. In doing so, we are consistently implementing the technology from our reference model and utilising standardised and proven process technology. Since sewage sludge treatment and phosphorus recovery are highly important to us, we are also active in key industry and specialist associations (BDE, DWA, DPP). (See also chapter "Membership in associations", from p. 125.)

We are also expanding our business activities in Magdeburg, where we are planning an EfW plant that will produce energy from high-calorific fractions and shredder light fractions. Building work started here in 2021, when we were also able to sign agreements with suppliers. With this move, we are reacting to market demand and creating possibilities for the utilisation of waste types which are subject to strict requirements when it comes to thermal recovery. Moreover, we want to combine this plant with a special process for the pyrolysis of municipal sewage sludge in order to recover phosphorus.

As a company whose business model is based on thermal waste recovery, we are intensively investigating the two pioneering topics of carbon capture and utilisation (CCU) and carbon capture and storage (CCS). After all, CO_2 can be more than a gas that harms the climate: using innovative technologies, it can become a valuable raw material. Accordingly, we launched an initiative in 2018 that aims to develop projects which make the CO_2 contained in the flue gas from waste combustion available as a raw material that can be utilised by industry. It can be used, for example, to produce basic chemicals such as sodium hydrogen carbonate, methanol or methane. In 2020, after thorough technical testing, we started planning carbon capture based on amine scrubbing in Delfzijl and Helmstedt. If our approval procedere is successful, the capture plant in Delfzijl is slated to start up in 2023. We plan to capture 200,000 tonnes of CO_2 per annum there until 2025 and then 400,000 tonnes per annum until 2030. We will supply the captured CO_2 to an industrial company for further utilisation. In conjunction with a partner from the energy supply sector and an off-taker, we intend to apply for financial support from an innovation fund in 2022 and submit the permit application.

At one of our sites, starting at the end of 2025 we want to combine carbon capture with the production of biomethanol for e-fuels. Together with energy supply companies, we want to operate an electrolysis plant powered by "green" electricity, which can generate up to 3,000 tonnes of hydrogen per year. This will then be synthesised with CO_2 captured from the flue gases from our EfW plants to produce biomethanol. According to our plan, in the first expansion stage the carbon capture facility will provide 25,000 tonnes of CO_2 per annum from 2025 for methanol production. We therefore expect that we will be able to deliver 15,000 tonnes of biomethanol for e-fuels from 2025. Subsequently, we will aim to continuously increase this volume and thereby reduce our CO_2 emissions at the same time, including those which are produced at the plant itself. Emissions are only released again when the e-fuel is used again in a downstream step.

Besides implementing our own projects, we engage in ongoing dialogue with researchers, industry and policy-makers about the potential of CO_2 as a raw material as well as about the current state of development of CCU and CCS technologies.

With its practical expertise, EEW also directly engages in research to support the development of new technologies and to apply the research findings to its own business activities. In 2021 we forged ahead with chemical recycling in particular. In a joint venture with Duales System Holding (DSD), we are working to develop a means of processing mixed plastics and waste from sorting activities, including those arising from DSD's system for collecting and managing waste. The aim is to acquire a large quantity of plastic waste for chemical recycling which cannot currently be reused for technical or financial reasons. We plan to set up a plant where plastic waste can be processed, sourcing feedstock from DSD and EEW waste streams. In 2020 we joined forces with RWTH Aachen University to research the recycling of road tar containing harmful substances. As part of our current project, we aim to establish a pyrolysis plant at one of our sites to recycle broken stone used in road construction.

At present, other focus topics include further utilisation of bottom ash (also known as clinker) as well as alternative recovery options for dusts, depollution and filter dust compositions. Together with partners from industry and the TU Bergakademie Freiberg, we have already carried out laboratory experiments and test series which aim to find other possibilities for reprocessing filter dusts and bottom ash.

Finding answers to global megatrends

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Protecting the climate and resources is one of the greatest global challenges of our time. It is up to policymakers, business and society equally 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 we want to systematically make use of now and in the future.

As part of our materiality analysis (2018), 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

About 50 per cent of the energy sources we use for power conversion are renewable. Moreover, we transform the heat generated by thermal recovery into steam for industrial partners and into heat for local district heating networks used by consumers. In this way, we reduce CO_2 emissions in the energy sector, business and industry as well as in private households and contribute to decarbonisation. We want to take another major step over the next few years: we intend to make our fleet operations climate-neutral by 2030 and climate-positive by 2040. Moreover, we want to increase the amount of renewable energy we generate at our own premises.

Dealing with scarce resources

By producing energy from waste, we reduce the consumption of fossil raw materials. We recover valuable resources from residues and return them to the cycle. These include metals, phosphorus and alternative building materials, for example for road construction. By closing material cycles, we reduce the usage of finite resources.

Dealing with the digital transformation

We are utilising the opportunities which digitalisation presents for the waste management and energy industry and are further expanding the digital infrastructure at our headquarters and plants. In addition, our corporate culture is evolving into a more agile and digital one and we are strengthening digital channels in our business and customer relationships.

Finding answers: dealing with climate change

To limit the negative effects of climate change, the European Union has established clear targets: by 2030 greenhouse gas emissions should be at least 55 per cent lower than 1990 levels, energy efficiency should rise by 32.5 per cent and the share of renewable energies in the overall mix should be increased to 32 per cent. Germany aims to reduce its greenhouse gas emissions by 65 per cent by 2030 (compared to 1990).

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. We already support climate protection with our business model and contribute to the decarbonisation of the economy. In the future, we will expedite the reduction of CO_2 emissions in the waste and energy sectors to an even greater degree. To make the EEW fleet climate-neutral by 2030 we are currently developing a climate strategy. Existing measures have already been incorporated into this. By doing so, we want to make our contribution to limiting global warming to below 2 degrees Celsius, which was the goal agreed by the United Nations member states in the 2015 Paris Agreement. To achieve our climate goals, we act on the basis of the same management systems and internal standards that apply, such as those for environmental protection (see also chapter “Advancing environmental protection through innovative solutions”, from p. 90).

Particularly in the area of heat provision, which accounts for around 56 per cent of energy demand in Germany, we contribute to reducing fossil fuels. We do this by using the heat given off by waste combustion and transporting it via district heating networks, which provide heat and hot water for consumers. This enables savings of other sources such as mineral oil and natural gas – and therefore results in lower CO_2 emissions. We thereby also enable consumers to meet the requirements of the German Renewable Energies Heat Act (EEWärmeG). This law obligates owners of new buildings to use renewable energy for a portion of their heating needs and provides for district heating from combined heat and power plants as a substitute measure. The heat extraction from our plants meets the requirements of the EEWärmeG because roughly half of the heat obtained through efficient power-heat coupling is generated from organic combustibles.

A glance at the European map shows that some countries – especially in southern and south-eastern Europe – are a long way from reaching the European Union’s climate targets. The continued high rate of landfilling indicates, among other things, that there is a need there for thermal waste recovery. With this in mind, our development of new markets in Europe focuses primarily on the consideration of predetermined criteria. We see this as presenting an opportunity to help establish a functioning circular economy in other countries as well, which will have positive effects on local people and the climate.

In December 2021 our CEO Bernard M. Kemper was appointed to the Beijing Enterprises Holdings Limited (BEHL) sustainability committee.

Closing loops: dealing with scarce resources

As natural resources grow scarcer and their national availability becomes limited, waste continues to gain in importance as a source of raw materials. Along with the recycling of reusable materials, thermal waste recovery constitutes a crucial component of the environmentally friendly circular economy. Although high-quality material recovery is generally the most sustainable method, to ensure high-value recycling for certain material streams (e.g. paper and plastics), thermal recovery is also necessary after a few cycles of material recovery. In addition to utilising the released energy, we are able to reclaim secondary raw materials that replace natural resources. For instance, metals that we reclaim from the bottom ash are returned to the material 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 substances would enter the environment if the waste were improperly treated. In future, we are planning new product developments in the areas of residues, heat and flue gas to further increase the recovery rate and thus the protection of resources. As part of these efforts, we signed a cooperation agreement with TU Bergakademie Freiberg in autumn 2021. Together, we are researching how we can recover aggregates for the cement and concrete industry from flue gas cleaning residues in the future. We expect the first valid results at some point in 2022.

Shaping the digital transformation: EEW DIGITAL

The digital transformation is changing the competitive environment and our customers' expectations. It is creating new key technologies and enabling more efficient processes. For us, digitalisation is about more than simplifying day-to-day processes. We are shaping a transformation to an increasingly digital corporate culture. To this end, we have drafted clear goals for the purposes of our digitalisation strategy EEW DIGITAL. These were grouped together as five key points in 2021: our underlying goal is to pave the way for digitalisation. Building on this, we want to enhance digital skills within our organisation, implement more efficient processes, develop new digital offerings and business models, and provide digital services for our customers.

With a view to developing and implementing digital offerings and business models, in addition to the existing EEW DIGITAL department we established a subsidiary called NEEW Ventures GmbH in the year under review. This acts as a venture builder with a remit to systematically tap digitalisation potential throughout the waste management value chain. The aim is to find gaps in circular material streams and fill them with innovative digital solutions to make a contribution to climate protection and the energy transition. With the assistance of its digitalisation partner the icon Group, NEEW Ventures GmbH will launch its first business model on the market in 2022. A total of five ventures are planned between now and 2026.

The implementation and further development of the EEW DIGITAL strategy is overseen by the department of the same name, which was set up specifically to tackle digitalisation. Its team was expanded in 2021. With the aim of generating awareness and approachability of both the digitalisation strategy and the team responsible for it, a departmental roadshow entitled EEW DIGITAL UNTERWEGS (EEW DIGITAL ON TOUR) was launched in late 2021. The roadshow serves to expand the company-wide network and provide a quicker way to address digitalisation issues now and in the future. Moreover, site visits enable us to assess the status quo and potential for digitalisation more effectively and engage in dialogue with staff members.

We also launched our Digital Hub in 2021, primarily to break up internal silos and work on our projects in a more tightly networked manner. The Digital Hub is a body devoted to selecting, supporting and monitoring digitalisation projects in the EEW Group. In 2022 we plan to expand the Hub in order to establish a KPI-based and effective project organisation in the future.

We also foster dialogue across disciplines and departments in the Digital CREEW. Almost 100 EEW employees are members of this. They connect, exchange views, and discuss the digital future of EEW with one another at 14-day CREEW Camps and via Teams channels, working groups and pilot groups.

In the digital EEW Group of tomorrow, we will need traits like courage, willingness to change, an error culture and an above-average team spirit which ensures knowledge sharing. With this in mind, we added these competencies to our new competency model in the year under review. Through further training and the transfer of know-how, we also want to enable all employees to undertake digitalisation measures. Furthermore, we are recruiting new talent and enhancing their digital skills.

Digital instruments and the possibilities they offer are increasingly growing in importance for communication and collaboration. In response, we introduced the employee app EEW2GO in 2021 which gives staff another communication medium alongside the intranet. The app is supplemented by the establishment of digital noticeboards and smart boards which visualise plant data, including for external visitors. Three digital noticeboards were installed at our headquarters in 2021. At the same time, smart boards were rolled out for the plants at three EEW Group pilot sites in 2021.

In another pilot project for digitally supported teamwork, smart glasses were introduced in the reporting year. With the aid of augmented reality, the glasses allow the wearer's surroundings to be shared live with colleagues or experts. Smart glasses are currently in use at three sites. They make it possible to, for example, diagnose errors remotely, thereby optimally saving time and reducing mileage.

Our customer relationship management has also been digitalised further. We set up our customer portal in 2020 and intensively further developed it in 2021. It is due to go online in 2022. In this way, we will further optimise invoice management and communication between our sales back office and our customers. Going forward, we want to further increase the utilisation of data we already possess in order to advance our digital evolution and, by doing so, strengthen our customer relationships and our leading role in the market. We forged ahead with the "Data management optimisation" project in 2021 with this in mind. A team of several employees now works exclusively on this topic and liaises closely with EEW DIGITAL and the whole EEW Group as an important interface. Their remit is to prepare our data and ensure it can be used optimally by 2023. Simultaneously, we expedited the SAP S/4HANA project this year as well to put in place this essential interface. In future, an SAP project manager will take care of implementing this large-scale project, which we intend to complete by 2025.

Steps on the way to our sustainability goals

Efficiently managing resources
Target for 2027

Optimise overall equipment effectiveness (OEE) at EEW's plants towards a target value of 94 per cent

> Increase OEE (= product of work availability and time availability) based on consistently high time availability (>90%) (in implementation phase)
– Time availability in 2019: 92.2%
– Time availability in 2020: 92.7%
– Time availability in 2021: 92.2%

Efficiently managing resources
Ongoing target

Reduce the total number of kilometres driven annually in the EEW fleet

> Establish virtual meetings and working methods (implemented)
– Use of online/video meetings and teleconferences, 100% of employees with administrative responsibilities have laptop computers which allow remote access to the company network

> Introduce a policy on working from home for EEW employees (implemented)

> Use digital technology for maintenance, e.g. smart glasses for remote maintenance (in test phase)

Securing a successful future with sustainable innovations
Target for 2022

Phosphorus recovery from sewage sludge ash

> Create the conditions to enable phosphorus recovery from sewage sludge ash via an innovative process (in implementation phase)

> Support the establishment of a phosphorus recovery plant in Helmstedt or Stavenhagen (in preparation phase)

> Construct sewage sludge mono-incineration facilities at existing plant sites (in implementation phase)

Finding answers to global megatrends
Target for 2022

Nearly paperless execution of company-wide business processes

> Convert business processes to low-paper ordering and invoicing:
– Majority of orders are in electronic form
– Project to introduce e-invoicing (in implementation phase)

> Reduce paper consumption in internal business processes:
– Projects to digitalise signatures and shift books (in implementation phase) and for paperless travel expense accounting (in preparation phase)
– Use of smart boards at the plants (in preparation phase)

Securing a successful future with sustainable innovations
Target for 2024

Industrial recovery of CO_2 (CCU and CCS)

> Conduct a carbon capture pilot project at the Delfzijl site (commissioning planned for 2024)

> Carbon capture for methanol synthesis (pilot project in Helmstedt in preparation phase)

Attainment status in the 2021 reporting year partially fulfilled | largely fulfilled | completely fulfilled

Delivering results: we are doing more for less

Thermal waste utilisation is an important control mechanism on the path towards a climate-neutral society. Our industry is making a decisive contribution to decarbonisation and is continuously reducing climate pollution.

EEW is leading the way. We are increasing the energy efficiency of our plants, developing new technologies and relying on the constructive cooperation of all stakeholders in order to stop climate change. Because as a result of exchanging ideas about innovations and solution paths, that which is possible becomes feasible and then put into practice. We focus our contributions to environmental protection on two areas of strategic emphasis:

Our responsible **response to climate change** is demonstrated by the fact that we will, in the future, capture CO_2 in order to store it or make it usable again. In addition, we are reducing our climate impact by reducing our own energy demand and aiming for a climate-neutral plant operation in the medium term.

We are committed to **strengthening the circular economy**[1] by making the recovery of sodium bicarbonate possible, further advancing chemical recycling, and reducing the consumption and transport of ammonia through the incineration of wastewater.

In the following, we present specific projects from these areas of strategic emphasis and let the facts speak for our commitment in the area of sustainability. We are doing more for less. Measure us by our performance.

[1] For further measures to strengthen the circular economy, see the chapter “Taking on challenges”.

Let’s talk about: less CO_2

While most people regard CO_2 as a climate killer, we consider the gas to be a raw material. In order to reduce emissions and make CO_2 usable, we have, with the competent support of the independent research institute TNO (the Netherlands Organisation for applied scientific research), designed a facility for the capturing of CO_2. In the interview, Brigitte Jacobs (Business Leader Energy Transition Industry TNO) and Wilfred de Jager (Technical Director EEW Delfzijl) exchange views on this groundbreaking technology and its potential applications. A glimpse into the future of our industry.

“CO_2-negative operation of the facility is definitely one of our goals.”

Wilfred de Jager | Technical Director EEW Delfzijl

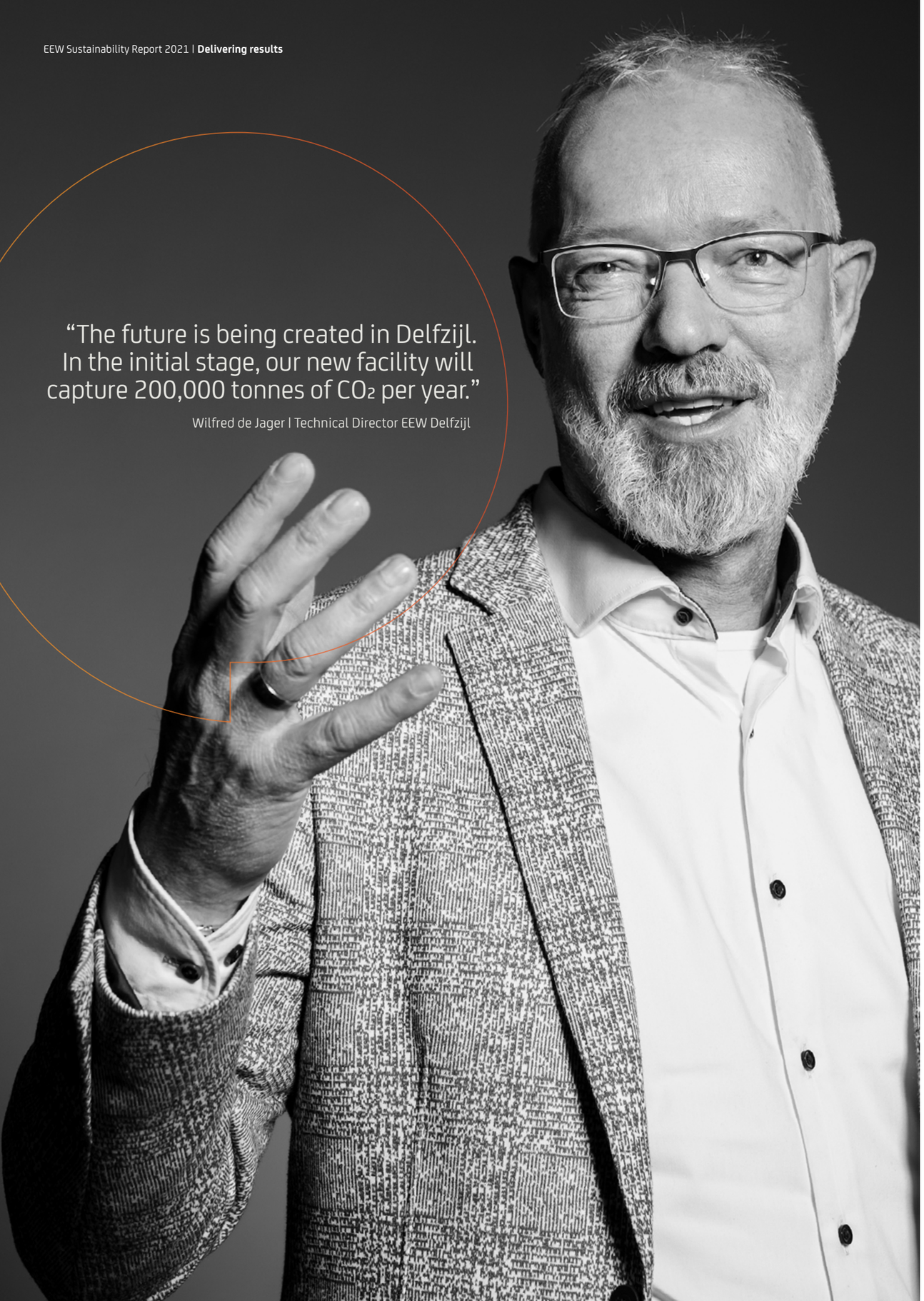
How can we capture CO_2 and put it to good use?

Wilfred de Jager | Sustainability plays a major role in our business strategy. Consequently, we are always looking for new ways to act sustainably – both throughout the EEW Group as well as here in Delfzijl. A major concern of ours is to save CO_2.

Brigitte Jacobs | A suitable technology for this is CCUS (carbon capture, utilisation and storage), i.e. the capture, utilisation and storage of CO_2. Its utilisation is of particular interest to the industry because CO_2 can be processed into mineral aggregates, chemicals and fuels, among other things.

Our mission: less CO_2 emissions.

Wilfred de Jager | Within the EEW Group, we see various potential uses for CO_2. For one, we can use it ourselves to recycle the sodium hydrogen carbonate used in flue gas purification. And what is also highly relevant on top of that is that CO_2 is a basic material for the manufacturing of biofuels. In the future, we want to supply manufacturers in the vicinity of our locations with the captured CO_2. With these considerations in mind and the ultimate goal of building a CO_2 capturing facility of our own, we set out to find an experienced partner to accompany us in this process. Since TNO has extensive know-how in waste utilisation, we approached you with initial ideas about a year and a half ago.



“The future is being created in Delfzijl. In the initial stage, our new facility will capture 200,000 tonnes of CO_2 per year.”

Wilfred de Jager | Technical Director EEW Delfzijl

Brigitte Jacobs | Since not everybody knows us, first a few words about us. TNO is an independent Dutch research institute, comparable to the Fraunhofer Gesellschaft in Germany, and was founded in 1932. Today, more than 3,500 people work for TNO, of which about 750 are in the field of the energy transition. For the energy transition, CCU/S is an important technology that we at TNO have been working on for more than 20 years.

Wilfred de Jager | Thanks to your advice and support, we have made very good progress with the project. Based on the knowledge gained, we are currently in the technical planning phase for a capture facility that is scheduled for completion in 2025 and will capture 200,000 tonnes of CO_2 per year in the first stage of expansion. Following that, we want to further optimise the technology and increase the capacity so that we can capture 400,000 tonnes of CO_2 annually by 2030.

Brigitte Jacobs | An important step for climate protection. But in order to meet the challenge as a whole, we need many technologies. I like to work with the image of a team. The technologies such as hydrogen production, biomass production, electrification and efficient utilisation of heat are the different players. Each of them is needed in order to succeed. This market has enormous potential, also due to rising prices for energy and CO_2.

Wilfred de Jager | Yes, the prices of energy and CO_2 will increase significantly. This will create a new dynamic in the marketplace.

Brigitte Jacobs | We expect this to result in a big innovation push. And we need companies such as EEW to make new technologies ready for the market. Thermal waste utilisation is clearly at the forefront in CO_2 capture. CCU/S is attracting attention. We are contacted by colleagues from Italy, Poland, Germany, actually from all over Europe, who ask: what are you doing there in the Netherlands? How does it work? That is understandable because if you combine renewables with CO_2 capture and storage, you can achieve negative emissions.

The future requires dialogue.

Wilfred de Jager | Exactly that is also one of our goals at EEW Delfzijl. In the second stage of expansion of the facility, we want to capture so much CO_2 that we become CO_2-negative. This facility will be a showcase project for EEW. Which means there is still a lot to do. That is why I suggest that we stay in touch over the next few years and tackle future developments together. Thank you very much for everything up to now.

Brigitte Jacobs | My pleasure. Thank you, too, and I look forward to all that will follow.

Click here to watch the video of the conversation about: less CO_2.

“We need companies such as EEW to make new technologies ready for the market.”

Brigitte Jacobs | Business Leader Energy Transition Industry TNO

Partner for sustainable development in the region

GRI 103-1 | 103-2 | 103-3

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 our business operations, we ensure the sustainable management of domestic and commercial waste that is neither reusable nor suitable for high-quality recycling. In line with the waste hierarchy, we subject this waste to meaningful recovery. By using waste as a resource for the regional production of heat and industrial steam and for electricity generation at national level, we combine long-term reliable waste management and energy supplies with environmental compatibility and economic efficiency. The thermal treatment process also enables us to recover residual recyclable materials, such as metals, from municipal waste. In the future, we also want to extract and utilise CO_2 from the process.

In this context, our materiality analysis (2018) identified the topics described below relating to the economic impact of our business operations.

Economic performance/indirect economic effects

We ensure 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 adding value in the regions where we operate our plants. We believe that innovations drive our success as a company (see also chapter “Securing a successful future with sustainable innovations”, from p. 68).

Our stakeholders encourage us to continue on this path: with expertise, innovative strength, vision and transparency. Our 2018 stakeholder survey showed that they believe it is important that EEW make technical preparations for the expected changes in waste streams and intensify its communication of innovative developments at the sites.

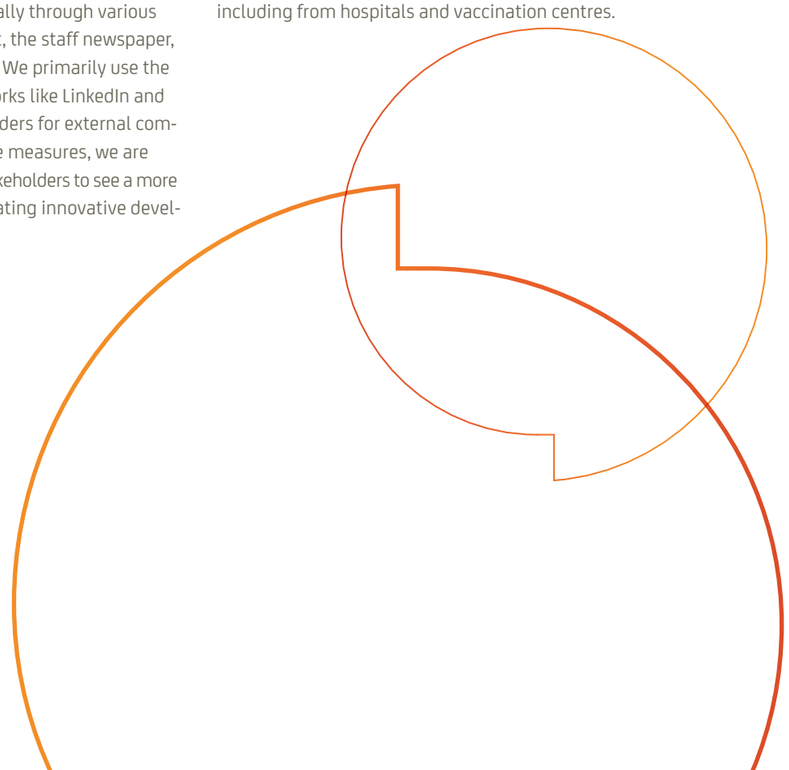
The Business Development department is responsible for the sustainable further development of our company and therefore also for the management of our economic performance. It observes the markets intensively in order to recognise trends and developments at an early stage. Based on this work, the department creates growth strategies, plans the development of new markets and initiates internal development projects. These include, for example, portfolio measures and growth projects.

All departments (including Technology, Sales, Legal and Controlling) as well as all sites are involved in the process of continual strategy development. This process is steered by the Business Development department. It amalgamates the collaboratively developed results and coordinates the strategy with the Board of Management. Once the strategy has been reviewed, the Business Development department finalises it and presents it to the Supervisory Board. The next step is beginning the implementation of the projects and measures resulting from the strategy.

The Corporate Communications department is then tasked with communicating all the topics arising from the strategy development internally through various channels comprising the intranet, the staff newspaper, the employee app and meetings. We primarily use the company’s website, career networks like LinkedIn and direct dialogue with key stakeholders for external communication. 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.

Local anchoring:
short distances, long-term solutions

We offer 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 waste management concepts with stable costs for our customers. By consistently using state-of-the-art technologies, we also meet the highest requirements for availability and environmental protection. For instance, we use the fluidised bed process in sewage sludge mono-incineration which, over the last few years, has proved the most suitable technology for phosphorus recovery. We are also boosting our energy efficiency with the construction of a new facility to replace the existing Stapelfeld energy-from-waste plant. Despite having the same capacity, its thermal output will be more than twice as high and the amount of electricity fed into the grid will increase from 90,000 to 200,000 megawatt-hours per annum. What is more, the distances to the EfW plants are mostly short. This reduces transport costs and makes a positive contribution to the region’s environmental footprint. Especially during the COVID-19 pandemic, it has also become clear how important the original objective of thermal waste treatment – namely the prevention and containment of epidemics – remains to this day. Thermal waste treatment plays an important role for hygiene and health in society because the plants safely manage waste from a wide variety of sources, including from hospitals and vaccination centres.



Our district heating project in Premnitz

Using the heat given off at our plant for a climate-friendly supply of heating to the town

20-km-long district heating pipeline for supply and return flow

Construction due to commence in mid-2021

Start-up planned for late 2022/early 2023

By using the energy contained in waste, we guarantee a continuous and secure supply of power for households, local authorities and industrial companies. In the mix of alternative energy sources, thermal waste treatment thus serves as a stabilising element. We offer regional off-takers customised supply contracts that take their particular requirements into account. As a result, our customers receive 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. With our investments in high-temperature heat accumulators, we further strengthen our ability to provide a continuous and secure supply of energy (see also chapter “Securing a successful future with sustainable innovations”, from p. 68).

Since 2018 we have been involved in a new district heating project in Hanover, where the energy supply company enercity wants to produce half of the city’s district heating from renewable energy sources by 2035. The use of heat from EEW’s energy-from-waste plant will make a key contribution to this. Commercial operations to supply district heating commenced in 2020. At peak times, we provide a quarter of the total annual district heating sales of 1,200 gigawatt-hours per year. As a result, technical capacity utilisation at the plant will almost double in the future, from 22 per cent to 40 per cent.

A further district heating project was agreed in 2019 so we will also be supplying the town of Brandenburg with district heating in the future. With the planned construction of a 20-kilometre-long district heating pipeline from Premnitz to Brandenburg, the municipal utilities will be able to replace the fossil natural gas used for heat production with climate-friendlier energy supplied from EEW’s Premnitz plant. In 2021 the foundations were laid for the district heating pipeline and the contracts for all important lots (subprojects) were awarded as part of a tender procedure. Commissioning is planned for 2023.

As a locally anchored player, it is important to us to involve residents and other local stakeholders in the developments. We take their expectations and requirements on board and analyse and attend to these. For instance, we conduct impact analyses headed up by the Marketing & Communications department ahead of new-build and extension projects. Our aims in doing so include continuously identifying our relevant stakeholder groups along with their essential interests and requirements. Additionally, we proactively inform residents at all sites about planned changes and answer their questions transparently.

Providing decentralised energy supplies to industrial companies and residential areas is not the only way that we contribute to adding value in the region. We also support the regional economy by prioritising the awarding of contracts to local suppliers. In 2021 we awarded 26 per cent of our procurement budget (excluding new-build projects) to suppliers based within a 50-kilometre radius of our plant sites. Respecting human rights is also entrenched in our principles of responsible procurement. However, compliance is not currently verified by means of human rights impact assessments.

Furthermore, environmental protection measures at our plants contribute to the climate and environmental protection targets in each particular region. All of our new-build and extension projects undergo a statutory environmental impact assessment. We invest in our plants everywhere to keep emissions low. What is more, the pollution levels at all of our facilities are deemed irrelevant. We realise that our activities increase traffic around our plants, especially due to the delivery of waste. For this reason, we optimise deliveries that are within our control, for example by using software tools like truck tracking and by means of deliveries via rail and ship wherever possible. For instance, after tendering and awarding a contract for our site in Helmstedt, the unloading terminal at the Buschhaus plant was restored. Following 15 years of disuse, 45,000 tonnes of waste a year are due to be delivered by rail here from 2022 onwards and unloaded into the plant’s bunker. This will eliminate approximately 2,250 HGV arrivals and departures every year, meaning 6.16 fewer trucks per day. Looking ahead, we also want to develop e-fuels with CO_2 from our plants as a climate-friendly power source.

At all our sites, we see ourselves as a partner of the local authorities – a partner who takes a long-term view and operates proactively, also with regard to resource-conserving sewage sludge recovery. In some cases, we already treat sewage sludge along with waste in our plants. The planned construction of sewage sludge mono-incineration plants at existing EEW sites will also create environmentally and economically advantageous synergies with our EfW plants.

Advancing environmental protection through innovative solutions

GRI 103-1 | 103-2 | 103-3 | 306-1 | 306-2

Thermal waste recovery and the associated energy production have direct impacts on the environment. On one hand, treating waste at temperatures exceeding 850 degrees Celsius reduces the volume of heterogeneous waste and destroys numerous harmful substances within the waste. At the same time, we use the energy contained in the waste – around 50 per cent of which is of biogenic origin – to generate electricity, heat and steam. In doing so, we make an important contribution towards a climate-friendly energy supply. On the other hand, emissions and residues arise from the combustion process at our plants.

Against this backdrop, as part of the recent materiality analysis, we identified three important subject areas relating to environmental protection where we are pressing ahead with innovative solutions.

Energy generation and supply

We use the energy contained in waste and produce electricity for households, process steam for industrial plants, and district heating for residential neighbourhoods. As such, we promote a decentralised energy infrastructure. Simultaneously, we reduce CO_2 emissions by using renewable sources of energy.

Resource reclamation and recycling

Besides energy, we recover valuable recycled raw materials such as bottom ash during thermal waste treatment and thus close material loops. These recycled raw materials are used in road construction and replace the natural resources gravel, stones and sand. Other residues, such as filter dusts, can be recovered in a responsible way. In the future, we want to ramp up our resource reclamation further. In connection with this, we are working on a future-proof solution for phosphorus recycling from municipal sewage sludge arisings.

Emissions

Our goal is to safely comply with the statutory limits or the limits specified by permits which are binding. We use modern flue gas cleaning technologies at all our plants. With these, we can minimise a portion of the organic and inorganic pollutants at the point of generation, chemically transform another portion into harmless or separable compounds, and filter out a further part. By doing so, we prevent air pollution and contribute to preserving air quality. In addition, we work incessantly to reduce our emissions further in an environmentally sound manner.

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 components: the environmental management system ISO 14001, the energy management system ISO 50001, the occupational health and safety management system ISO 45001, and the quality management system ISO 9001.

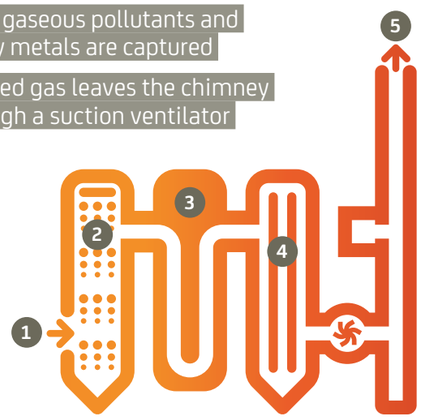
In addition, various directives and process instructions ensure compliance with external and internal requirements concerning environmental protection as well as driving improvements. These include the directive on environmental, energy and quality policy as well as the process instructions on corporate environmental protection, energy management, internal audits and continuous improvements. The overall organisation of residue management and recovery is regulated by the legal requirements pertaining to residues. At all of our plant sites which treat hazardous waste thermally, we register and track hazardous waste via an electronic waste documentation system. Our principles for the responsible procurement of operating materials also contain statutory environmental standards as well as our own environmental standards, which go even further. Our suppliers are required to fully adhere to these standards. Complaints relating to environmental matters are primarily handled by site managers with the support of our central Environment & Permits department.

To achieve that all 17 of our EfW plants operate to the highest possible standard of environmental friendliness, we constantly monitor and control their performance. For a precise analysis, we use daily, weekly and monthly reports; measurements; and comparisons of planned/actual data, which immediately flag up deviations from normal operations. Should there be possible or actual cases of limits being exceeded, we are thereby able to prevent harmful environmental effects or minimise their impact. Once a year, we publish emission figures in accordance with Section 23 of the 17th Ordinance on the Implementation of the Federal Immission Control Act (BImSchV).

Each plant site is responsible for the operations of its facility and thus for on-site environmental protection. This includes compliance with the emission limits, the implementation of all other environmental standards and guidelines, and the prevention of unplanned downtime. The individual plants are assisted by our Technology department which serves all of our sites, our HSQ department, and the Environment & Permits department. Among other things, they provide the sites with evaluations and methods, foster the sharing of expertise, advise, and work on the environmentally friendly further development of the plants. The Infrastructure team based in the Technology department is also responsible for technical controlling. The Residue Management unit has overall responsibility for residues being dealt with. It is also responsible for auditing carriers and waste management firms as well as for evaluating the analytics of waste arisings. The individual plant sites take care of waste management documentation.

Multi-level flue gas cleaning in our plants:

1. Flue gases flow from the boiler to the flue gas cleaning plant
2. Cleaning of flue gases with electronic and mesh filters
3. Addition of lime milk, activated carbon, lignite coke, lime hydrate and sodium hydroxide
4. Dust, gaseous pollutants and heavy metals are captured
5. Purified gas leaves the chimney through a suction ventilator



In addition to these responsibilities, all employees are, expected to strictly adhere to and implement the management procedures which we have communicated to them concerning occupational health and safety, the environment, quality, and the use of energy. Furthermore, certified training measures are completed every two years by the officers for pollution control, waste, water protection, hazardous materials and fire prevention as well as the person responsible in accordance with the Ordinance on Specialised Waste Management Companies (EfbV). Each year, internal audits are carried out by qualified EEW employees. Additionally, four to five audits are conducted annually by an independent certification organisation for EEW to obtain or renew its certificates. Our management approach is evaluated as part of these internal and external audits.

Energy generation and supply

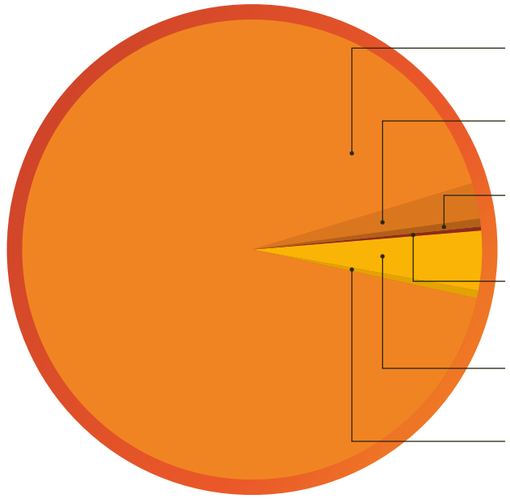
We use the energy released by thermal waste recovery to supply electricity, heat and process steam for industry and households. In this way, we replace fossil fuels, such as coal and oil, and avoid greenhouse gas emissions.

Each year, we produce environmentally friendly electricity for the equivalent of around 720,000 households per year, assuming that each household consumes on average 2,890 kilowatt-hours 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 3.8 million megawatt-hours per year. With this climate-friendly production of electricity and heat – around half of which is renewable – we make an important contribution towards decarbonising the economy. Especially in view of the volatility of the electricity price, we want to further expand the production and sales of heat and process steam and invest in a local energy infrastructure.

Resource reclamation and recycling

Following the thermal recovery of waste, non-combustible components are left as residues which amount to approximately 32 per cent on average. This means that a waste throughput of 4.86 million tonnes generates around 1.55 million tonnes of residues. The largest share is made up of the combustion end product bottom ash, which has high potential for recycling. Under the regulations of the waste working group of the federal government and states of Germany, our partner firms process the bottom ash at dedicated plants. The majority of it is then sold to processing companies for use as a recycled building material in road construction: examples include as a base course 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 quarrying these materials. Moreover, bottom ash is so unreactive that there is largely no risk of noxious leachate or greenhouse gases being produced when it is used properly. The metals remaining in the bottom ash are separated and recycled. These consist of both ferrous (steel and stainless steel) and non-ferrous metals (copper, aluminium, brass and zinc). Sorting out metals during processing forms part of the agreement with our partner firms that recover bottom ash.

Breakdown of our greenhouse gas emissions for 2021



Scope 1

Emissions from thermal waste recovery
1,959,970 t CO_2e/a

Emissions from the combustion of oil and natural gas
55,278 t CO_2e/a

Process emissions
8,294 t CO_2e/a

Scope 2

Emissions from purchased electricity
5,646 t CO_2e/a

Scope 3

Emissions from substances purchased for flue gas cleaning
94,500 t CO_2e/a

Emissions from the landfilling of residual materials
6,456 t CO_2e/a

Boiler ash and filter dust are also among the remaining residues. These are produced during the combustion of waste and captured by the flue gas cleaning process (see chart on p. 91). Filter dust is often classified as hazardous waste. We ensure that the boiler dust and filter dust are securely stored underground and thus permanently removed from the environmental cycle. They can be used, for example, to fill in and shore up cavities in mines, especially in old salt domes, as these form a solid geological barrier. We only work with direct business partners which are certified waste management companies that operate backfilling facilities. Residual risks can be minimised by inspecting incoming deliveries above ground and using gas detection systems. In the future, we would like to utilise alternative recovery options for boiler dust and filter dust in addition to backfilling mining cavities (see also chapters “Efficiently managing resources”, from p. 64 and “Finding answers to global megatrends”, from p. 74).

We also require water for our processes. We source this from the public water supply or use surface water and groundwater. Mains water is primarily used for drinking and sanitary purposes. Once it has been used, it flows into the drain network as wastewater to be processed at public treatment plants. In some cases, we treat sanitary wastewater ourselves and reuse it as process water to save drinking water. Surface water and groundwater usually pass through a water treatment facility and can then be utilised in the cycles at our plants. It is only supplemented by drinking water in isolated cases to compensate for losses which are technologically unavoidable. At some plants, we need water to condense waste steam after steam has been used as a source of energy, to cool flue gas and, for instance, to produce calcium hydroxide solution for separating pollutants from combustion gases.

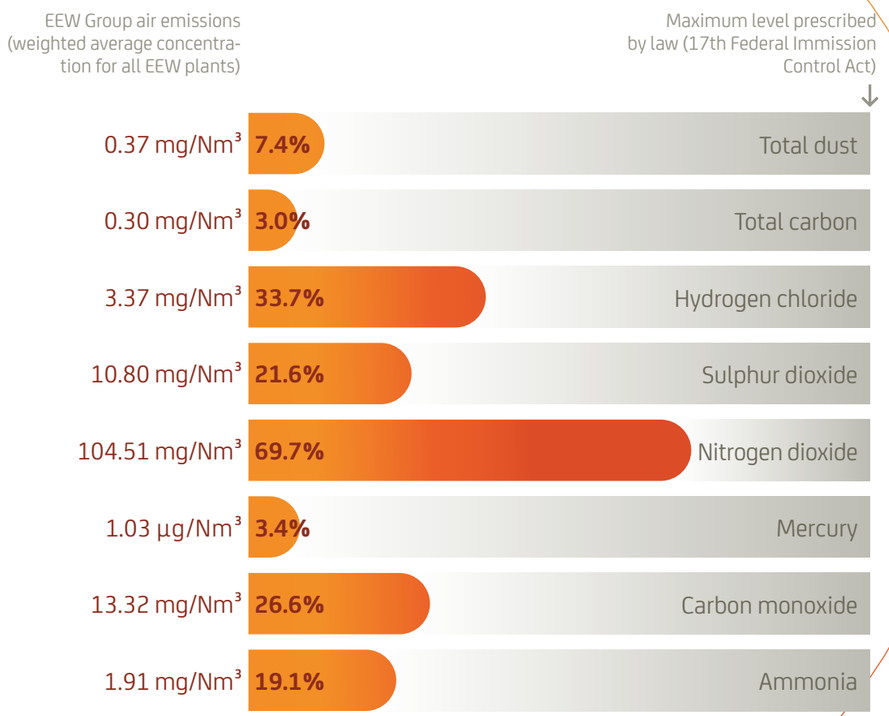
Normally, no effluent is produced because process wastewater is generally reused internally at the plant sites. In rare instances, heavy rainfall can cause an excess of storm water in the detention basins. If this happens, it is released into receiving streams in a controlled fashion. The concentration of harmful substances in this water is limited by the relevant water authorities' discharge permits and is regularly monitored by the respective local authorities. The water needed for flue gas cleaning is vaporised at the flue gas cleaning facilities and discharged from the stack along with the flue gas. It is not available for subsequent reuse. At present, our technical reporting does not capture any information about the quality or quantity of water which is abstracted and recirculated. Due to the heterogeneity of our plants, capturing this data is a very demanding undertaking. We are currently setting up a corresponding system.

The revised German Sewage Sludge Ordinance has turned our attention to another raw material: phosphorus. By constructing sewage sludge mono-incineration plants, we are paving the way for recovering phosphorus from sewage sludge ash. Phosphorus is crucial to plant health and development and is thus an indispensable mineral in agricultural fertilisers. However, phosphorus cannot be synthesised and the world's natural reserves are limited and unevenly distributed. The European Commission has rated phosphorus as a critical raw material since May 2014 now. By building sewage sludge mono-incineration plants with downstream phosphorus recycling, we want to make a contribution to conserving this vital resource. We started constructing our first sewage sludge mono-incineration plant in Helmstedt in 2019. Trial operations at the plant are due to commence in June 2022. Full-scale standard operations are expected to start in the third quarter of 2022. We currently expect to produce approximately 13,700 tonnes of ash containing phosphorus each year, with around 8 per cent of this being pure phosphorus. This means we will be able to substitute some 1,100 tonnes of raw phosphorus each year with our Helmstedt operations in the future. We have already signed a cooperation agreement with Seraplant GmbH for the further processing of the raw phosphorus. Seraplant operates one of the first industrial production facilities to make straight and complex fertilisers containing phosphate based on sewage sludge ash.

With this partnership, we are working to convert sewage sludge into fertiliser long before phosphorus recovery becomes mandatory in 2029. In this way, we are making a valuable early contribution to environmental and resource conservation in Germany. We have already been granted permission to build additional plants in Delfzijl, Stavenhagen and Magdeburg. Accordingly, we started constructing facilities in Stavenhagen and Magdeburg in October 2021. The licensing procedure is still under way for another project in Stapelfeld.

Breakdown of our significant air emissions

(in relation to the maximum levels prescribed by law)



This chart is not part of the audit scope of the external audit.

Emissions

Thermal recovery uses high temperatures which completely destroy organic pollutants in waste. The resulting emissions contain carbon monoxide, sulphur dioxide, hydrogen chloride and nitrogen oxides, ammonia, heavy metals, mercury and unburnt hydrocarbons. We are working on reducing these harmful substances as far as possible using various processes. For instance, some heavy metals are transferred to the flue gas so that they and the rest of the organic matter are bound on carbon-based adsorbents. Other pollutants such as hydrogen chloride (HCl) or sulphur oxide and its compounds (SOx) are bound by adding reagents and then filtered out. Nitrogen oxides (NOx) are removed from the waste gases by adding ammonia or ammonium compounds. The released ammonia reacts with the NOx in the waste gas to form environmentally neutral components (nitrogen and water). This means that none of the harmful substances that are separated out of the flue gas stream enter the biosphere, which would cause the output to have a negative environmental impact. What is more, the remaining emitted pollutant loads – such as heavy metals and organic hydrocarbons – are lower than those put in in the form of substitute fuels. None of the remaining pollutant loads have a harmful effect on the biosphere in the plants' emission zones.

We check whether the emissions from thermal recovery conform with the law by conducting continuous measurements and permanent self-monitoring. To do this, we use measuring technology certified by the German Technical Inspection Agency (TÜV) and the German Environment Agency (UBA), which is inspected and calibrated by external experts at predetermined intervals. By closely monitoring flue gas cleaning and the values determined, we are able to safely comply with the statutory requirements. We conduct special training to raise our employees' awareness of safe compliance with limits.

Against this backdrop, we completed a technical inspection in 2021 to prepare for the revision of the 17th Ordinance on the Implementation of the Federal Immission Control Act planned for 2023. The revision is expected to entail a further reduction in emissions of harmful substances and tighter limits. We are prepared for the changes and will make a further reduction in emissions by our plant fleet.

Steps on the way to our sustainability goals

Partner for sustainable development in the region
Ongoing target

Increase energy efficiency by leveraging renewable energies at the plant sites

> Support expansion of the district heating network for local supply
– Hanover: commercial operations of district heating supply to enercity since 2020
– Premnitz: build a district heating pipeline from Premnitz to Brandenburg (construction work began in mid-2021)

Partner for sustainable development in the region
Ongoing target

Promote e-mobility within the Group

> Acquire two electric vehicles for the EEW vehicle pool (implemented)

> Set up charging points at our sites (in implementation phase)

Advancing environmental protection through innovative solutions
Ongoing target

Increase share of renewables in the energy we use

> Increase purchasing of electricity and gas based on renewable energies (in implementation phase)

> Promote captive-use generation from photovoltaics in connection with expansion or new construction (in preparation phase)

Partner for sustainable development in the region
Target for the end of 2021

Reduce accident figures by 30 per cent **(baseline year 2018: 12)**

> Sensitise partner firms to the issue of occupational health and safety (in implementation phase)

> Central works agreement on the wearing of personal protective equipment (implemented)

> Information campaigns and regular training to prevent staff accidents (in implementation phase)

> Draw on external expertise to identify potential accident hotspots and derive preventive measures (in implementation phase)

Advancing environmental protection through innovative solutions
Target for the end of 2023

Reduce backfilling by 3 per cent

(baseline: relative proportion of filter dust per tonne of waste input in 2019)

> Use new recycling processes for filter dust management:
– Research alternative recovery options for flue gas cleaning residues with TU Bergakademie Freiberg (in implementation phase)

Attainment status in the 2021 reporting year  partially fulfilled  largely fulfilled  completely fulfilled

EEW Art: seeing things differently and acting sustainably

Art captures the present, it looks ahead, it inspires the new, and it promotes discourse on challenges and developments in society. With the EEW Art programme, each year we offer artists the opportunity to creatively engage with our company and our work.

In 2021 Jessica Backhaus became the second artist for EEW Art to deal with our treatment plants and the resource of waste. Born in Cuxhaven, the art photographer studied in Paris, worked in New York, and has been living in Berlin since 2009. Jessica Backhaus is considered to be one of the most important German representatives of contemporary photography. Her eye for that which is special in everyday life is also reflected in her work for EEW. We have acquired nine works from this series, exhibited them at our corporate headquarters in Helmstedt, and published them in this sustainability report. Let yourself be drawn into her work. The dialogue begins in the exploration of the art.

More information about the project

Let’s talk about: EEW Art

In the context of the EEW Art programme, photographer Jessica Backhaus was given carte blanche in order to deal artistically with waste and its thermal utilisation. In a conversation, Jessica Backhaus, Julia Rosenbaum (Art Consultant) and Bernard M. Kemper (CEO) discuss how art changes the way we look at things and why this change of perspective may also be a prerequisite for sustainable practices.

“Those who want to discover something new, embark on a tracking expedition in Jessica Backhaus’s motifs.”

Julia Rosenbaum I Art Consultant

What happens when waste becomes inspiration?

Bernard M. Kemper I I would like to extend a heartfelt welcome to the photographer, Jessica Backhaus. Dear Jessica, you have been commissioned to take photographs at our facilities as part of EEW Art. We have given you carte blanche so that we get to know your view of our facilities.

Jessica Backhaus I Thank you very much for this invitation. Typically, commissioned work does not allow for complete freedom of expression. Normally, the customer wants a specific benefit-oriented perspective on things. But with you, artistic freedom is part of the programme. That is very rare and very special.

Bernard M. Kemper I Artistic freedom is an essential aspect of EEW Art. Because sustainability needs the conviction to want to change something. That is why it is important to look over the rim of the tea cup, to consciously make a break with day-to-day business, and to say: now let’s dare to take an unbiased look from the outside.

When it comes to sustainability, EEW and art come together.

Julia Rosenbaum I Do you remember when we first started working together, we talked about what can be done with EEW and art?

Bernard M. Kemper I Yes, I remember it very well. Bringing art into the context of our company was completely alien to us at the beginning. That is why I had to do a lot of convincing with some colleagues. But when it comes to sustainability, EEW and art come together. Because on the one hand, we have a sustainable business model, and on the other hand, promoting the arts is also a form of sustainability.

“I am attracted by the seemingly incidental things, the special things in day-to-day life.”

Jessica Backhaus I Photographer

“My works enter into a dialogue with the staff who work there.”

Jessica Backhaus | Photographer

Julia Rosenbaum | Photography is particularly well-suited to bring together the artistic level and the documentary level. It can create a great moment of tension in the realm between abstraction and documentation.

Jessica Backhaus | I took photos at the EEW plants in Stapelfeld and Premnitz. There, I was given the freedom to move around the entire facility and look everywhere for what I found interesting and important.

Julia Rosenbaum | That fits right in with the way you work, doesn’t it? You go into the location and immerse yourself there. Do you first look from the macrocosm into the microcosm?

Jessica Backhaus | First, I look around in general, really quickly, like a scanner.

Julia Rosenbaum | And what’s catching your attention?

Jessica Backhaus | It’s the colours, the light, the details, or even the moment. Quite often, I’m drawn to situations that other people simply walk past. For many years now, the very things that are actually incidental have interested me.

Bernard M. Kemper | You photographed the grate ash, the so-called bottom ash, and a single spoon sticking out of the ash. Basically, it’s a symbol. Because we deal with the throwaway products of our society and try to make something new out of this waste. In this case, the best option is to transform what is thrown away into energy. That is precisely our understanding of sustainability, which is also reflected in your images. Everything is located within a closed loop and returns again. Both we, as a company, as well as each individual, have an enormous influence on what returns and in what form.

It is important to see things from a different perspective.

Jessica Backhaus | When I was looking for motifs in Stapelfeld, I was accompanied by two employees. We were together all day and they showed me the different areas of the facility. Apparently, I always paused at places that were very unusual for them. After a while, they said: we have been working here for 20 years now but we have never seen our facility like this before. That was a particularly beautiful moment.

“Art means to achieve the all-important look over the rim of the tea cup.”

Bernard M. Kemper | CEO EEW

“Your images point towards our understanding of sustainability: everything is located in a closed loop and returns.”

Bernard M. Kemper | CEO EEW

Bernard M. Kemper | Everyone living in Germany is connected to us because they produce waste, they have an impact on the environment and therefore also on its future. And that’s why I think it’s so good and important to look at things from a different perspective.

Julia Rosenbaum | And in doing so, you really need to take a closer look. So suddenly you discover a bend and wonder what it is. (See p. 106)

Bernard M. Kemper | That’s a curved weld that goes upwards.

The dialogue begins with the exploration of the art.

Jessica Backhaus | Something happens when engaging with art. EEW has chosen exactly the right works for this: on the one hand, the photographs show very specific objects and situations that can be located directly; on the other hand, there are works that are rather abstract and are not immediately obvious. In contrast to that which is figurative, abstraction offers the possibility of finding your own space, leeway for dreaming, feeling, seeing, and sensing. It is in the interplay between reality and abstraction that the exploration begins.

Bernard M. Kemper | That has to lead to a dialogue, doesn’t it?

Jessica Backhaus | I think so. After all, the end products, i.e. my works, live in the facilities, so to speak. That is, they enter into a dialogue with the staff who work there.

Bernard M. Kemper | We do, of course, wish that the engagement with the images and with what we do makes a difference, that this discourse will contribute towards moving away from the throwaway society and really thinking in terms of closed loops.

Jessica Backhaus | And that’s where the openness to embark on unknown paths helps.

Click here to watch the video of the conversation about: EEW Art.

“Photography creates a field of tension between documentation and abstraction.”

Julia Rosenbaum | Art Consultant

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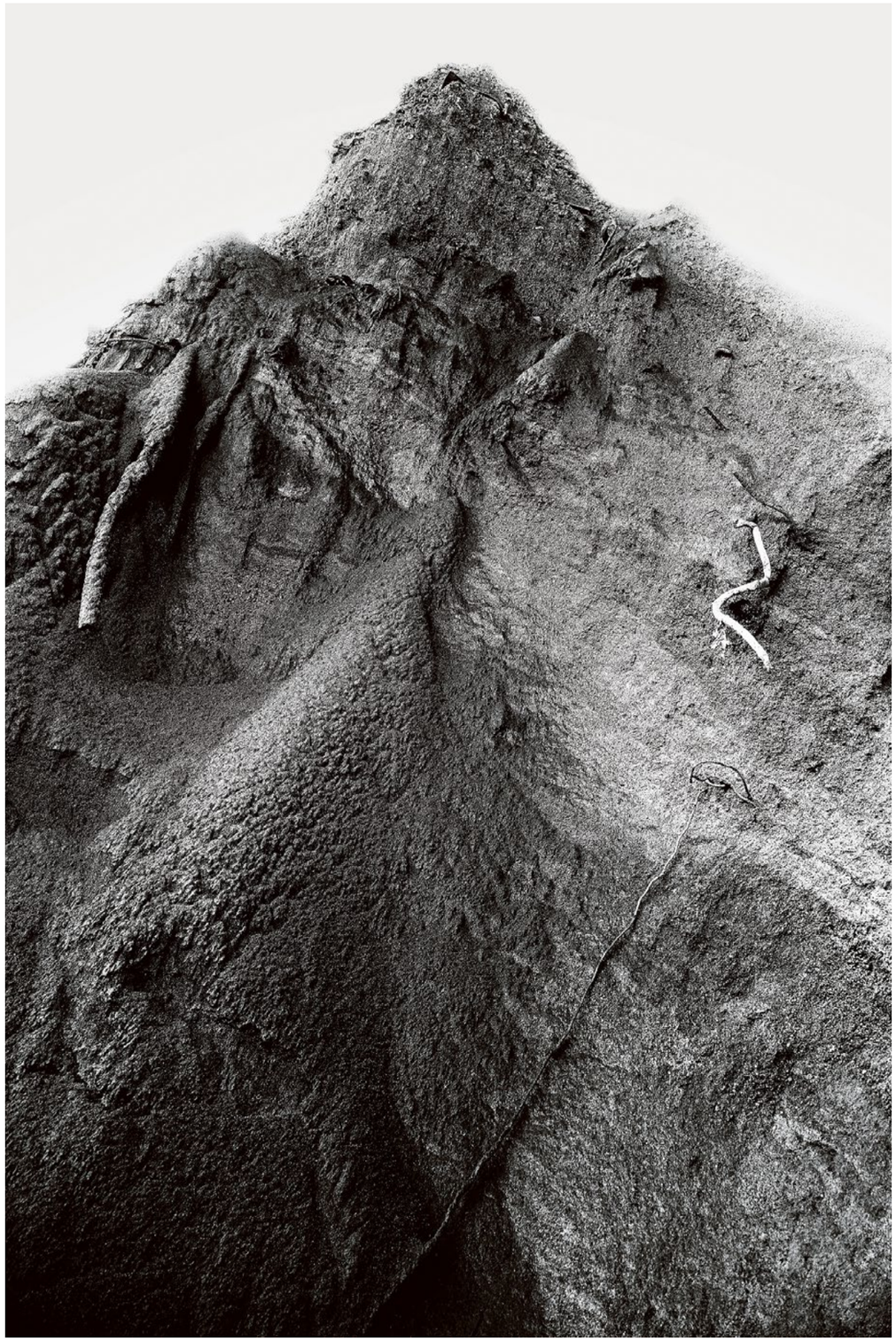

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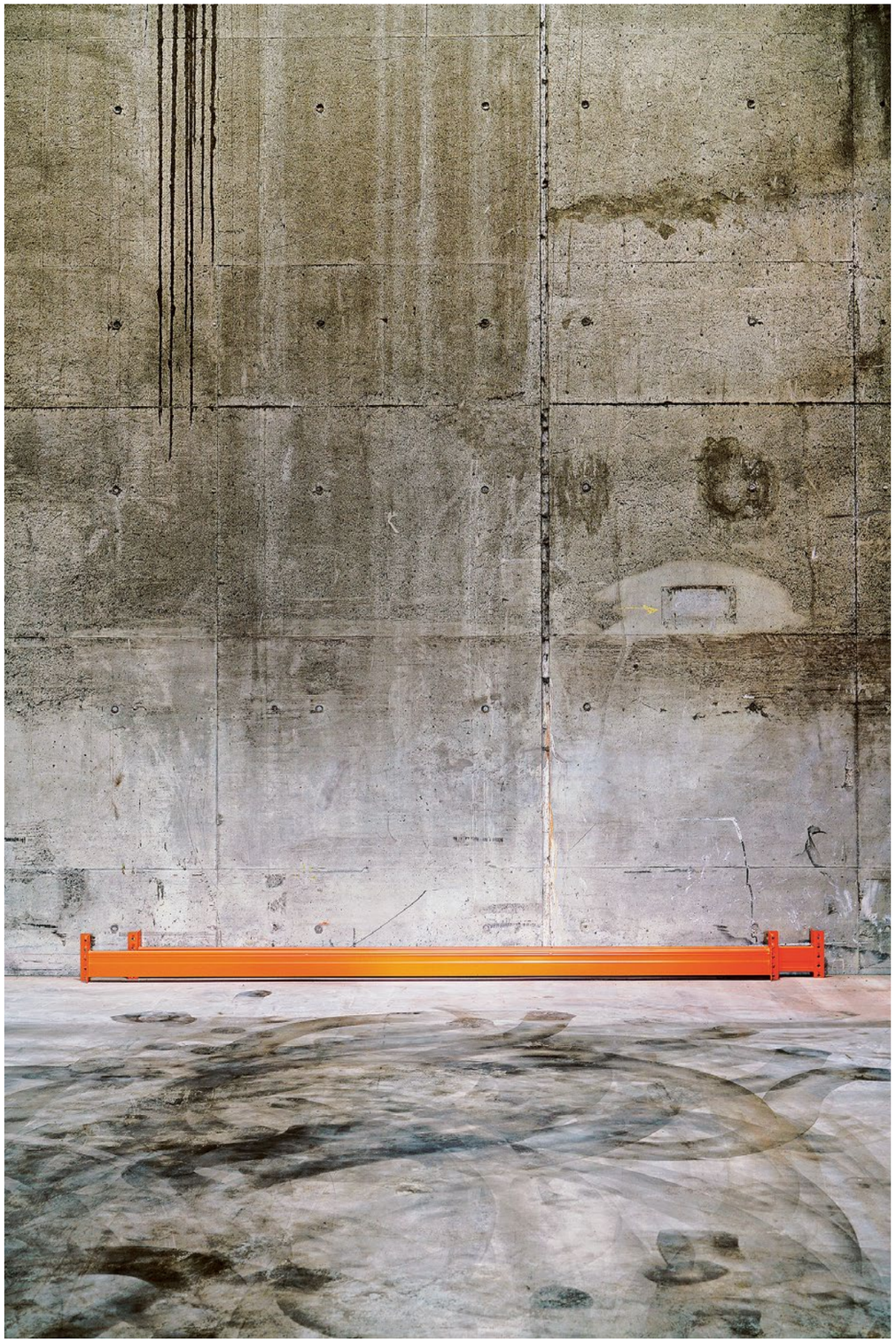

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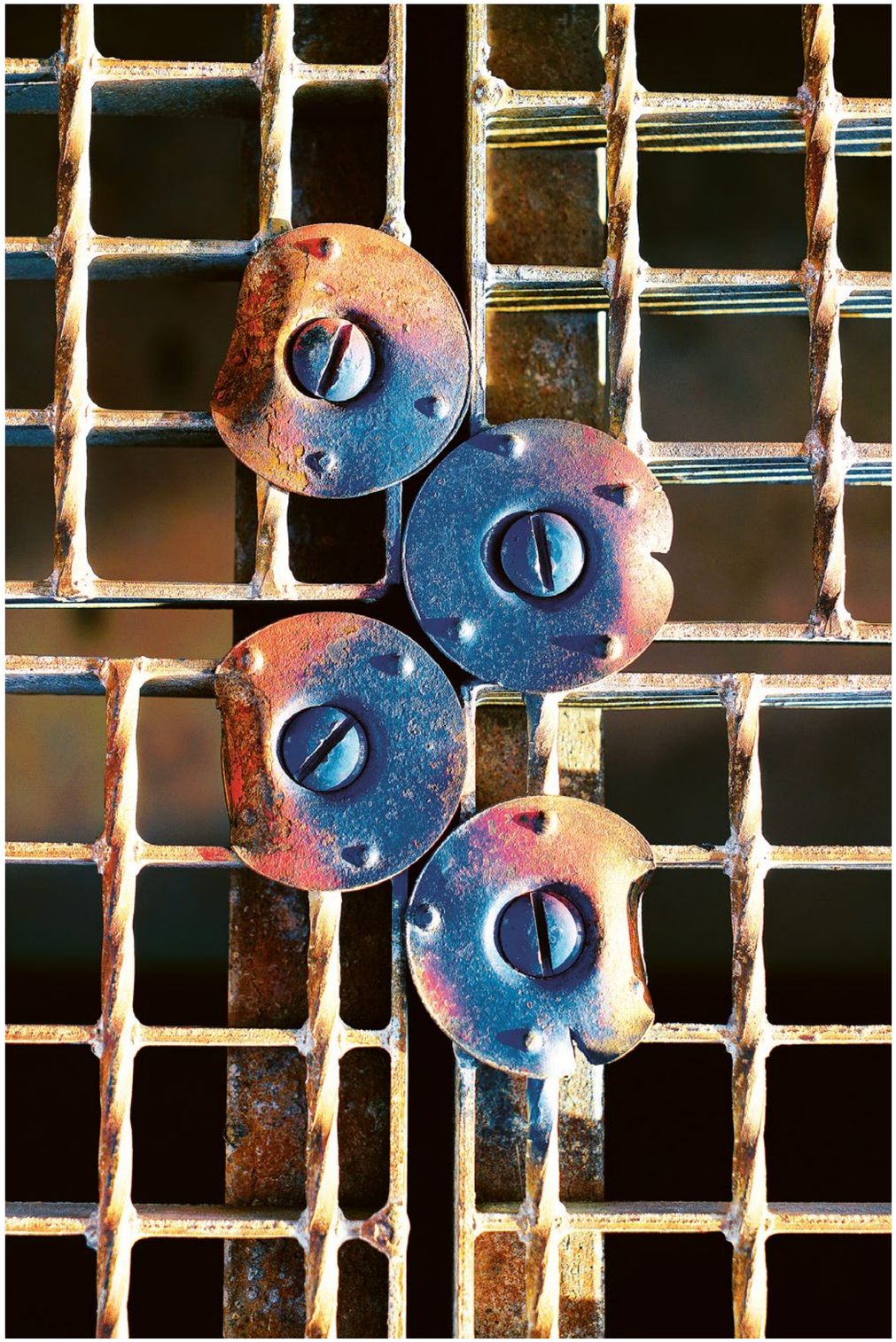

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Facts
and figures

Overview of key figures

GRI indicators	Description	2019	2020	2021
ECONOMIC KEY FIGURES				
Direct economic value generated and distributed [1]				
201-1	Direct economic value generated (revenues)	€593,078,000	€629,292,000	€659,042,000
	Economic value distributed[2]	€496,731,000	€531,449,000	€570,135,000
Proportion of spending on local suppliers				
204-1	Proportion of procurement spending at significant sites (including new-build projects) that is spent on suppliers local to the sites[3]	14%	19%	19%
	Proportion of procurement spending at significant sites (excluding new-build projects) that is spent on suppliers local to the sites[3]	26%	28%	26%
Materials used				
301-1	Total weight of waste input	4,716,603 t	4,811,000 t	4,907,130 t
ENVIRONMENTAL KEY FIGURES				
Energy consumption within the organisation				
302-1	Total electricity consumption[4]	11,775 MWh	17,866 MWh	✓ 13,443 MWh
	Total heating oil consumption	45,778 MWh	46,861 MWh	✓ 72,280 MWh
	Total gas consumption	131,768 MWh	162,119 MWh	✓ 179,215 MWh
	Total electricity sold[5]	1,772,868 MWh	1,817,979 MWh	✓ 1,784,267 MWh
	Total heat sold[5]	790,598 MWh	887,759 MWh	942,706 MWh
	Total steam sold[5]	2,176,201 MWh	2,095,743 MWh	2,221,053 MWh

[1] Data taken from the 2021 annual financial statements of the EEW Group.
[2] The economic value distributed comprises cost of materials, personnel expenses, other operating expenses, income taxes and net income.

[3] The 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.

[4] Total amount of electricity obtained from the power grid.
[5] Figures excluding the company headquarters (EEW Energy from Waste GmbH).

We measure and report on the direct and indirect greenhouse gas (GHG) emissions resulting from our business activities in accordance with the requirements of the GRI Standards and guided by the GHG Protocol Corporate Standard (explained in detail in the footnotes to the tables). The key figures show the development of greenhouse gas emissions in tonnes of CO_2 equivalent (CO_2e) over the years 2019 to 2021. During a review of the way in which we assigned our emissions to the categories of the GHG Protocol Corporate Standard, we established that some of the emissions are not caused by the combustion of flue gas reagents (Scope 1) as previously assumed. Instead, they are other indirect emissions (Scope 3) stemming from the procurement of these reagents. The figures for previous years were restated accordingly. This does not affect the total volume of CO_2 emissions.

GHG emissions avoided through the energy recovery of waste and the reclamation of metallic secondary raw materials are not presented as offsetting credits but are instead reported additionally as emissions avoided through substitution.

GRI indicators	Description	2019	2020	2021
ENVIRONMENTAL KEY FIGURES				
GHG emissions of the organisation				
305-1	Total volume of direct GHG emissions (Scope 1)[1]	2,032,270 t CO_2e	2,034,029 t CO_2e	✓ 2,023,542 t CO_2e
305-2	Total volume of energy indirect GHG emissions (Scope 2)[2]	4,840 t CO_2e	6,700 t CO_2e	✓ 5,646 t CO_2e
305-3	Other indirect (Scope 3) GHG emissions[3]	96,825 t CO_2e	99,763 t CO_2e	✓ 100,956 t CO_2e
305-4	Intensity of GHG emissions per tonne of waste input[4]	0.451 t CO_2e	0.449 t CO_2e	0.438 t CO_2e
	Avoidance through substitutions[5]	2,383,075 t CO_2e	2,234,913 t CO_2e	2,462,146 t CO_2e

[1] The GHG emissions in Scope 1 comprise all direct emissions resulting from the combustion of the fossil fraction of the waste, the consumption of heating oil and natural gas in the production facilities (in the waste-fired boilers; from operations of the steam superheater) and for heating buildings, as well as the consumption of resources for flue gas cleaning. The figures presented to date do not reflect the GHG emissions of the organisation’s vehicle fleet, which will be added once data collection has been established.
To calculate emissions from the combustion of waste, the total volume of waste combusted was broken down into the categories of domestic waste, commercial and industrial waste (C&I), and sewage sludge and then weighted and assigned corresponding emission factors (domestic waste: 0.315, C&I: 0.5, sewage sludge: 0.07). This resulted in average emission factors for subsequent calculations of 0.403 t CO_2e/t for 2021, 0.416 t CO_2e/t of waste for 2020, and 0.420 t CO_2e/t for 2019.
To calculate the emissions from heating oil consumption, the values for the mean density of 0.85 kg/l and the calorific value of 40 MJ/kg (from: ecoinvent database) were used. A figure of 0.074 t CO_2e/GJ was used as the emission factor (from: “CO_2-Emissionsfaktoren für fossile Brennstoffe” (CO_2 emission factors for fossil fuels), German Environment Agency, 6/2016, p. 36).
To calculate the emissions from natural gas consumption, first the gas consumption was converted into kWh (density of 0.8 kg/m³ and calorific value for natural gas of 10.5 kWh/kg from: ecoinvent database). A value of 0.201 t CO_2e/MWh (from: ecoinvent database) was used as the emission factor.
To calculate the emissions from the consumption of resources for flue gas cleaning, a figure of 0.52 t CO_2e/t was used as the emission factor (from: ecoinvent database).

[2] The Scope 2 GHG emissions comprise the emissions resulting from electricity purchases at EEW’s 17 plant sites and company headquarters in Helmstedt. To calculate the emissions from electricity purchases, the consumption figure was multiplied by the relevant electricity mix factor in “Entwicklung der spezifischen Kohlendioxid-Emissionen des deutschen Strommix in den Jahren 1990–2020” (Development of the specific carbon dioxide emissions of the German electricity mix between 1990 and 2020), German Environment Agency, 2/2021, p. 9).

[3] The Scope 3 GHG emissions include other indirect emissions stemming from purchases of resources for flue gas cleaning and the landfilling of residual materials (bottom ash, flue gas cleaning residues). To calculate the emissions from purchases of resources for flue gas cleaning, specific emission factors were applied for the individual materials (from: ecoinvent database). Regarding the landfilling of residual materials, it is assumed there was 50 per cent landfilling of bottom ash and 100 per cent recovery of flue gas cleaning residues. A value of 10.6 kg CO_2e/t of bottom ash (from: ecoinvent database) was used as the emission factor.

[4] All Scope 1–3 product-related emission categories were incorporated into calculation of the intensity quotient. Calculation of the quotient is based on the 4,863,346 t of waste thermally recovered at our 17 plants in 2021. Our value-adding process primarily produces CO_2 (Scope 1). The underlying emission factors in all Scope 1–3 emission categories also take into account the emissions of upstream processes.

[5] The avoided emissions result from the energy recovery of waste and the recycling of metals into secondary raw materials. In the generation of electrical energy, district heating and process steam, waste substitutes the use of fossil resources. The substitution was calculated based on the current emission factors for the district heating and electricity mix in Germany (source: German Environment Agency), which take into account the yearly status of the energy transition. For the emission factor for process steam, the 2010 climate report by Infraserv Höchst was used as a source. The substitution of GHG emissions through metals recovery was determined with the factor 2.6 t CO_2e/t metal (source: ITAD).

GRI indicators	Description	2019	2020	2021
ENVIRONMENTAL KEY FIGURES				
Nitrogen oxides (NOx), sulphur oxides (SOx) and other significant air emissions[6]				
305-7	Total dust[1,2]	0.47 mg/Nm³	0.44 mg/Nm³	0.37 mg/Nm³
	Total carbon[3]	0.29 mg/Nm³	0.31 mg/Nm³	0.3 mg/Nm³
	Hydrogen chloride[2]	3.87 mg/Nm³	3.67 mg/Nm³	3.37 mg/Nm³
	Sulphur dioxide[4]	9.33 mg/Nm³	10.89 mg/Nm³	10.8 mg/Nm³
	Nitrogen dioxide[5]	113.18 mg/Nm³	110.76 mg/Nm³	104.51 mg/Nm³
	Mercury[6]	1.25 µg/Nm³	1.39 µg/Nm³	1.03 µg/Nm³
	Carbon monoxide[4]	11.30 mg/Nm³	12.02 mg/Nm³	12.32 mg/Nm³
	Ammonia[3]	1.96 mg/Nm³	1.89 mg/Nm³	1.91 mg/Nm³

1 The emission values presented in the table are the weighted averages of the respective emission values of all the EEW Energy from Waste GmbH plant sites.
2 Limit values in accordance with 17. BImSchV (daily averages), 2019, 2020 and 2021: 5 mg/Nm³
3 Limit values in accordance with 17. BImSchV (daily averages), 2019, 2020 and 2021: 10 mg/Nm³
4 Limit values in accordance with 17. BImSchV (daily averages), 2019, 2020 and 2021: 50 mg/Nm³
5 Limit values in accordance with 17. BImSchV (daily averages), 2019, 2020 and 2021: 150 mg/Nm³
6 Limit values in accordance with 17. BImSchV (daily averages), 2019, 2020 and 2021: 30 µg/Nm³

Waste generated by households, municipalities and industry is an important resource for us and is the largest input material in terms of volume to go into our value-adding process (see GRI 301). In addition to the environmentally sound products electricity, district heating and process steam, residues are created at the end of thermal recovery at our plants which are classified as waste. The table below and the remarks in the “Advancing environmental protection through innovative solutions” section (p. 90 ff.) detail how we deal with these.

Waste generated				
306-3	**Total weight of waste generated**	1,459,408 t	1,505,287 t	1,541,534 t
	Total weight of hazardous waste[7]	273,641 t	275,517 t	273,743 t
	Total weight of non-hazardous waste, of which[8]	1,185,767 t	1,229,770 t	1,267,791 t
	Recycled[9,10]			*1,218,116 t*
	Recovery or disposal[10,11]			*49,675 t*

7 Includes, amongst other things, mercury, cadmium and lead.
8 Bottom ash, sands and sodium chloride.
9 The bottom ash undergoes a recycling process. This involves metals being processed for reuse (9.59% on average according to certificates of destruction). Approx. 36.5% of the bottom ash is then disposed of as landfill.
10 The amendment of GRI 306 involves a new breakdown structure, which we are using for the key figures from 2021 onward. This figure was not reported in previous years.
11 Bottom ash (used by cement works or disposed of as landfill), sands (used by cement works) and sodium chloride (used by the aluminium industry or in mines).

Waste diverted from disposal[12]		
306-4	Total weight of hazardous waste diverted from disposal, of which[13]	233,604 t
	Processed for reuse	*0 t*
	Recycled	*0 t*
	Recovered using other processes[14]	*233,604 t*
	Total weight of non-hazardous waste diverted from disposal, of which	132,968 t
	Processed for reuse[15]	*131,401 t*
	Recovered using other processes[16]	*1,567 t*

12 The amendment of GRI 306 involves a new breakdown structure, which we are using for the key figures from 2021 onward. This figure was not reported in previous years.
13 All the hazardous fractions from flue gas cleaning, in particular boiler ash and filter dust.
14 Other use in mining.
15 Metal reclamation from bottom ash, reuse of coarse ash in civil engineering and as bulk material.
16 Sands and sodium chloride in mining.

GRI indicators	Description	2019	2020	2021
ENVIRONMENTAL KEY FIGURESS				
Waste directed to disposal[1]				
306-5	Total weight of hazardous waste directed to disposal, of which			40,139 t
	Combusted (with energy recovery)			*0 t*
	Combusted (without energy recovery)			*0 t*
	Landfilling[2]			*40,139 t*
	Disposed of using other methods			*0 t*
	Total weight of non-hazardous waste directed to disposal, of which			1,134,823 t
	Combusted (with energy recovery)[3]			*6,091 t*
	Combusted (without energy recovery)			*0 t*
	Landfilling[4]			*478,136 t*
	Disposed of using other methods[5]			*650,596 t*

1 The amendment of GRI 306 involves a new breakdown structure, which we are using for the key figures from 2021 onward. This figure was not reported in previous years.
2 At Class III landfill sites.
3 Unburnt materials in the bottom ash which are fed back into thermal recovery.
4 Disposal of processed bottom ash and sands at landfill sites.
5 Processed bottom ash used for road and landfill construction.

SOCIAL AND COMPLIANCE KEY FIGURES

Information on employees and other workers					
102-8	**Total number of all employees**		1,134	1,159	✓1,217
	Gender	Female	200	203	✓211
		Male	934	956	✓1,006
	Temporary employees		66	60	79
	Gender	Female	31	23	40
		Male	35	37	39
	Employees in Germany		1,021	1,038	1,092
	Gender	Female	181	195	196
		Male	840	843	896
	Temporary employees in Germany		53	63	67
	Gender	Female	21	21	21
		Male	32	42	46
	Employees in the Netherlands		67	75	78
	Gender	Female	7	8	9
		Male	60	67	69
	Temporary employees in the Netherlands		3	7	12
	Gender	Female	1	3	3
		Male	2	4	9
	Employees in Luxembourg		46	49	47
	Gender	Female	6	7	6
		Male	40	42	41

GRI indicators	Description		2019	2020	2021
SOCIAL AND COMPLIANCE KEY FIGURES					
Information on employees and other workers					
	Temporary employees in Luxembourg		0	1	0
	Gender	Female	0	0	0
		Male	0	1	0
	Full-time employees[1]		889	890	✓923
	Gender	Female	156	120	✓124
		Male	733	770	✓799
	Part-time employees[1]		41	60	✓75
	Gender	Female	34	42	✓45
		Male	7	18	✓30
Collective bargaining agreements[2]					
102-41	Employees covered by collective bargaining agreements		86.1%	85.8%	84.7%
New employee hires and employee turnover[3]					
401-1	**New employee hires total**		48 (4.5%)	52 (4.5%)	83 (6.8%)
	Gender	Female	6 (0.6%)	8 (0.7%)	12 (1.0%)
		Male	42 (3.9%)	44 (3.8%)	71 (5.8%)
	Age	Under 30 years old	13 (1.2%)	12 (1.0%)	16 (1.3%)
		30–50 years old	34 (3.2%)	28 (2.4%)	56 (4.6%)
		Over 50 years old	1 (0.1%)	12 (1.0%)	11 (0.9%)
	Region	Germany	48 (4.5%)	45 (3.9%)	78 (6.4%)
		Netherlands	0 (0.0%)	4 (0.3%)	2 (0.2%)
		Luxembourg	0 (0.0%)	3 (0.3%)	3 (0.2%)
	Employee turnover[4] total		40 (3.8%)	46 (4.0%)	44 (3.6%)
	Gender	Female	8 (0.8%)	8 (0.7%)	7 (0.6%)
		Male	32 (3.0%)	38 (3.3%)	37 (3.0%)
	Age	Under 30 years old	5 (0.5%)	5 (0.4%)	7 (0.6%)
		30–50 years old	20 (1.9%)	20 (1.7%)	23 (1.8%)
		Over 50 years old	15 (1.4%)	21 (1.8%)	14 (1.2%)
	Region	Germany	36 (3.6%)	43 (3.7%)	37 (3.0%)
		Netherlands	1 (0.1%)	1 (0.1%)	1 (0.1%)
		Luxembourg	3 (0.1%)	2 (0.2%)	6 (0.5%)

[1] The 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.

[2] The 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.

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

[4] The employee turnover figures refer exclusively to permanent employment relationships.

GRI indicators	Description		2019	2020	2021
SOCIAL AND COMPLIANCE KEY FIGURES					
Diversity of governance bodies and employees					
405-1	**Individuals within governance bodies**				
	Gender	Female	11.0%	11.0%	✓11.0%
		Male	89.0%	89.0%	✓89.0%
	Age	Under 30 years old	0.0%	0.0%	✓0.0%
		30–50 years old	33.0%	33.0%	✓11.0%
		Over 50 years old	67.0%	67.0%	✓89.0%
	Employees covered by collective bargaining agreements				
	Gender	Female	19.3%	18.8%	19.1%
		Male	80.7%	81.2%	80.9%
	Age	Under 30 years old	14.4%	16.8%	13.1%
		30–50 years old	45.0%	43.7%	45.7%
		Over 50 years old	40.6%	39.5%	41.2%
	Trainees				
	Gender	Female	17.9%	14.5%	15.2%
		Male	82.1%	85.5%	84.8%
	Age	Under 30 years old	95.5%	95.7%	97.0%
		30–50 years old	4.5%	4.3%	3.0%
		Over 50 years old	0.0%	0.0%	0.0%
	Employees not covered by collective bargaining agreements				
	Gender	Female	11.1%	10.8%	11.7%
		Male	88.9%	89.2%	88.3%
	Age	Under 30 years old	0.0%	0.0%	0.0%
		30–50 years old	38.9%	38.7%	42.2%
		Over 50 years old	61.1%	61.3%	57.8%
	Senior managers				
	Gender	Female	3.3%	0.0%	0.0%
		Male	96.7%	100.0%	100.0%
	Age	Under 30 years old	0.0%	0.0%	0.0%
		30–50 years old	16.7%	23.3%	27.3%
		Over 50 years old	83.3%	76.7%	72.7%

GRI indicators	Description		2019	2020	2021
SOCIAL AND COMPLIANCE KEY FIGURES					
Incidents of discrimination and corrective actions taken					
406-1	**Total number during the reporting period**		0	0	0
Average hours of training					
404-1	**Average hours of training, broken down by**				
	Gender	Female	16 h	18 h	12 h
		Male	17 h	17 h	10 h
Percentage of employees receiving regular performance and career development reviews					
	Percentage of all employees, broken down by				
404-3	Gender	Female[1]	83.1%	79.4%	79.8%
		Male[1]	83.1%	79.4%	79.8%
	Senior managers[2]		100.0%	100.0%	100.0%
	Employees not covered by collective bargaining agreements[2]		100.0%	100.0%	100.0%
	Trainees[2]		100.0%	100.0%	100.0%

[1] The Großräschen, Stapelfeld, Stavenhagen and Premnitz sites do not have regular reviews for employees covered by collective bargaining agreements.
[2] The exclusion of certain plants (see above) applies only to employees covered by collective bargaining agreements and does not apply to senior managers, employees not covered by collective bargaining agreements or trainees.

GRI indicators	Description		2019	2020	2021
SOCIAL AND COMPLIANCE KEY FIGURES					
Work-related injuries					
	Health rate[1]		94.4%	94.6%	✓ 95.1%
403-9	**All employees[2]**				
	Number and rate of fatalities as a result of work-related injury		0 (0.0%)	0 (0.0%)	0 (0.0%)
	Number and rate of high-consequence work-related injuries (excluding fatalities)[3]		3 (1.7 LTI)	1 (0.5 LTI)	✓ 3 (1.6 LTI)
	Number and rate of recordable work-related injuries[4]		4 (2.2 TRIF)	2 (1.1 TRIF)	✓ 4 (2.1 TRIF)
	Number of hours worked[5]			1,827,085 h	1,900,075 h
	All workers who are not employees but whose work and/ or workplace is controlled by the organisation[6]				
	Number and rate of fatalities as a result of work-related injury		0 (0.0%)	0 (0.0%)	1 (1.0%)
	Number and rate of high-consequence work-related injuries (excluding fatalities)[5,7]			3 (3.1 LTI)	2 (2.1 LTI)
	Number and rate of recordable work-related injuries[8]		4 (3.8 TRIF)	5 (5.5 TRIF)	2 (2.1 TRIF)
	Number of hours worked[5]			971,834 h	974,188 h

[1] This information relates to employees of the EEW Group.
[2] The following work-related hazards, which were identified via risk assessments, pose the risk of high-consequence injuries: falling, working with power-driven or non-power-driven equipment, climbing down/twisting an ankle, hazardous materials, tripping/stumbling, electrical accident, transport and load handling, burns/scalding. A safety alert is created for each accident classed as a total recordable injury (TRI) or lost time injury (LTI). This specifies the hazards as well as any remedial measures. These are discussed in conference calls with the EEW Group's plant managers and safety specialists in order to avoid similar hazards at other sites. In addition, there is a teleconference about the accident. A management summary is prepared weekly and the data is documented monthly in reports and/or statistics. In accordance with the applicable hierarchy of controls, we have adopted and implemented technical as well as organisational and personal protective measures. The rates are calculated based on 1,000,000 hours worked. No employees are excluded from this indicator.
[3] In the reporting year, there were three high-consequence accidents: 1 scalded foot – caused by stepping into hot water, 1 fractured midfoot – caused by a heavy steel plate falling, 1 crushed thumb – caused when removing a blockage using a rod.
[4] In the reporting year, there were four recordable work-related injuries: 1 scalded foot, 1 fractured midfoot, 1 crushed thumb, 1 lacerated index finger.
[5] With the change to GRI 403, there is a new classification and basis of calculation, which we apply as of 2020. This figure was not reported in previous years.
[6] The following work-related hazards, which were identified via risk assessments, pose the risk of high-consequence injuries: falling, working with power-driven or non-power-driven equipment, climbing down/twisting an ankle, hazardous materials, tripping/stumbling, electrical accident, transport and load handling, burns/scalding. A safety alert is created for each accident classed as a total recordable injury (TRI) or lost time injury (LTI). This specifies the hazards as well as any remedial measures. These are discussed in conference calls with the EEW Group's plant managers and safety specialists in order to avoid similar hazards at other sites. In addition, there is a teleconference about the accident. A management summary is prepared weekly and the data is documented monthly in reports and/or statistics. In accordance with the applicable hierarchy of controls, we have adopted and implemented technical as well as organisational and personal protective measures. The rates are calculated based on 1,000,000 hours worked. Construction site accidents are not recorded within the scope of this indicator. As of 2020 the data for contract workers is reported along with those for employees of partner firms in one figure.
[7] In the reporting year, there were two high-consequence accidents: a laceration to the back of the head – caused by a knock, and 1 fatality – caused by a fall.
[8] In the reporting year, there were two recordable work-related injuries: a laceration to the back of the head and an accident resulting in fatal injuries.

GRI indicators	Description	2019	2020	2021
SOCIAL AND COMPLIANCE KEY FIGURES				
Sites assessed for risks related to corruption				
205-1	Total number in the reporting period	0 (0.0%)	0 (0.0%)	0 (0.0%)
Confirmed incidents of corruption and actions taken				
205-3	Total number of confirmed incidents of corruption in the reporting period	0	1	0
	Total number of confirmed incidents in which employees were dismissed or disciplined for corruption	0	1	0
	Total number of confirmed incidents when contracts with business partners were terminated or not renewed due to violations related to corruption	0	0	0
	Public legal cases regarding corruption brought against the organisation or its employees during the reporting period and the outcomes of such cases	0	0	0
Legal actions for anticompetitive behaviour, anti-trust, and monopoly practices				
206-1	Total number of legal actions during the reporting period	0	0	0
Non-compliance with environmental laws and regulations				
307-1	Total monetary value of significant fines for non-compliance with environmental laws and/or regulations	€0	€0	€0
	Non-monetary sanctions for non-compliance with environmental laws and/or regulations	0	0	0
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%	100%	100%
	Public disclosure of results of environmental impact assessments	100%	100%	100%
	Works councils, occupational health and safety committees and other worker representation bodies to deal with impacts	100%	100%	100%
Political contributions				
415-1	Total monetary value of political contributions	€0	€0	€0
Complaints concerning customer data				
418-1	**Substantiated complaints received concerning breaches of customer privacy**	0	0	0
	From outside parties and substantiated by the organisation	0	0	0
	From regulatory bodies	0	0	0
	Identified leaks, thefts or losses of customer data	0	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	€0	€0	€0
	Total number of non-monetary sanctions	0	0	0

Membership in associations

GRI 102-13

We are a member of various lobby groups and industry associations. Their bodies are platforms for the representation of interests at the political level and for various research areas.

BDE | With 750 member companies of all sizes, the Federation of the German Waste, Water and Raw Materials Management Industry is the strongest interest group representing the private waste, water and raw-materials management sector in Germany and Europe. It is committed to ensuring reliable framework conditions.

BDEW | The German Association of Energy and Water Industries represents the interests of its 1,800 municipal 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.

VKU | The German Association of Local Public Utilities represents the interests of municipal utility and waste management entities in Germany. The more than 1,500 member companies are mainly active in the energy supply, water, wastewater, waste management and urban-cleaning segments.

ITAD | Interessengemeinschaft der Thermischen Abfallbehandlungsanlagen in Deutschland e. V. (Interest Group for Thermal Waste Treatment Plants in Germany) advocates on behalf of thermal waste treatment plant owners and operators in their relations with the public, policymakers, public authorities and other interest groups and supports research projects aimed at optimising thermal waste treatment.

DGAW | The German Waste Management Association is made up of representatives of private and municipal waste management companies, politics, administration, science, plant and mechanical engineers, plant designers, plant operators and citizens' initiatives. Close collaboration with all important organisations in the raw-materials industry 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 offers a network for specialists and managers from the worlds of business, research and local politics who are closely involved with water and waste. It also supports scientific research, compiles relevant information in magazines, books and publications, contributes to standardisation work, acts as a political, economic and scientific adviser, and promotes vocational and further training in water and waste management.

DPP | The German Phosphorus-Platform 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 are industrial and commercial organisations that share a common interest: energy. The member organisations account for around 80 per cent of industrial energy consumption and approximately 90 per cent of industrial captive power generation in Germany.

KWS | With its vocational and further training offerings, KWS Energy Knowledge eG offers its member firms and other energy companies the opportunity to provide, adapt and expand the occupational qualification of their employees. The offerings include certificate courses, officially recognised training programmes and individually tailored training measures as well as activation measures.

Independent auditor's report on a limited assurance engagement

GRI 102-56

The assurance engagement performed by Ernst & Young (EY) relates exclusively to the German PDF version of the Sustainability Report 2021 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 "✓" in the Sustainability Report of EEW Energy from Waste GmbH for the period from 1 January 2021 to 31 December 2021 (hereafter "report").

Our engagement exclusively refers to the disclosures marked with the symbol "✓" in the German PDF version of the report. Not subject to our assurance engagement are other references to disclosures made outside the report as well as prospective or prior year disclosures. The report is published as a PDF version at https://www.eew-energyfromwaste.com/en/responsibility/sustainability/our-engagement/.

A. Responsibilities of the executive directors

The executive directors 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 (manipulation of the report) or error.

B. Independence and quality assurance of the auditor's firm

We have complied with the German professional requirements on independence as well as other professional conduct requirements.

Our audit firm applies the national legal requirements and professional pronouncements - in particular the BS WP/vBP ["Berufssatzung für Wirtschaftsprüfer/vereidigte Buchprüfer": Professional Charter for German Public Accountants/German Sworn Auditors] in the exercise of their Profession and the IDW Standard on Quality Management issued by the Institute of Public Auditors in Germany (IDW): Requirements for Quality Management in the Audit Firm (IDW QS 1) and accordingly maintains a comprehensive quality management system that includes documented policies and procedures with regard to compliance with professional ethical requirements, professional standards as well as relevant statutory and other legal requirements.

C. Auditor's responsibility

Our responsibility is to express a conclusion with limited assurance on the disclosures marked with the symbol "✓" in the report based on the assurance engagement.

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 any matters have come to our attention that cause us to believe that the disclosures marked with the symbol "✓" in the report of the Company have not been prepared, in all material respects, in accordance with the GRI criteria. Not subject to our assurance engagement are other references to disclosures made outside the report, prospective disclosures and prior-year disclosures.

In a limited assurance engagement, the procedures performed are less extensive than in a reasonable assurance engagement, and accordingly, a substantially lower level of assurance is obtained. The selection of the assurance procedures is subject to the professional judgment of the auditor.

In the course of our assurance engagement we have, among other things, performed the following assurance procedures and other activities:

- 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, aggregating and validating sustainability data in the reporting period and testing such documentation on a sample of 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 "✓".

D. 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 to 31 December 2021 have not been prepared, in all material respects, in accordance with the relevant GRI criteria.

We do not express an assurance conclusion on the other references to disclosures made outside the report, prospective disclosures as well as prior-year disclosures.

E. Restriction of use

We draw attention to the fact that the assurance engagement was conducted for the Company's purposes and that the report is intended solely to inform the Company about the result of the assurance engagement. As a result, it may not be suitable for another purpose than the aforementioned. Accordingly, the report is not intended to be used by third parties for making (financial) decisions based on it. Our responsibility is to the Company alone. We do not accept any responsibility to third parties. Our assurance conclusion is not modified in this respect.

F. 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.ey.com/general-engagement-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, 07 July 2022

Ernst & Young GmbH
Wirtschaftsprüfungsgesellschaft

Nicole Richter Wirtschaftsprüferin (German Public Auditor)	Hans-Georg Welz Wirtschaftsprüfer (German Public Auditor)

Imprint

GRI 102-53

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Concept and editing
Scholz & Friends Reputation, Berlin

Creative concept and design
Petershagen Kommunikation, Cologne

Publication
August 2022
The report is available in German and English.
In case of a discrepancy between the versions,
the German version shall prevail.

Image credits
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