BMK

BEGEISTERUNG
FÜR **ELEKTRONIK**

ENVIRONMENTAL STATEMENT 2022

INTRODUCTORY MESSAGE FROM THE MANAGEMENT BOARD

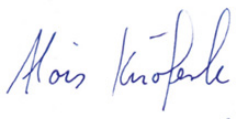
Ladies and Gentlemen, dear readers,

As a service provider in the field of Electronic Engineering and Manufacturing Services (E²MS), we see ourselves as a competent partner for the entire life cycle of electronic assemblies. Our service portfolio includes the development, manufacturing and end-of-life management of electronic assemblies and finished units. These activities are interwoven with issues of environmental protection and resource conservation. The intensification of environment-related legislation in recent years provides the legal guidelines for this. However, statutory obligations and prohibitions alone are not enough to protect the environment. With the increasingly clear negative effects of climate change, loss of biodiversity, and pressing resource shortages, everyone must do their part in protecting the environment if anything is to change for the better.

Environmental awareness is becoming more important at BMK, because electronic assemblies and thus our services, are being seen in a wide variety of product groups from more and more diverse industries. We want to live up to our responsibility towards the environment and continuously increase our environmental performance through the improvement of our processes for current and future generations. With this environmental statement, we would like to give you a closer look into BMK as a company, our corporate mission statement, and our commitment to environmental protection. On the following pages you can read more about the values we stand for, what we have achieved since the establishment of our environmental management system in 2003, and what our goals are to continue to make a valuable contribution to the environment and society in the future.

BMK is open and interested in professional exchange, whether at trade fairs, conferences, or other meetings, with interested parties or graduates writing their final thesis at BMK. If you have any questions, please do not hesitate to contact your personal contact person or our environmental management representative.

Sincerely,
Your management team



Alois Knöferle
BMK Group GmbH Co. KG

Dr. Bärbel Götz
BMK professional electronics GmbH

Nafi Pajaziti
BMK electronic services GmbH

René Schmidt
BMK electronic solutions GmbH

COMPANY OVERVIEW

B, M and K – may only be three letters, but are known throughout the entire industry for quality, expertise and above all enthusiasm. BMK is a leading electronics service provider with optimized, value-added processes and customized services.

BMK takes specific requirements into account when optimizing the supply chain, such as comprehensive technological expertise in the development, production and after-sales service of electronic assemblies and devices, efficient purchasing strategies, and market-driven logistics concepts. To better support our customers, BMK uses and links various databases to make reliable statements on relevant topics regarding the environment, obsolescence prevention, lifecycle management, and critical raw materials.

BRIEF COMPANY HISTORY

Our company history begins in 1994 with the foundation of BMK professional electronics GmbH as a management buy-out of NCR/ AT&T Augsburg. The headquarters were originally at Deuterpark in Augsburg with just 25 employees and a production area of 1,200 m². At that time, the annual turnover had already achieved 1.8 million Euros.

While the German Federal Government convened its Council for Sustainable Development for the first time, BMK founded another business to offer its customers more environmentally friendly services in the electronics industry. This company was established under the motto "repairing instead of disposing" and its goal is to make an important contribution to resource conservation through durable products. Since 2001, BMK electronic services GmbH has been a reliable partner for the service and repair of electronic assemblies and devices.

Furthermore, the automotive industry has been showing increased interest in electronic services. BMK's know-how in control systems, sensor technology, and driver assistance systems for e-mobility has been in high demand. Therefore, BMK electronic solutions GmbH, founded in 2005, was repurposed in 2019 to specialize in the production of electronic assemblies on behalf of customers in the automotive sector. At the same time, BMK professional electronics has expanded its expertise in all areas of prototyping, samples, and series production. Since 2007, BMK Group GmbH & Co. KG has been providing administrative services for the entire BMK Group.

The company's dynamic expansion required the establishment of a secondary location in Augsburg. In 2006, BMK professional electronics, BMK electronic solutions, and the BMK Group moved into another industrial park "Sigmatechnopark Augsburg", which Siemens had shut down only previously. BMK continues to use the site for electronic assembly-production. The rented area is 140 meters away from residential buildings and located outside of conservation areas. The site "Sigmatechnopark" is situated in a designated commercial area of Augsburg and very close to the University of Augsburg. Stops and stations of the public and regional/long-distance transport systems can be reached on foot in 10 to 20 minutes.

BMK location at Sigmatechnopark Augsburg (STA)
Werner-von-Siemensstraße 6, 86159 Augsburg

- BMK professional electronics GmbH
- BMK electronic solutions GmbH
- BMK Group GmbH & Co.KG

The company BMK electronic services stayed at the industrial park “Deuterpark” until March 2022. Its new site “Steinerne Furt” is located at the commercial area Lechhausen Nord and the nearest residential building is 340 meters away. This site is also situated outside of conservation areas. BMK follows the robotics-producer Kuka and warehouse owners in renting the site and is surrounded by a flower shop and a garden center, a veterinarian practice and a pharmaceutical wholesales company. The industrial areas in the south and west are currently unused.

BMK Standort Steinerne Furt 63, 86167 Augsburg
Bildquelle: Keller & Hosp

Thus, the BMK sites are all located in designated commercial areas in the city of Augsburg, where BMK is in a rental position in the industrial parks. There is no indication of possible contaminated sites. The production area at BMK covers over 30,000 m² and more than 5,500 different electronic products are manufactured or refurbished. BMK recorded sales of €348 million in 2022 and has more than 1,600 employees.

Initial certifications

1996 initial certification ISO 9001

2003 initial certification ISO 14001

2008 initial certification ATEX/Ex directive 94/9/EC

2010 initial certification medical technology ISO 13485

2014 initial certification OHRIS

2015 initial certification ISO 50001

2020 initial certification SMETA (Sedex Members Ethical Trade Audit)

2021 initial validation EMAS

2021 initial certification IATF

BMK'S MISSION STATEMENT

Our company policy is an essential foundation for our management system. It is based on market requirements, as well as principles of standard DIN EN ISO 9001, the European regulation EMAS (EU) 1221/2009[a] (incl. DIN EN ISO 14001) and the occupational health and safety concept OHRIS. The company policy comprises all areas of responsibility and all BMK employees.

Our basic idea for responsible handling of the environment is the prevention of environmental risks and reduction of possible environmental impacts in all our business decisions and activities. The central feature of our corporate policy is the preventive evaluation of the environmental impacts which occur through our entrepreneurial decisions. The management system describes the responsibilities and competences required to implement and comply to the demands:

- the definition of the environmental objectives and the consequent measures,
- the supervision of the application and efficiency of the measures performed, e.g. environmental audits,
- the planning, capture, control and continuous advancement of the measures with the aid of control circuits.

BMK attaches great importance to a foresighted, organized and systematically coordinated distribution and use of energy to cover the energy demand in the company. Taking into account ecological and economic objectives, the primary goals are sustainable reduction of energy costs, energy-efficient production processes, and improvement of the overall economic situation. To fulfill the environmental goals, environmentally relevant consumption figures, e.g. related to energy, are measured, recorded and reviewed, the required resources and means are provided by the management, and the workforce is actively involved. BMK commits itself to consider the topic of energy efficiency in the procurement of goods, as well as resource conservation in the evaluation. The realization of the environmental policy is supported by the environmental management system according to EMAS, which means that in the company:

- compliance with the current environmental legislation relevant to BMK is ensured, for example, by separating and labeling waste in accordance with the law,
- all employees receive regular training on environmental protection,
- the energy flows are recorded, and the energy consumption is systematically evaluated,
- energy-saving measures are planned and introduced, and their results are regularly evaluated,
- the environmental aspects are recorded, evaluated, and monitored by BMK,
- the planning of activities is carried out for the permanent continuous improvement of environmental performance

The full company policy is accessible via the link: Our_organisation_policy.pdf (bmk-group.de)

[a] including updates thereto, regulations (EU) 2017/1505 and (EU) 2018/2026

OPEN DIALOGUE

Open conversations with experts are an enriching resource for the further development of the BMK management system. For example, BMK actively participates on industry interest groups, COGD (Component Obsolescence Group Deutschland) and the Trade Association for Electronic Design (FED). Another important opportunity for open exchange is the participation in professional conferences, were BMK exchanges experiences on how to be more sustainable (EMS-Round Table or EMS-Day).

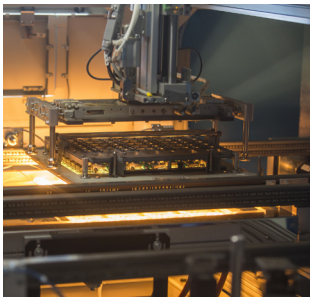
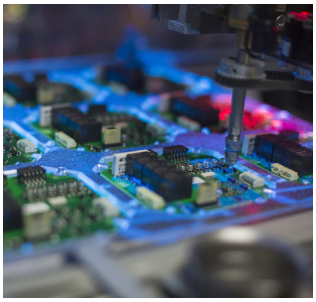
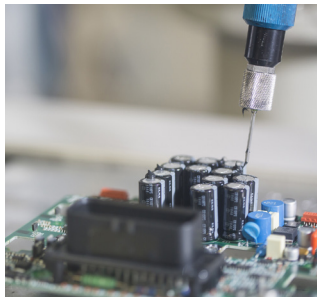
BMK was registered a member of the "Umwelt- und Klimapakt Bayern" in 2021. Furthermore, BMK electronic services received the Bavarian Price on Resource Efficiency for outstanding, trend-setting performance in the field of resource efficiency in 2021. For its commitment BMK was decorated with the Grand Prize for Medium-sized Enterprises und received the award Bavarian's Best 50 in 2022. The same year and second time in a row focus Money awarded BMK in the category "Germany's Best – Sustainability" and with the innovation price.

OUR RANGE OF SERVICES

State-of-the-art, automated manufacturing processes as well as continuous process improvement and constant error prevention through internal process control and manufacturability analyses guarantee BMK customers the highest quality. BMK offers its customers the following services.

BMK professional electronics GmbH

BMK professional electronics is the electronics partner for ambitious and sophisticated business clients. High-performance E²MS services have been provided here since 1994 in lot sizes ranging from 1 to 50,000 units. On the modular production lines, an average of 150 million components are assembled on printed circuit boards each month using SMT (surface-mount technology), THT (through-hole technology) and selective soldering processes. In SMT soldering, nitrogen is used as a protective gas to ensure high-quality and durable solder joints. Ruggedizing strengthens the durability of components exposed to environmental influences throughout their service life, such as contamination, oxidation, or vibrations. Ruggedizing services at BMK professional electronics include varnishing, encapsulating, underfilling, or siliconizing of electronic assemblies.

BMK is a contract service provider, meaning BMK manufactures electronic assemblies on behalf of the customer. BMK also helps its customers optimize their supply chain by reacting rapidly to fluctuations in demand and getting their products quickly on the market, while also ensuring excellent quality. BMK professional electronics enthusiastically drives on innovation. The well proven know-how from 18 years of development experience in product layout design, legal conformity and certification of electronic assemblies and devices is constantly being expanded upon. BMK customers are also regularly supported in their product management throughout the entire life cycle of the electronic

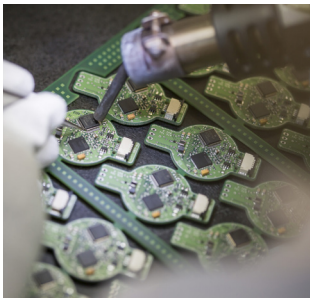
ssemblies. This support includes development of testing procedures, manufacturing prototypes, and adaption of production processes to individually fit the product requirements. Even though BMK does not sell its own products, BMK is still involved in shaping and influencing the product life cycle of electronic devices and offers expertise in areas of development, manufacturing, testing, ruggedizing and repair. BMK professional electronics ensures the best results through customized service, professional consulting, and optimized value-added processes. In late 2022, BMK professional electronics employed 1,217 people.

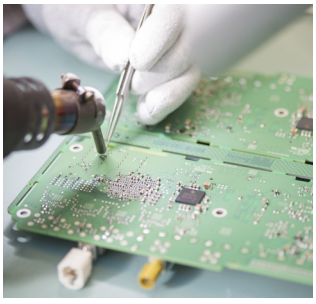
BMK electronic solutions GmbH

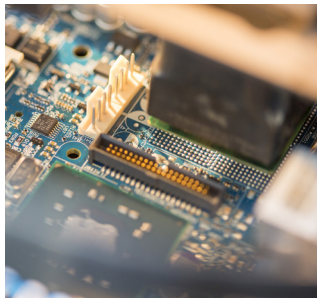
Founded in 2005, BMK electronic solutions has provided complete support for automotive customers and has had its own production since 2019. The company employed 188 people (as of late 2022). With specific automotive industry knowledge, customized solutions and demand-oriented automation are utilized for the optimal production of prototypes, series, and spare parts (also in small quantities). Our know-how is requested particularly for e-mobility, control systems, sensor technology, and driver assistance systems. BMK customers appreciate the just-in-time production with flexible manufacturing concepts. For the highest degree of flexibility, infrastructural adjustments were made within the BMK Group to react optimally and quickly to customer needs. BMK electronic solutions has been successfully audited by OEMs (Original Equipment Manufacturer) and is a supplier of leading Tier-1, meaning suppliers of systems and modules in the automotive industry. In 2021, BMK electronic solutions successfully passed the certification procedure according to IATF 16949 requirements. Since 2022 manufacturing services also include ruggedizing processes, such as varnishing, and encapsulating.

BMK electronic services GmbH

BMK electronic services GmbH is the complete after-sales service partner for electronic assemblies and systems of sophisticated business-to-business (B2B) customers. Customers are offered special recycling solutions in all obsolescence management issues. The company employed 118 people as of late 2022. Since 2001, BMK has been repairing and analyzing electronic assemblies, from chip level to module level, in industrial environments to the highest technical standards. The service portfolio also includes software updates, programming, modifications, and assembly work. In close coordination with the customer, the process specialists develop optimal models for handling logistics and interlock these with economical repair strategies.







Economic and ecological considerations play a big role in the decision to either repair assemblies or to dispose of them completely. The continuously increasing demand for complete lifecycle management was the decisive factor for the spin-off of BMK electronic services GmbH from the parent company. This principle of "rebuilding instead of producing again from scratch" helps to conserve resources. Therefore, investments were made in testing procedure know-how and fault analysis for assemblies, as well as in specific machinery and special tools for carrying out efficient repairs. The amount of rejected assemblies can be significantly reduced by the appropriately targeted repair and replacement of individual components. Around 60,000 assemblies are saved per month, and no new parts need to be manufactured. By avoiding this waste, the customer not only reduces their disposal costs of old equipment, but also saves on acquisition costs of new goods.

Electronic components and thus their input raw materials (tungsten, gold, coltan and tin) are saved and the product lifecycle is prolonged. For example, BMK has a repair rate of 98 % for BGA (Ball Grid Array) replacement. The success story of BMK electronic services shows that companies are increasingly turning to repairing instead of disposing. This not only saves on costs, but also gives the topic of sustainability momentum throughout the industry.

BMK Group GmbH & Co. KG

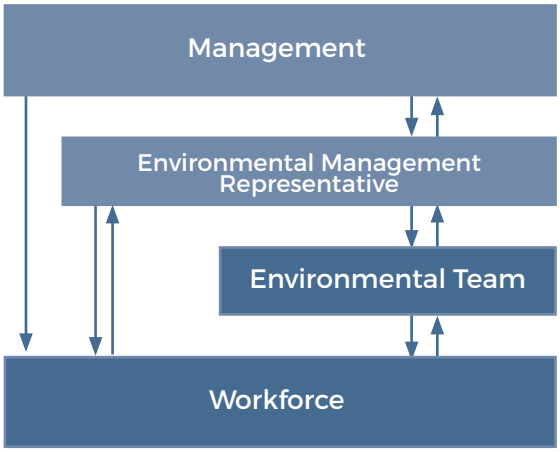
The BMK Group is the umbrella organization for all other associated companies of the BMK Group. As of 2022, 87 employees support and direct the activities of the entire company in the areas of IT, administration, human resources, marketing, and finance. For example, BMK has its own educational academy where employees can develop their skills in mandatory and voluntary training courses. Regular training courses are offered on the topics of quality, technical know-how, occupational safety, and environmental protection.

As is usual for administrative units, environmental aspects are essentially oriented toward energy requirements, however BMK procurement processes are also subject to continuous optimization. The BMK Group, founded in 2007, is the main contact for suppliers, external service providers and other business partners and the major interface point for communication with interested parties. Interested parties from the industry or region can obtain information about BMK's range of services via the website or also in direct discussions, for example at one of numerous trade fairs/ exhibitions.

ENVIRONMENTAL MANAGEMENT AT BMK

Environmental protection concerns everyone, also BMK. Since 2003, we have been making a strong effort to resource conservation, efficient production processes, the modernization of BMK-used industrial sites and the prevention of environmental risks. To take full advantage of any leeway for development, BMK's environmental management system is integrated into one management system that includes quality, energy and occupational health and safety management. Tasks for optimization and continuous development are thus implemented holistically to make optimum use of synergy effects.

As a result, all BMK processes are represented in a common workflow system in three different languages. It illustrates complex company processes with relevant correlations and interfaces between other processes and departments in a simple and precise manner. This multilingual documentation system helps to show responsibilities and information flows. All processes are checked for their effectiveness in terms of quality requirements, energy efficiency, environmental protection, and occupational safety, while also being further developed and intensively expanded on. Providing the management system in an online cloud application ensures easy accessibility for all BMK employees.



It is important to BMK to promote the environmental awareness of our employees and to utilize their ideas for practical environmental protection. According to ISO 14001 and EMAS, the core instruments for motivating employees are the following: inform, train, and involve. For example, all employees regularly receive information on any innovations in environmental management. Environmental training is provided for all employees, including time for questions and discussions as part of BMK's idea management. Since 2020, an energy- and environmental team encompassing the most relevant BMK company divisions and levels, supports the environmental management system and strengthens the participation of the workforce to make more environmentally friendly decisions. The team is responsible for monitoring BMK-specific environmental indicators, providing suggestions for improvement among the workforce, and ensuring continuous improvement of environmental performance through concrete measures. The environmental management representative reports to BMK management for both sites, coordinates environmental communication, environmental goals setting, conducts audits, and further develops the environmental management system and implements measures to improve environmental performance. Regular meetings of the management board ensure the strategic orientation of the environmental system.

To fully comply with legal requirements, the company representatives also make an important contribution. They were appointed corresponding to the processes taking place at BMK:

- Energy management
- Waste management

- Energy management
- Waste management
- Occupational safety
- Fire protection
- Hazardous goods
- Radiation protection
- External contractors coordination.

They are supported by the appointed responsible persons operating environmentally relevant installations and machines, e.g., in water protection (ensuring the proper discharge of technical wastewater and correct handling of substances hazardous to water) and organized waste collection. Hazardous substances are checked by the occupational safety specialist before they are used at BMK and are substituted for less dangerous materials wherever possible. BMK regularly monitors legislation for the compliance of hazardous substances. An occupational safety committee meets on a quarterly basis to promote cooperation and conversation between safety and health protection. This committee also deals with accident occurrences and prevention, results, briefings, instructions, new equipment, and physical health awareness days. The qualified electrician is involved in matters relating to energy supply. Maintenance work, repairs, testing, and cleaning carried out by external service providers are monitored by the appointed coordinator.

Emergency management, which includes fire protection and business continuity management, is also a part of BMK's risk management to prevent environmental risks and reduce potential environmental impacts in the event of an emergency. To ensure a smooth emergency response situation, those responsible work closely with the business park operators and local institutions. All necessary monitoring within BMK for DGUV A3 tests or inspections of explosion protection equipment is of course carried out regularly by experts. In the reporting period there were no violation of environmental legislation.

Significant environmental aspects

Regular checks are carried out for each individual company in the Group to determine which environmental impacts BMK potentially contributes to. For this reason, the consumption of energy and resources, generation of waste, and other negative emissions to the environment are recorded on a process-oriented basis and prioritized according to their environmental significance. A holistic input-output analysis is the basis for the collection of necessary data, which traces internal processes as well as interfaces to service providers, partners, and other players in the same market setting as BMK and considers impacts of the product life cycle of electronic assemblies.

The assessment procedure is carried out in two steps. In the first step, environmental aspects per process are classified according to volume, past environmental performance, the extent to which BMK can influence these measures, and if they comply with the relevant legal provisions and regulations. For example, BMK electronic services at the site Steinerne Furt has a comparatively high energy requirement (volume), 57.6 % of which is made up of renewable energy sources (past environmental performance) and whose absolute use is subject to internal influences (influenceability). In contrast, the use of production space represents a rather static environmental aspect (volume), which has not used up any additional new land (past environmental performance) and whose design and layout can in most cases only be influenced by BMK in close cooperation with the landlord (influenceability). This basic evaluation is carried out for normal

operations as well as for possible incidents and for start-up operations, if applicable. This results in an evaluation factor, which is the basis for the second step in the assessment. With regards to the above-mentioned examples, this results in a high evaluation factor for energy processes and a low evaluation factor for land use.
In the second step of the assessment procedure, each environmental aspect is quantified so that achievements regarding environmental performance are considered as absolute reductions in energy and resource requirements and in the amount of waste. Like the first step, quantification is also process-oriented in relation to the BMK' process landscape so that focal points requiring immediate action are determined while observing the significance of these environmental aspects.

Using the described procedure above, all environmental aspects for the year 2022 were determined with relation to their significance to the environmental management system and the goal of achieving continuous improvements in environmental performance. Indirect environmental aspects such as delivery traffic, on-site conditions for employees, guests, and external companies, and aspects of the product life cycle were evaluated. For the first time two indirect aspects of the product life cycle proved significant.

The following environmental aspects were identified as significant for the companies of the BMK Group:

BMK professional electronics

- Storage of hazardous substances
- Electricity demand for production facilities
- Nitrogen uptake
- District heating and cooling
- Volume of non-hazardous waste
- Water usage for air humidification

BMK electronic solutions

- Storage of hazardous substances
- District heating
- Cooling
- Volume of non-hazardous waste

BMK electronic services

- Volume of non-hazardous waste
- Electricity demand
- District heating

BMK Group

- District heating
- Demand of EoL-services of customers
- Packaging material for shipping

ENVIRONMENTAL INDICATORS

The following core indicators are defined using production volumes as reference values. The three companies located in the Sigmatechnopark site are combined into one figure. BMK is not a PCB manufacturer, but a service provider for PCB assembly in the Electronic Engineering and Manufacturing Services (E^2MS) industry. Experiences were made with the sectoral reference document on best environmental management practices for the electrical and electronic equipment manufacturing sector in the companies BMK professional electronics and BMK electronic solutions. In the course of time the trend of miniaturization of electronic assemblies (indicating the increasing number of electronic components being placed per area of printed circuit board) shows significant influence on the indicators. This leads to a distorted image of the environmental performance, especially at the site of Sigmatechnopark. As a result, we refrain from using this specific reference value. Instead, the number of assembled components seems more appropriate.

Reference value	Sigmatechnopark			Deuterpark			Stein. Furt
	unit	2020	2021	2022	unit	2020	2021	2022[a]
Production volume	kpC	1.106.450	1.107.378	1.213.665	KrA	1.574	1.723	1.969

In the context of printed circuit board assembly, which is carried out by BMK professional electronics and BMK electronic solutions, the reference value of one thousand processed components (kpC) will be used. Components hereby include printed circuit boards, electronic components, and mechanic components, e.g., cables, chassis, screws etc. The economic activities of BMK electronic services include repair services and test procedures, and since 2021 also assemblies. The environmental performance will therefore be referenced to production quantities amassing one thousand repaired, tested and assembled electronic assemblies (krA) is taken as the reference value. BMK electronic services moved to the site Steinerne Furt in April 2022. Therefore, in the following it will be necessary to sort the volumes of the key performance indicators either by the year or by the site in which the volumes occurred. The sorting is indicated in each section.

Biodiversity

As a tenant of existing commercial space, BMK has not taken up any additional new land since its foundation. Instead, part of the strategy and company policy is to use existing industrial sites to further protect biodiversity. BMK does not lease near-natural areas that are a part of our business park. For the BMK sites in Sigmatechnopark and Steinerne Furt, as well in the former site Deuterpark, the following core indicators are utilized on biodiversity:

biodiversity	Sigmatechnopark			Deuterpark			Stein. Furt
	unit	2020	2021	2022	unit	2020	2021	2022[b]
Rented space	m²	29.064	31.720[c]	31.720	m²	4.306	4.306	8.087
Rented space per production volume	m²/ kpC	0,026	0,029	0,026	m²/ krA	2,73	2,50	4,1

The production area that was additionally rented at the End of 2021 in Sigmatechnopark for assembly services, is now a fixed component to the economic activities of BMK professional electronics. The relocation of BMK electronic services corresponded with an increase of area capacities. Those are needed for the increasing order situation. A positive side effect of the leased space is the excellent connection to the public and regional transport infrastructure, which makes it possible for BMK employees and visitors to travel comfortably by environmentally friendly means of transport. The total amount of leased space has grown at both locations over time.

[a] Indicator includes the production volume that was generated at Deuterpark site in the first quarter of 2022.
[b] Used space as of April 1st, 2022; the site Deuterpark was not included.
[c] Due to a change in the calculation basis the data for 2021 had to be modified.

Energy demand and requirements

BMK is committed to constantly improving the efficiency of its processes. This applies to both the area of supply technology and to the production processes themselves. Therefore, BMK always purchases new equipment according to the best available technology and makes sure to check for energy efficiency when making investments. At the Sigmatechnopark location, the largest consumption of electricity comes from systems generating compressed air, air conditioning, and ventilation. The benchmark of excellence on compressed air supply, as indicated by the sectoral reference document for the electrical and electronic equipment manufacturing sector, is achieved with 0.11 kWh/m³ in 2022. At the site Steinerne Furt, testing and repair workstations are the biggest cause for energy consumption. Here, compressed air supply achieved a performance of 0.14 kWh/m³.

Both sites are connected to the district heating network of the city of Augsburg. Thus, BMK's heating supply is obtained through district heating, roughly one third of which is generated from renewable energies (29.88 %). Waste heat from the compressors is supplied into the local grid of the industrial park and both the volume and the associated CO2-Reductions are monitored. The cooling supply at Sigmatechnopark is guaranteed by a closed cooling circuit within the area. Using electricity, two refrigeration units chill the water down to approx. 6°C, which is then primarily used for air conditioning, but also for cooling production facilities. Since the beginning of 2020, an additional eco-chiller has been implemented in one of the production halls at BMK professional electronics. It feeds the generated cold from the used nitrogen into the local grid of the industrial park and reduces the cooling demand by approximately 4 %, which is used in air conditioning and cooling of production plants.

Energy consumption	Sigmatechnopark				Deuterpark			Stein. Furt
	unit	2020	2021	2022[a]	unit	2020	2021	2022[b]
Total energy demand	kWh	11.111.514	11.835.387	12.167.290	kWh	396.626	728.522	597.979
share of renewable energies	kWh	5.825.835	6.351.194	9.932.465	kWh	175.242	301.025	252.993
Total energy demand per production volume	kWh/ kpC	10,0	10,7	10,0	kWh/ krA	251,9	422,8	303,6
Electricity demand	kWh	5.109.540	5.356.165	6.211.982	kWh	158.990	182.585	268.099
Electricity demand per production volume	kWh/ kpC	4,6	4,8	5,1	kWh/ krA	101,0	106,0	136,2

[a] A number of meter readings were transmitted by the landlord with inexplicable deviations. Thus, the energy data of Sigmatechnopark must be viewed under reserve.

[b] The indicator includes all energy uses at the Site Steinerne Furt, and the electricity demand of the first quarter of 2022 at Deuterpark.

Heat demand	kWh	3.271.624	3.866.022	3.187.143	kWh	237.636[a]	545.937[a]	329.880
Heat demand per production volume	kWh/ kpC	3,0	3,5	2,6	kWh/ krA	150,9[a]	316,83[a]	167,5
Cooling demand	kWh	2.730.350	2.613.200	2.768.165				
Cooling demand per production volume	kWh/ kpC	2,37	2,27	2,28				

The relocation of BMK electronic services to the site Steinerne Furt was prepared starting in the beginning of January 2022. Both Electricity demand and heating were monitored, starting on the 1st of January. The relocation to more modern production spaces lead to an overall decreased energy consumption, which is especially due to reduced heating demand despite the larger area rented. The share of renewable energy in the electricity mix accounted to 57.6 %. The increased energy demand in Steinerne Furt can be explained with the temporary use of two sites as well as significant increase of customer orders.

The improvement in efficiency in the energy use at Sigmatechnopark is mostly due to mild temperatures in 2022 and resulting reduced heating demand. The operation of an additional production area as well as investments into facilities to accomplish increased production volumes caused an increased electricity demand. Environmental protection was enforced by measures such as changing the lighting in the new production hall to LED and switching to purchasing electricity from 100 % renewable energy.

Material requirements

The core elements of BMK's processes are the components that are soldered onto the PCBs. At the location Steinerne Furt operations such as repair, testing and assembly are conducted. A referencing of key materials in these processes is not possible. Especially the repair activities on the other hand entail significant material reductions for customers. For the companies at Sigmatechnopark the processing of electronic components for soldering and assembly are the core business. Soldering tin and soldering paste continue to be of particular importance for the assembly of printed circuit boards. According to the RoHS directive, soldering agents containing lead must be phased out of production. BMK primarily manufactures with lead-free soldering agents, but still supplies customers who are subject to exemptions under RoHS III and who require solder containing lead in their production. It is anticipated that the current ratio of around 93 % lead-free soldering agents used in production will increase to 100 % in a few years.

Because of the trend to miniaturization (increased number of electronic components being assembled per printed circuit surface area), air insulation of assembled components is becoming impossible, requiring a protective coating to ensure the functionality of the entire assembly. Thus, coating assemblies with a protective varnish is becoming more and more important. In addition, more and more assemblies manufactured by BMK are intended for outdoor use and must have a protective lacquer applied to safe-

[a] A number of meter readings were transmitted by the landlord with inexplicable deviations. Thus, the energy data of STA must be viewed under reserve.

[b] The indicator includes all energy uses at the Site Steinerne Furt, and the electricity demand of the first quarter of 2022 at Deuterpark.

guard against environmental influences. Encapsulating compounds are becoming a second ruggedizing mainstay and are included as key material for the first time in 2022.

Key materials	Sigmatechnopark				Deuterpark			Stein. Furt
	unit	2020	2021	2022	unit	2020	2021	2022[a]
Components	kpC	1.106.450	1.107.378	1.213.664	kpC	1.482	2.796	2.960
Soldering tin & soldering paste	kg	8.323	7.647	10.766				
Soldering tin & soldering paste per production volume	kg/ kpC	0,0075	0,0069	0,0089				
Varnish	kg	2.630	3.002	4.440				
Varnish per production volume	kg/ kpC	0,0024	0,0027	0,0037				
Encapsulating compound	kg	-	-	8211,25				
Encapsulating compound per production volume	kg/ kpC	-	-	**0,0067**				

BMK is always careful to prevent the risk of environmental accidents, since all three companies handle a wide range of chemicals for process-related reasons. Regulations of the German Water Resources Act, the German Wastewater Ordinance, and the German Ordinance on Installations Containing Hazardous Substances to Water (AwSV) are strictly observed and staff is regularly trained on the requirements for accident prevention and the handling of emergency equipment in the case of an accident. Regular substitution analyses are carried out at BMK in accordance with the Hazardous Substances Ordinance to ensure the safety of our employees by replacing high-risk material for humans and the environment with less hazardous substances, if possible. BMK operates one facility subject to specialist operation according to AwSV since 2021. No environmental incidents were recorded in 2022 that were subject to public registration.

[a] Indicator includes processed components for the whole year, notwithstanding the production location.

Waste production

BMK is motivated to constantly seek new ideas for reducing the total amount of generated waste and for recycling unavoidable residues from production. Considering the waste hierarchy, BMK has positively influenced the production and handling of 34 different waste categories through numerous measures in the past. In comparison to former environmental statements 4 waste categories could be diminished, in one case because the cooperation with the corresponding waste treatment organization had to be canceled, another waste category became subject to an exchange system and two waste categories do not occur any more.

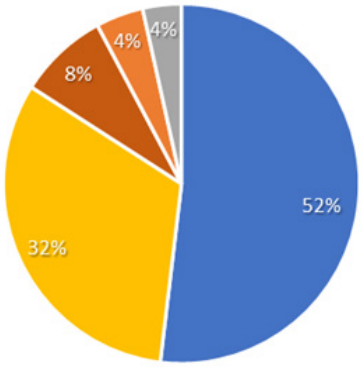
Waste	Sigmatechnopark				Deuterpark			Stein. Furt
	unit	2020	2021[a]	2022	unit	2020	2021	2022[b]
Total waste generation	kg	405.815	395.493	415.248	kg	48.149	85.664	102.756
Total waste generation per production volume	kg/ kpC	0,37	0,36	0,34	kg/ krA	30,6	49,7	52,2
Total volume of hazardous waste	kg	25.008	20.680	23.854	kg	2.580	927	3.608
Total volume of hazardous waste per production volume	kg/ kpC	0,023	0,019	0,020	kg/ krA	1,6	0,5	1,8

The overall increasing order situation in all BMK companies caused an increasing production volume in 2022. Yet the total volume of waste generation per production volume at Steinerne Furt shows a slight deterioration because a big part of the customer demands involved disassembly procedures, rendering components waste. The amount of hazardous waste can be explained with rejections of defective lots, e.g., because of water damage or customer decisions against repair after the conducted failure analysis. The fluctuating amount of hazardous waste at Sigmatechnopark is due to irregular disposal frequencies of various waste categories. Respectively, the increase in 2022 must partly be explained with (newly required disposals of certain waste categories, and partly with increased production volumes for processes that produce chemical waste as a byproduct. Furthermore, supply shortages have cause delays in production s tarts, thus causing chemicals (encapsulating compounds) to be disposed because of their use-by date.
Overall, in 2022 the largest waste categories at the Steinerne Furt site were scrap metal, cardboard/paper and wood, the largest waste categories among hazardous substances were electronic scrap and alkaline cleaning water. The largest waste volumes at the Sigmatechnopark site were cardboard/paper and plastics. The waste category wood could successfully be reduced again. Hazardous waste mainly included empty containers contaminated with hazardous substances, alkaline cleaning water, and waste varnish.

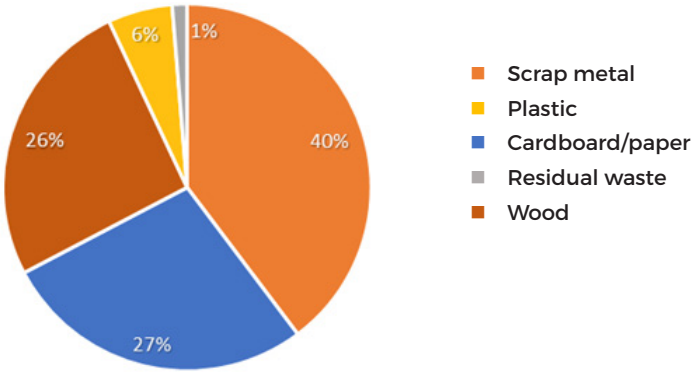
[a] Due to false summation in the data overview corrections had to be conducted in 2021.
[b] Indicator includes the first quarter of 2022 at Deuterpark site.

We have found partners who will take our unavoidable residues from our production and utilize them in their own production, creating in this sense a circular economic system. Beyond the legal requirements, waste that arises is collected as pure components for better recyclability. Regarding commercial waste, the BMK companies achieve a separate collection rate significantly exceeding 90 %.

Commercial Waste in Sigmatechnopark



Commercial Waste in Steinerne Furt



To monitor and manage waste, BMK has appointed a voluntary waste management officer to support coordination and improvement of our environmental performance with respect to company-specific waste production.

Emissions

The annual greenhouse gas emission is known regarding the status for electricity and district heating supply, fuel consumption and coolants. For the calculation of CO_2 emissions from consumed fuel, only the vehicles used solely for business purposes are examined. An emissions factor of 2.65 kg CO_2/Liter is assumed, historical data have been modified accordingly. BMK's coolant consumption at the Sigmatechnopark site results from cooling units for air conditioning, refrigerators containing auxiliary materials that need temperature-controlled storage until use, and most importantly climatic test facilities. Those latter systems are operated to test ruggedness and lifecycle of electronic assemblies. In accordance with the Chemicals Climate Protection Ordinance, which supplements the EU F-Gas Regulation mandatory leak testing is conducted at the necessary time intervals. The global warming potential of coolants was taken f rom the "List of Greenhouse Potentials of Selected Compounds and their Mixtures" published by the German Federal Environment Agency. At the Steinerne Furt site, there are no emissions from either vehicle or coolant use. CO_2 emissions from electricity and district heating supply are established from Augsburg's municipal utility company for both sites. SO_2, NO_x and PM emissions are not recorded as they are not significant environmental aspects at BMK.

In addition to greenhouse gas emissions, other business processes, in particular varnishing, cause emissions of volatile organic compounds (VOCs) at the Sigmatechnopark site. Although we do not operate any facilities that require a permit under German emission control law, facilities that emit VOCs are still subject to our regular inspections.

BMK is also subject to noise protection regulations assigned to the landlord. Initial noise level readings show that we are constantly below the determined noise limit for commercial areas. BMK's business activities are barely heard in comparison to the noise impact from the B300 federal highways around the Sigmatechnopark site and the B2 near the Steinerne Furt site.

Emissions	Sigmatechnopark				Deuterpark			Stein. Furt
	unit	2020	2021	2022	unit	2020	2021	2022
Greenhouse gas emissions	t CO_2-Eq	1.701	1.597	312	t CO_2-Eq	71,1	108,1	105,2[a]
Greenhouse gas emissions per production volume	t CO_2-Eq/ kpC	0,0015	0,0014	0,0003	t CO_2-Eq/ krA	45,1	62,7	53,4
VOC total	kg	3.071	3.338	6.884				
Total VOC per production volume	kg/ kpC	0,0028	0,0030	0,0057				

In 2022, the level of VOC consumption was again below the threshold set by the 31st Federal Emission Control Act (BImSchV). Around 3 tons of VOC emissions were produced due to varnishing processes, the rest stemmed from soldering operations. The increased emissions value of VOC compared to the year before can be explained with the increased need for coating assemblies with a protective varnish. The reported greenhouse gas emissions for the site Steinerne Furt are comparable to the levels of 2021 even though electricity demand increased. This result is linked to the significantly decreased demand for facility heating. At the site Sigmatechnopark electricity supply could be changed to exclusively renewable energy sources. As a result, emissions decreased significantly.

Water

Tasks requiring water at BMK are found in supporting processes (cleaning or analysis procedures), in building services (ventilation), and sanitary facilities.
Reduction of harmful chemicals is currently not possible for washing procedures e.g., trays for transportation of electronic assemblies. Consequently, washing systems have been installed for those processes that operate with closed water circuits. The cleaning medium is only be replaced when sufficient and qualitative cleaning is no longer ensured. The alkaline cleaning water are disposed of properly.
In the case of BMK electronic services, pre-cleaning is required for equipment awaiting repairs. The wastewater is discharged into the sewage system. At the site Sigmatechnopark, wastewater is discharged from analysis procedures in the cross-section laboratory. In both cases, wastewater volumes are monitored separately. The existing threshold values of the discharged sewage as assigned through the regulations of the German Wastewater Ordinance and the local drainage statute are regularly checked and adhered to.

[a] Indicator includes emissions from electricity use in the first quarter of 2022 at Deuterark site, but no heating values. Those are included in 2021 due to meter reading dates.

parameter	CSB	ammonium-nitrgen	fluoride	hydrocarbon-index	Fish eggs test	phosphor, total	ferric, total
Threshold value	600 mg/l	50 mg/l	50 mg/l	10 mg/l	6 G egg-value	2 mg/l	3 mg/l
Cross-section Sigmatechnopark	400	<0,05	0,12	<0,1	1	0,401	<0,02
pre-cleaning Steinerne Furt	21	<0,05	0,12	<0,1	1	0,60	0,23

Especially at the Sigmatechnopark site, humidity must be monitored to ensure quality and antistatic properties on the production lines. Water is therefore used in the ventilation systems to maintain a humidity between 30 % and 60 %. Sanitary water usage at Sigmatechnopark cannot be recorded in the data below, as the corresponding facilities are shared with other tenants in the complex. In Steinerne Furt, BMK-specific recording is possible and is thus included in the assessment of water consumption.

Water consumption	Sigmatechnopark				Deuterpark			Stein. Furt
	unit	2020	2021	2022	unit	2020	2021	2022[a]
Total annual water consumption	m³	1.606	1.965	2.144	m³	485	595	646
Total annual water consumption per production volume	m³/ kpC	0,001452	0,001775	0,001766	m³/ krA	0,31	0,35	0,33

At the site Steinerne Furt the number of employees increased, causing more sanitary wastewater. The discharge of wastewater on the other hand could be reduced significantly by means of process modifications. At Sigmatechnopark site the increase of water consumption reflects the development of the production volume, requiring intensive humidification, e.g., for three-shift or weekend operation

Indirect environmental aspects

Due to close cooperation with customers, numerous suppliers, and commercial landlords, BMK deals with environmental aspects that are beyond the direct control of the company. Nevertheless, BMK takes the opportunity to contribute to environmental protection through open dialogue and cooperation with third parties.

For example, all companies of BMK offer the opportunity of returnable packaging to their customers. Especially, BMK electronic solutions has set the goal of increasing returnable packaging with customers for their automotive projects in series production to the highest level possible. Within the scope of assembly design and service, the focus on resource conservation and the longevity of electronic modules is important:

[a] Indicator includes water consumption as of April 1st, 2022; Consumption volumes at Deuterpark site are included in 2021 due to meter reading dates.

Energy-efficient assemblies are developed at the customer's request and are characterized by the longest possible service life, also in battery operation. Of course, the assembly designs are compliant with relevant legal regulations, e.g., RoHS, REACh or the WEEE Directive. BMK consults with the customer to design guidelines for the purpose of qualifying for eco-labels. On request, BMK development will accompany its customers from the first functional prototype all the way to series production.

BMK also supports its customers in the optimization and further development of their existing assemblies, for example handling discontinued components, dealing with component shortages on the market, or implementing new technology to continue selling assemblies. In these cases, a redesign of the assembly is conducted, and thus total replacement can be avoided, therefore extending the permanence of existing customer products. For defective assemblies, BMK has developed its own procedures for error analysis and repairs at chip-level with the goal of avoiding obsolescence of assemblies and associated products.

For the procurement of production supplies, BMK strives for the highest possible supplier consolidation (with fixed intervals for suppliers) in order to significantly reduce the number of deliveries. At the Sigmatechnopark site, the number of extra shipments could be reduced to 14.8 % in 2022. Due to the flexible ordering and production methods at BMK electronic services, such an approach is not possible at the Steinerne Furt location. BMK's strategic suppliers periodically undergo a supplier evaluation during which, among other aspects, environmental certificates and guidelines are checked for. Environmental requirements are included in the overall evaluation along with criteria for smooth cooperation and quality aspects. Our strategic purchasing department annually agrees on targeted goals with the suppliers and discusses the supplier evaluations based on overall implementation.

In addition, it is important for BMK to work closely with the business park operators to modernize the building technology at both sites. With the previous owner of Sigmatechnopark, the Corestate Augsburg Grundstücks GmbH & Co. KG, installation of energy-efficient lighting in most production halls and joint investments in modern utility supply technology are examples of joint modernization in partnership between BMK and its landlords. On April 1st, 2021 the Sirius Facilities GmbH became landlord at Sigmatechnopark. While fire safety is still a shared responsibility and the landlord supports waste management, investments into the modernization of building services are subject to individual negotiations. E.g., the monitoring of energy and water consumption is only possible after data are made available by the landlord, digitization is yet to be implemented. The modernization of lighting in the production hall for electronic assembly, one of the long-standing requests of BMK professional electronics, has been agreed upon in the beginning of 2023.

Overall, BMK strives to continuously enhance the database regarding environmentally relevant activities so that a continuous improvement of environmental performance based on data and facts is possible.

BMK ENVIRONMENTAL GOALS

From the assessment of environmental aspects, it is evident that the primary focus for improving BMK's environmental performance must be on the issues of energy demand, waste generation and handling of hazardous substances. BMK management regularly meets and discusses how to improve the company's environmental performance. Synergies are utilized for the benefit of the company and mutual support is provided for the common goal of environmental protection. The industry-specific reference document (EU) 2019/63, which is used as a basis for orientation, does not fully apply to BMK since unequipped printed circuit boards are not manufactured here, but rather assembled or repaired at component level. Company-specific suggestions on efficient soldering methods, efficient cooling technology, utilization of pressurized air, and the substitution of hazardous substances, have already been implemented in the company or included in the management strategy. Issues relating to waste management, climate neutrality, and the disclosure of greenhouse gas emissions are a part of BMK's strategic environmental program. Thus, the industry-specific reference document for the electronics industry also serves to improve environmental performance at BMK relating to identified environmental aspects.

For target setting and implementation, it is important to consider different production conditions and practicable solutions to increase environmental performance at all sites. All BMK employees are involved in improving the environmental performance of their respective work areas. They can share their ideas with their supervisors, energy- and environmental team members or the environmental management representative and can participate in the implementation of their ideas. Combining the strategic direction of management with the daily-routine knowledge of all members of the company results in our environmental program. Each company provides a contribution according to its strengths.

As the oldest and largest company of the BMK Group, BMK professional electronics has many years of experience and comprehensive know-how about the life cycle of electronic assemblies. The core topic of environmental protection is the continuous development of established processes with new possibilities of digitization. BMK electronic services at the Steinerne Furt site stands out from the other companies for its various standalone manufacturing islands instead of linear production lines. This manufacturing process is optimal for customers who wish to repair their products instead of disposing of them. Due to the smaller production area, the number of employees, and the changed production focus, not all measures are feasible for series production there. Therefore, the company relies on its own means of production optimization and utility supply technology to make its contribution to environmental protection. BMK Group does not have an own production, but rather administrative areas such as HR, marketing, finance, and IT. It acts as a reinforcement for the other companies and increases the efficiency of the support processes so that significant contributions to the overall environmental performance can be achieved.

For long-term objectives milestones could be achieved. The goals that were to be reached in 2022 could be achieved and sometimes exceeded:

- The use of area per employees in the offices of distribution and purchase at BMK professional electronics could be reduced significantly. Beyond the planned 10 % per employee 29 % reduction could be achieved by means of new office equipment, technical equipment, and desk sharing.
- The use of area per employees in central functions at BMK electronic solutions could be reduced significantly. Desk sharing was prepared with the purchasing of new office equipment and technical equipment, thus already achieving a reduction of 18 % instead of the planned 10 % use of area per employee.

- The goal to reuse 40 percent of cartonnage packaging from repair and rebuild jobs could steadily be achieved as of April 2022. One exception is the end of the year, when the new release of a software caused a time bottleneck.
- The processing of the catalogue of requirements for the new location of BMK electronic services could be concluded.
- The goal to motivate 5 percent of the permanent employees to select an environmentally sound and healthy form of mobility for their way to work could be fulfilled and exceeded. 6.89 % participated in the leasing-offer for bikes, e-bikes, and cargo bikes. The project was reinforced by campaigns like "with the bike to work".

The companies of BMK continue to pursue started projects and set ambitious objectives. Among these the goal to set up a prototype for product-related CO_2-assessement needs to be extended to 2023. After careful analysis the 100 percent-objective of introducing returnable packaging with customers for their automotive projects with the start of series production cannot be fully implemented. BMK electronic solutions adjusts the goal to achieve a ratio of 90 % until the end of 2023. The reduction of energy use in the field of climatization small changes to the ventilation facility could be achieved; in 2023 the installation of an energy terminal with controlling function is planned and shall make steering options for the reduction of energy consumption transparent.

For the objective of the optimization of compressed air supply at the new site of BMK electronic services a new net was installed that ensures accessibility, and short ways, but to achieve the overall goal further measures are required. Those are planned in 2023. For the development of an organization-specific CO_2-assessement the system boundaries were set; further required data are assembled in 2023. For the function-specific training a group-wide concept was developed, which will be implemented step by step in cooperation with the departments. The further environmental objectives can be seen in the following table.

BMK professional electronics	**2022**	**2023**	**2024**	**2025**
The electricity demand for lighting in the production hall of electronic assembling shall be reduced by 50 percent in comparison so 2022.	▶	☐	◀	
A prototype for product-related CO_2-assessement shall be set up in collaboration with the Fraunhofer IZM research institute.	▶	◀		
BMK electronic solutions				
A returnable packaging ratio of 90 percent is to be achieved for series start-up products for automotive customers.	☐	◀		
The energy-saving potential of ventilation and climate control technology in one of the production halls (18 II) is to be investigated.	☐	◀		

BMK electronic services				
At the new site, compressed air generation should be optimized, creating an annual energy savings of 45 percent. This corresponds to a planned savings of 3.7 MWh.	☐	◀		
The electricity demand for lighting in the logistics area shall be reduced by 50 percent in comparison so 2022.		▶	◀	
The capacity potential of a PV-plant on the roof of the logistics area shall be determined and the modules shall be installed.		▶	◀	
BMK Group				
A CO_2 assessment is to be drawn up and potential savings identified for the entire corporation.	☐	◀		
To sensitize employees for environmental issues function-specific training shall be developed.	▶	☐	☐	◀
Legend: planned launch ▶ ongoing project ☐ planned completion ◀				

The German and English version of this environmental statement were validated by the environmental verifier. The content of this English translation is fully consistent with the content of the original German environmental statement. The next validated environmental statement will be published in 2024.

BMK supports important impulses and creative ideas from its employees. BMK is also open to external exchange of knowledge and information at trade fairs, professional conferences, and/or other meetings with interested parties. Graduates who would like to write their projects or final thesis at BMK are welcome.

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Declaration on verification and validation activities

The signatories, Dipl.-Ing. Ulrich Wegner, EMAS environmental verifier with registration number DE-V-0045, and Dipl.-Biol. Lennart Schleicher, EMAS environmental verifier with the registration number DE-V-0404, jointly accredited for the scope 26.12, 33.13, 70.10, 95.11, 95.12 (NACE-Code), declare to have verified whether the sites or the whole organization, as indicated in the environmental statement of the organizations:

BMK Group GmbH & Co. KG, BMK professional electronics GmbH,
BMK electronic solutions GmbH
Werner-von-Siemens-Str. 6, 86159 Augsburg

BMK electronic services GmbH,
Feldstraße 2, 86159 Augsburg (until 31.03.2022)
and
Steinerne Furt 63, 86167 Augsburg (starting 01.04.2022)

meet all requirements of Regulation (EC) No. 1221/2009 of the European Parliament and of the Council of 25 November 2009, updated by Regulation (EU) No. 2017/1505 and Regulation (EU) No. 2018/2026 on the voluntary participation by organizations in a community eco-management and audit scheme (EMAS). By signing this declaration, we declare that:

- the verification and validation have been carried out in full compliance with the requirements of Regulation (EC) No. 1221/2009, updated by Regulation (EU) No. 2017/1505 and Regulation (EU) No. 2018/2026,
- the outcome of the verification and validation confirms that there is no evidence of non-compliance with the applicable legal requirements relating to the environment,
- the data and information of the environmental statement of the organizations reflect a reliable, credible and correct image of all activities of the organizations within the scope mentioned in the environmental statement.

This declaration is not equivalent to EMAS registration. EMAS registration can only be granted by a Competent Body under Regulation (EC) No. 1221/2009, updated by Regulation (EU) No. 2017/1505 and Regulation (EU) No. 2018/2026. This declaration shall not be used as a stand-alone piece of public communication.

Munich, 03.06.2022

Dipl.-Ing. Ulrich Wegner
Environmental verifier

Höchstadt, 03.06.2022

Dipl.-Biol. Lennart Schleicher
Environmental verifier