# BUFA



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# Foreword

#### DEAR READER,

2020 started like any other year - with the usual issues, tasks and plans that come up at the beginning of a year. Then, in March, everything suddenly changed. Since the coronavirus pandemic reached Germany, we have experienced massive restrictions on our daily life - and the corresponding impacts in all sectors. Even after a year, it has still not been possible to return fully to normal life. And even when the pandemic is over, it certainly won't be 'business as usual'. While we are kept busy day in, day out with the coronavirus and how to combat it, the question arises: are sustainability and climate protection still important topics?

In the short-term, the temporary lockdowns significantly reduced CO2 emissions as mobility decreased. However, this will not have a long-term impact. For this, we need sustainable concepts, products and processes. This is what we are pursuing at all levels at BÜFA as we continue to focus on both climate protection and a careful approach to the environment.

In summer 2020, we introduced sustainability reporting at BÜFA. These reports form the basis for improving the company's environmental protection in a controlled manner and for steering the expansion of the ecological product range. BÜFA has set itself a major goal for this year: to make our emissions in our direct sphere of influence (Scope 1) climate neutral.

We will initially achieve this primarily through compensatory measures, such as the rewetting of native peatlands. In parallel, we are examining all our processes and setting up a cross-site climate task force to sustainably reduce or avoid emissions. Projects such as the installation of a solar power system and cooperation with the University of Oldenburg will support this goal.

However, sustainability at BÜFA means much more than that. We have seen the coronavirus crisis as an opportunity – for innovations in antimicrobial surfaces, for changes in our working environment by integrating online meetings, and for starting a "trainee company" that offers ecological products for pets, which have become even more important during these times.

So, in spite of all the challenges, the year 2020 was a good starting point for increased sustainable change at BÜFA. You can read about what we have achieved, what progress we have made and what we intend to do in this report. We hope you find it informative and welcome your suggestions at: info@buefa.de.







Jan Philipp Wuppermann Chairman of the Advisory Board

lmage: BÜFA

Felix Thalmann CEO BÜFA Group





BÜFA Chemicals BÜFA Cleaning

# About BÜFA

The BÜFA Group is an independent, medium-sized family business operating in the chemical industry. The Oldenburg-based company can trace its roots back to its trade in dyewoods, oils and chemicals; an operation which it founded in 1883. Today, across its three business divisions of Chemicals, Cleaning und Composites, BÜFA offers a wide range of products, services and support internationally:

### Chemicals

- Nationwide supply of chemical raw materials to industrial sectors
- Distribution, contract filling and warehousing (warehouse logistics)
- Export of raw materials and transport of chemicals

#### Cleaning

- Extensive range of cleaning products for various industries
- Individual dosing and application technology
- Performance of chemical analyses as well as consulting services dedicated to hygiene management

#### Composites

- Development and production of high-quality specialities and distribution of a complete portfolio for manufacturers of composite materials
- System provider with comprehensive machine and application expertise
- Contract manufacturing, project consulting as well as development and installation of special systems



BÜFA Composite Systems

Our customers include companies operating in food processing, textile, industrial and vehicle cleaning, wind energy, the rail and commercial vehicle sectors as well as shipand boat building.

With 624 employees and 31 trainees, BÜFA achieved a Group turnover of EUR 244 million in 2020. In keeping with its unrivalled ethical

values, this traditional Oldenburg-based company cultivates a fair and cooperative partnership with customers, suppliers and the general public. Guided entirely by its robust corporate principles, BÜFA is strictly aligned with the principle of sustainability. BÜFA focuses on "New Chemistry" and combines economic efficiency with societal responsibility.



BÜFA Holding Photos: Markus Monecke / BÜFA



# Highlights

#### GREEN IDEAS – GREEN BUSINESS IDEA JAM

BÜFA is a project partner in a cooperation programme between Erasmus and the European Union called "Scale up for Sustainability" (S4S). Other project partners include Carl von Ossietzky University Oldenburg, Linköping University, Vennebroek Academic Services, EWE, Cewe, Tekniska Verken, Againity, Noble Environment Benelux and the Borderstep Institute for Innovation and Sustainability. The project puts students' knowledge into practice. New teaching modules are developed in close cooperation with leading companies. The S4S project develops new concepts for integrating economic and ecological thinking in business and education. The aim is to promote the development of innovative business models in Green Venturing.

As part of this project, the "Green Business Idea Jam" took place in October 2020 in cooperation with the University of Oldenburg at the innovation centre ZUKUNFT. unternehmen. During the workshop, ten students from different departments, supported by BÜFA colleagues, explored topics related to climate neutrality at BÜFA.

The themes discussed were operating energy, mobility and compensation. The students' ideas included considering heat pumps instead of boilers when renewing heating systems, installing electronic thermostats on radiators, continuing to use video conferencing and creating incentive systems for environmentally friendly driving practices.





At the end, the students presented their results to management, who gave feedback and positive criticism on the exciting ideas and new perspectives.

Several points from the workshop will be revisited in a subsequent course at the University of Oldenburg.

## BÜFA RECEIVES "WIR SIND DABEI" MARK FROM THE NIEDERSACHSEN ALLIANZ FÜR NACHHALTIGKEIT

Last year, BÜFA was awarded the "Wir sind dabei" (We are in) mark from the Niedersachsen Allianz für Nachhaltigkeit (Lower Saxony Alliance for Sustainability). The award from the Lower Saxony Environment Ministry recognises special commitment to operational sustainability.

BÜFA received the "Wir sind dabei" award for, among other things, the certification of its quality management system according to DIN ISO 9001 and its environmental management system according to DIN ISO 14001. In the social domain, BÜFA was awarded the "Demografiefest 4.0 – Sozialpartnerschaftlicher Betrieb" certificate for its sustainable human resources policy which includes numerous measures related to health and corporate culture. In addition, BÜFA was able to demonstrate its commitment through the staff agreement for employees providing care for family members as well as an above-average trainee ratio in comparison to the rest of Lower Saxony.

The mark has been granted for five years, after which it will then have to be re-assessed for renewal.



#### **NATRUE CERTIFICATION**

BÜFA Chemicals has for several years now been offering washing raw materials certified to ecological standards. The focus initially lay on products for the detergent and cleaning agent industry. Some of the raw materials, however, are increasingly becoming attractive to the cosmetics industry for what are known as "rinse-off" products. The first raw materials have already been recognised under the COSMOS natural cosmetics standard.

Since 2020, BÜFA has been able to list raw materials in the NATRUE standard for cosmetic raw materials, following new regulations for recognition. The surfactants

- Tensidol® APG 818 MB (Coco Glucoside)
- Tensidol® APG 1200 MB (Lauryl Glucoside)

Mit dieser Bescheinigung wird der Firma

BÜFA GmbH & Co. KG

DE - 26125 Oldenburg

bestätigt, dass sich das Produkt

Tensidol APG 818 (MB)

aus folgenden Rehtsfortgulatien zusammensetzt:
0,00% Matursforfe (0,00% fol)
50,00% Wasser
50,00% Naturalen Stoffe
0,00% Naturdenlische Stoffe
und den Richtlinien von

NATRUE entspricht

European Natural and Organic Cosmetics Interest Grouping A.1.S.B.L.

Produkt

NCI Neme(n)

Tensidol APG 818 (MB)

Die Bescheinigung berechtigt zur Nutzung des NATRUE Labelis gemäß
Zeichernutzungsvertrag mit NATRUE.

Engstingen. 24.07 2020. Dr. Josehim Banchef
Out. Dahm. Bungstellt von. Unterscheft

Lindenschaft von. Unters

Tensidol® SLS MB
 (Sodium Lauryl Sulphate)
 were included in the NATRUE-database
 as recognised raw materials.

The NATRUE certification for natural cosmetic products is one of the standards recognised by the BNN (German Association for Natural Foods and Goods), which allows goods to be sold in specialist organic markets. Well-known cosmetic brands that work with this standard include Weleda, Lavera, Alverde, Alterra, Logona and Primavera.

#### **CERTIFIED ORGANIC PRODUCTS**

In 2018, we decided to make the ecological quality of products clearly visible to our customers through an environmental certificate and list our detergents and cleaning agents according to the EU Ecolabel (EU Flower). Important aspects in terms of the current EU Ecolabel requirements are:

- Certified origin of palm oil-based ingredients
- Application-oriented certified products, consumption and dosing technology or dispenser
- Ban on the use of raw materials that cause avoidable hazards during application
- Product assessment in terms of its environmental impact
- Waste avoidance

In 2020, we added five more products and washing processes to our list of EU Ecolabel-listed products and processes. As part of our sustainability strategy, we plan to further expand our listing of products and processes. Currently, we have applied to list three products and are in the review phase for one process prior to the application.

# FROM TRAINEE PROJECT TO NEW TRAINEE COMPANY AT BÜFA – LAUNCH OF THE ONLINE SHOP

#### **GRUENE-TIERWELT.DE**

In 2020, BÜFA trainees became founders and launched their own start-up, combining BÜFA's three strategic fields of action: digitalisation, innovation and sustainability. After six months of intense preparations, the online shop www.gruene-tierwelt.de went live in November 2020.





Photo: gruene-tierwelt.de

Customers can now find organic animal care and animal husbandry products in the shop. The trainees are in charge of the concept, logistics, purchasing as well as the design and marketing of the online shop.

The new trainee company is now part of the training at BÜFA. The established training programme of the Oldenburg family-owned company, which focuses heavily on the de-

velopment of trainees' personal responsibility and independence, is now being expanded by an innovative approach. The young professionals learn on a smaller scale what it means to set up and run a company. Employees from specialist departments are available to advise them at all times. This prepares the specialists and managers of tomorrow in the best possible way for their future careers.



# Values + Strategy

#### THE BÜFA CLIMATE TASKFORCE

BÜFA has set itself the goal of making the emissions in its direct sphere of influence climate-neutral from 2021. In July 2020, a working group made up of management, purchasing, marketing, ESHQ and business development staff met for an initial strategy meeting to put this plan into action.

Regular meetings of the "BÜFA CLIMATE Taskforce" now take place on a quarterly basis and the group has been expanded to include representatives from each site. The planned investments at each site that will have a positive impact on the climate over the next few years are discussed.

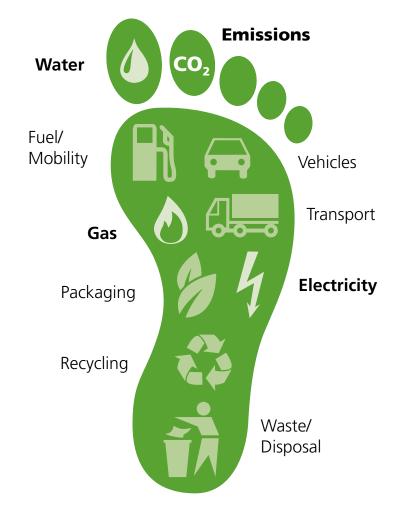
sate for the emissions calculated so far through offsets. This will enable us to quickly achieve the goal we have set ourselves of making our Scope 1 emissions climate-neutral by 2021. At the end of last year, a compensation package was introduced that is in line with the company's philosophy and takes into account values such as regionality, longevity and diversity. BÜFA will support projects from atmosfair (wind power promotion, solar energy, environmental education and much more), PRIMAKLIMA (reforestation) and MoorFutures (moorland wetting) as part of this project.

There was an initial agreement to compen-

In 2021, the important principles of "avoiding" and "reducing" emissions will continue to be discussed, and systematic climate targets will be agreed upon.

At present, investigations are ongoing into the extent to which solar or biomethane systems can be installed at BÜFA to avoid CO<sub>2</sub>, for example, as well as whether business trips can be foregone in the future and held digitally instead.

We want to reduce emissions, for example, through further LED projects, e-mobility, modern heating technology and canister recycling.







Thre Investitionen in Klimaschutz.

# Zertifikat

No. 11162-11561

Die Ausgleichsagentur Schleswig-Holstein bescheinigt mit diesem Zertifikat, dass

BÜFA GmbH & Co. KG

einen freiwilligen Beitrag zur Wiedervermässung des Königsmoors, Kreis Rendsburg-Eckemförde, und damit zum Klimaschutz leistet. Die damit verbundene Treibhausgas-Emissionsminderung wird für einen Zeitraum von 50 Jehren zugesichert.

#### 400 Tonnen

Beitreg zur CO,-Einsparung





TÜVRheinland®

Projekt Königsmoor venfiziert nach ISO 14064-2

Molfsee, 22. Januar 2021



#### 7ertifika

Die E.ON Energie Deutschland GmbH bescheinigt, dass im Auftrag des Unternehmens

BÜFA GmbH & Co. KG Stubbenweg 40 26125 Oldenburg - Nadorst

im Zeitraum vom 01.01.2020 bis zum 31.12.2020

eine Energiemenge in Höhe von 2.222 MWh zu 100 % aus Erneuerbaren Energien erzeugt und in das Netz der allgemeinen Versorgung eingespeist wird. Die Erzeugung von

## Business Strom mit unserer Option "Natur"

wird durch Herkunftsnachweise gemaß § 79 des Erneuerbaren Energien Gesetz (EEG) belegt.



Certificates for offset projects

Photo: Stiftung Naturschutz Schleswig-Holstein



Photo: shutterstock.com



# Climate + Resources

# RESOURCE CONSERVATION WITH CLEANING FUTURE FLOW

Relatively large quantities of fresh water are required for in our operations, as the mixing tanks and filling equipment must be rinsed thoroughly with water after each production batch. This water is collected, treated, and released as wastewater. The current amount of water will be reduced significantly to conserve this natural resource. This is why, as part of a project launched in 2019, available options for eliminating rinsing steps without compromising quality have been examined in detail.

This project, called "Cleaning Future Flow', carried on in 2020: All products containing the raw material sodium hypochlorite were analysed in the laboratory to see if they could be produced consecutively with no need for a rinsing step using water in between.

For those products where this option is possible, a group was defined in production planning which was subsequently produced in our plant consecutively without rinsing processes. This project day was very successful. There were no quality defects, time was saved, and 300 litres of water were saved per product change.

This measure was subsequently incorporated into production planning, which means that we have succeeded in making an important contribution to conserving resources by saving drinking water and waste water.

#### **ELECTRIC MOBILITY**

Last year, we continued to promote e-mobility. Since autumn, we have been converting our courier services between locations and to other external service providers to electricity. We now cover around 100 kilometres a day in a climate-neutral way.

In addition, we have also expanded our charging facilities for electric vehicles. As well as charging stations at our locations for our own fleet of vehicles and for our employees, we now offer two public e-charging points at our holding company. There are already concrete plans to offer more charging stations here.

For new orders, we also choose plug-in models or electric cars for company vehicles, depending on the driver's requirements. By 2021, we will have converted around a quarter of all vehicles in our fleet to sustainable engines.

# BUFA

## A NEW LEASE OF LIGHT – REPLACING THE LED LIGHTING IN THE OLD BÜFA GLASS HALL

The future is being created in the old BÜFA Glass Hall at our location in Ohmstede – home not only to start-ups, but also to the ZUKUNFT.unternehmen incubator. That is reason enough to adapt the lighting to modern, sustainable standards as well. Over 3,500 square metres were completely retrofitted.

Photo: shutterstock.com



With the new LED lighting, we have been able to achieve a theoretical energy saving of over 50 percent with significantly improved light efficiency. Although we already use green electricity at BÜFA, this is expected to reduce CO<sub>2</sub> emissions by around 38 tonnes per year.

Daylight-dependent control has been installed to increase this saving, making optimum use of daylight and ensuring good lighting. At the same time, the exterior lighting is also being upgraded so that, as well as improving safety through better lighting, the appearance of the property is also enhanced.

## NEW PRODUCTION FILLING LINE AT BÜFA COMPOSITE SYSTEMS – RESOURCE-SAVING AND LOW EMISSION

In 2020, a modern, semi-automatic filling line for hobbocks was built and commissioned at BÜFA Composite Systems. The system consists of a labelling station, a filling area with two dosing heads and a lid sealer.



The line has significantly accelerated bucket filling. The level of automation and the double filling head mean that the filling speed is three times faster than the old system used in the past. The automated processes make operations much simpler: The bucket is prepared directly on the system and does not have to be laboriously labelled and lined elsewhere in the plant beforehand. The enclosed filling area means that employees are exposed to fewer emissions.

A further benefit for employees is ergonomics: the fully automatic capper takes care of closing the containers, once a laborious task

There is also a direct advantage for customers. The buckets are fitted with formliners. The formliner contaminated with the product can then be removed at the customer's premises, allowing the tinplate bucket to remain clean. This makes it much easier, more efficient and more environmentally friendly for the customer to dispose of the waste.

# WELL SOLVED – EXPANSION OF THE SOLVENT DISTILLATION PLANT AT BÜFA COMPOSITE SYSTEMS

In mid-2019, we started planning the expansion of the distillation plant. The expansion was intended to achieve a significant increase in the running time of the system with the same amount of staff. It was also intended to increase the filling quantity of the system. After the expansion, the inventory of contaminated rinsing styrene was to be sustainably reduced and the distillation of acetone restarted. This will also eliminate the need to transport materials to the external distillers previously needed.



As well as the expansion, the plant is also constantly being optimised - for example, with adjustable lances that are more effective in extracting the liquid above the solids at the bottom, and a general increase in volume achieved though providing automatic distillation of multiple IBCs. As a result, the styrene distillation process has changed as desired during the operation. In Q1 2021, an average of around 24 per cent more was distilled than was needed for a constant storage quantity of the rinsing styrene. This enabled the high inventory levels to be reduced.

As well as styrene, the plant upgrade also allows acetone to be distilled, eliminating the need for third-party distillation.

The target – to recycle all the contaminated rinsing styrene and acetone produced in the plant – was reached in the first quarter of 2021. At present, we are still investigating whether, in addition to the quantity, the quality of the upstream processes in production can be optimised.

For the expansion, the distillery was completely shut down for about a week and then successfully restarted within a month. The liquid in the IBC is evaporated with the help of modern heating technology. The vapours condense in the condenser and flow as distillate into a separate container. The solids are collected in the distillation tank, drained off at the end of the process, and disposed of properly. The objective of the new plant is to distil all styrene and acetone produced.

An immission control test for the styrene operation carried out in July 2020 also went according to plan, with the measured concentrations consistently below the permitted values.



# SHIFT TO ELECTRIC FORKLIFTS AT BÜFA CHEMICALS

To further reduce CO<sub>2</sub> emissions at our site in Altmoorhausen, among a wide range of measures we have focused on the CO<sub>2</sub> emissions of our forklifts.

Until a few years ago, we mainly used propane-powered LPG forklifts on our site. In 2017, a total of around 23 tonnes of  $\mathrm{CO}_2$  were emitted by LPG trucks. By successively converting the LPG forklifts to electrically powered ones, and by switching to  $\mathrm{CO}_2$ -neutral electricity, we were able to completely eliminate  $\mathrm{CO}_2$  emissions from forklifts.

# NESTING BOX FOR KESTRELS AT BÜFA CHEMICALS

BÜFA Chemicals has joined forces with the Naturschutzbund Oldenburg (Oldenburg Nature Conservation Association) to provide a new home for a kestrel. A site survey was carried out with the Naturschutzbund to identify the perfect location for a nesting box. A suitable place was quickly found and the installation of the nesting box could then be arranged. BÜFA Chemicals manufactured the stainless steel brackets required for the installation and covered all the costs incurred.

After about three months, we were able to observe a kestrel nesting and also its offspring moving into the nesting box.



# Work + Future

# IMPROVEMENT: EACH AND EVERYONE - EVERY DAY - IN EVERY PROCESS!

Since 2016, we at BÜFA have reorganised with a view to lean management, reinterpreted leadership, established new functions and carried out comprehensive method training.

In 2019, we have focused on the concept of Lean: "Kaizen", the will to continuously "change for the better" should influence everything we do.

Making this a reality has led to a focus in 2020 on the way we lead and on process optimisation.

In 2020, with leadership in focus, the managing directors were first trained in "coaching leadership". Their coaching approach

enables them to empower their staff to work more independently than before. This allows continuous improvements to become sustainable.

We have further anchored the Kaizen concept and professionalised the methods we use, especially with regard to problem solving and process optimisation. We focused on the 5S concept (organisation and cleanliness) in a pilot project at BÜFA Cleaning, which immediately led to higher standards in the company and to the first significant successes in the form of higher output rates.

We have analysed processes with flow charts; value stream analyses have been used in production and the Makigami method (form of process flow analysis) has been used in administration to scrutinise and improve processes. The focus in 2021 will (have to) be even more on process optimisation.

We have digitalised the first lean content and processes: We have digitalised the first lean content and processes: various shop floor meetings at all locations take place digitally, all in-house training is offered in the form of web-based training, and basic content can be accessed by all employees at any time via a learning platform. And we are taking the first steps towards digitally processing plant data and making it available for optimisation.



BÜFA, Photo: Markus Monecke



In 2021, the highlighted areas will be continued and further developed:

- We will implement coaching leadership as a pilot project at BÜFA Chemicals; shadow coaches will support supervisors in reflecting on their leadership style.
- Business performance targets will be horizontally aligned and "unfolded" into the divisions and teams; process metrics and targets will ensure that results are achieved.
- As well as value stream management, other methods for process optimisation are being tested and applied: Kanban and pull systems, total productive maintenance (TPM), overall equipment effectiveness (OEE) and Single-Minute Exchange of Dies (SMED).

#### CRISIS AS OPPORTUNITY – ONLINE WORK

The coronavirus pandemic is still posing some challenges. Most importantly, collaborative work is possible only at a distance and, for the most part, through remote working. From one day to the next, video communication services like Zoom became everyday work tools.

Customer visits, trade fairs, job interviews, regular shop-floor talks and various internal meetings were "relocated" and conducted as video conferences instead of face-to-face meetings. The flexible approach to this unique situation has shown, however, that even in a future without the virus, digital working can work smoothly and even offers many advantages.



Fewer hours behind the wheel, on the road or in hotels, and instead more flexibility and optimised use of resources with increased productivity and a better carbon footprint – video conferencing can become a safe, important and sustainable tool today and in the future.



#### **SMOKE-FREE LOCATIONS AT BÜFA**

Since 1 January 2021, our BÜFA locations have been smoke-free. Smoking is still permitted within defined times and in designated areas in front of the factory premises. In the run-up to achieving this, we offered stop-smoking programmes in 2020 as part of our health programme. The goal is for as many people as possible to be smoke-free and live healthier lives in the future.

At the beginning of 2020, the first stop-smoking courses were held in person. During the pandemic we also created the opportunity to take part in digital courses via the TK Health Coach. The bestseller "Allen Carr's Easy Way to Stop Smoking" is also available to everyone as an audio book.

Further stop-smoking courses and additional measures are offered as needed.





# Commitment + Region

# FAST SUPPORT IN THE CORONAVIRUS PANDEMIC

The pandemic presented many aid organisations in Germany with major challenges. BÜFA has donated disinfectants and disposable masks to the food banks in the region to support the work of regional institutions. Some of these had to temporarily suspend their regular operations to protect employees and customers. With new concepts, such as decentralised food distribution and delivery services, the volunteers quickly created alternatives and implemented food delivery services with as little contact as possible. Working with food requires high hygiene standards at all times, especially at the moment, so hand sanitiser and face masks have been a great help to the food banks.

BÜFA's Antisept HD disinfectant is fully virucidal and has been in high demand during the pandemic. At the beginning of the crisis in particular, there were bottlenecks in many companies and institutions. The Oldenburg-based family business has a special bond with the region and has been able to contribute to combating the pandemic with various donations.

Overview of the company's exemplary social commitments in 2020:				
Schülerforschungszentrum NordWest (Student Research Center NorthWest)	Coordination of courses in mathematics, computer science, natural sciences and technology with other regional companies			
Oldenburg University Association	Yearbook and Annual Report 2020			
Carl von Ossietzky Universität Oldenburg	Professorship endowment			
TEDx Oldenburg	Online presentations of innovative ideas			
Kulturetage cultural association	Cabaret festival 2020			
Rastede Racing and Riding Association	Beach & Ride in Nethen 2020			
StreetBaskets4Life	Streetball court to promote integration			
EWE Baskets basketball club	Sponsoring of professional sport			
Sucht-und Jugendhilfe (addiction and youth help)	Explanation flyer for Oldenburg schools			
Polizeigewerkschaft Niedersachsen (Police Union of Lower Saxony)	"Children in traffic" colouring book			
SELAM gGmbH	"Kiek In" equipment, disinfectant and face masks			
Trostreich e.V.	Donation, disinfectant and face masks			
Kiola e. V.	Donation, disinfectant and face masks			
Rett e. V.	Donation, disinfectant and face masks			
Tafel Westerstede e. V.	Disinfectant and face masks			
DRK-Speisekammer Rastede	Disinfectant and face masks			
Tischlein deck dich Edewecht e.V.	Disinfectant and face masks			
Oldenburger Tafel e.V.	Disinfectant and face masks			





# Products + Responsibility

# FIRST FIBL LISTING OF THE "FERROXOL" PRODUCT

Ferroxol® is used for effective and safe desulphurisation in biogas plants.



When biogas is obtained, hydrogen sulphide is generated, which must be broken down to make the raw gas usable. Hydrogen sulphide can also corrode the pipelines and motors in biogas plants and pollute the environment. This can be effectively counteracted with Ferroxol®.

Ferroxol® is not only suitable for utilising biomass. The desulphurisation process also protects the downstream pipelines and motors of the biogas plant from corrosion and reduces environmental pollution. The bound hydrogen sulphide creates a sulphate that can be used as a plant fertiliser.

As it is certified on the list of inputs for organic farming, Ferroxol® is well suited for farms that have a sustainable and environmentally friendly approach.

Products on the FIBL list (list of inputs for organic farming) are certified by experts on the basis of various legal provisions (including EC Regulation No. 834/2007 and EC Regulation No. 889/2008) and scientific criteria. Guidelines such as the current IFOAM standard, are also used as a basis for certification. The controlled certification ensures that the products can be reliably used in line with the principles of organic farming.

# ORGANIC SHOPPING LIST – THE FIBL LIST

In 2019, we decided to have products added to the list of inputs for organic production. This list is published by the Research Institute of Organic Agriculture (FiBL).

In 2020, the list contained 11 products from BÜFA's range. The products are appreciated by our customers who prefer to work with environmentally compatible cleaning agents and disinfectants, and are being purchased increasingly frequently.

By introducing FiBL-listed products for our customers, we are able to market products that are organic, have above-average degra-

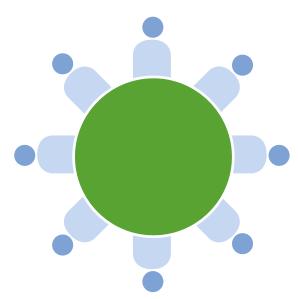


dability and do not pollute waste water. This means that we can contribute to improving our environmental performance by supplying our customers in the food industry with environmentally friendly products as part of the supply chain.



# SUSTAINABLE RAW MATERIAL MANAGEMENT - CEN 17032 (SURFACTANTS)

Sustainability aspects have been taken into account as part of raw material management since 2019. Our aim is to influence the procurement of raw materials to ensure that we give priority to those that contribute to sustainability. First we looked at the performance of surfactants, an essential class of raw materials for the production of detergents and cleaning agents. For this, we use the DIN CEN/TS 17035 standard which defines the surfactants available on the market in four categories: non-biobased surfactants, partially biobased surfactants, predominantly biobased surfactants and fully biobased surfactants. After we succeeded in obtaining a classification in the above-mentioned categories for more than 90 per cent of our surfactants used, we have set ourselves the goal for 2020 that at least 50 per cent of all surfactants purchased should be bio-based. In 2019, this ratio was 48 per cent, but we managed to increase it to 54 per cent by the end of 2020. We want to continue to improve. In 2021, the goal is to achieve a share of more than 55 percent.



# ENVIRONMENTAL ROUND TABLE – RSPO CERTIFICATION

The issue of palm oil has become a concern in many areas of our lives. You often see products that claim they are "palm oil-free". However, it is not yet possible to completely eliminate the use of this raw material in all areas. It is therefore even more important to deal with the issue responsibly and to pay attention to sustainable, certified quality.

As a trader of chemicals based on palm oil and its derivatives, this also affects BÜFA.

Since May 2019, the ViVoChem site in Almelo/ NL has been certified according to the RSPO standard (Round Table on Sustainable Palm Oil) under the MB (Mass Balance) scheme. Since May 2020, the BÜFA Chemicals site in Hude/ Altmoorhausen has also been certified.

This means that BÜFA is authorised to purchase, repackage, process and sell products that are certified in accordance with the RSPO Standard MB at both locations.

This makes an important contribution to the sustainable use of palm oil and its derivatives and offers customers a competitive, responsible product.



# Topics of the Future

AN
INNOVATIVE
"SPOT DETECTIVE"
AT BÜFA
CLEANING

A sensor that detects what kind of stain there is on a textile or that recognises whether it is genuine leather or imitation leather? In future, we will be adding this innovative detector to our portfolio of products and services at BÜFA Cleaning.

This is because BÜFA has acquired a stake in the Oldenburg-based start-up InProSens. InProSens develops innovative analysis systems for process analytics and quality assurance. Detection techniques can be used to non-destructively measure numerous sub-

stances in solid or liquid form in a matter of seconds in a variety of industrial production processes.

The innovative near-infrared sensor NIRScreen will be used to identify textile materials and to analyse soiling on textiles. This is because every type of fabric must be treated differently when washing and cleaning, as does every type of stain.

The InProSens stain detector will support effective and gentle cleaning of textile fabrics in combination with our products. The analysis can be used to provide the customer with clear instructions for action and product recommendations.

InProSens is an independent company launched in 2018 after it was created at the University of Oldenburg. The core team includes chemists René and Alexandra Ungermann, business informatics specialist Thore Stratmann, and systems electronics engineer

Janek Willms. As well as the EXIST start-up grant from the Federal Ministry for Economic Affairs and Energy provided through the University of Oldenburg, the founders already have years of experience in developing sensor technology and analysis devices.



Matthias Wach, Head of Research & Development at BÜFA Cleaning and chemists René and Alexandra Ungermann from the start-up "InProSens"

#### **NO CHANCE FOR MICROBES**

Microbes on surfaces in public spaces pose an increasingly serious threat. Whether they are on public transport, in hospitals or public bathrooms, the danger of infection lurks everywhere. The coronavirus pandemic has highlighted the importance of hygiene as well as the current shortcomings in many areas.

Companies in these industries face the challenge of preventing the spread of dangerous viruses, bacteria or fungi through targeted hygienic preventive and emergency measures. The additional expenditure due to targeted disinfection measures is, however, not insignificant.

Antimicrobial functions in surfaces can prevent the spread of microbes and reduce the substantial amount of work required for disinfection. Existing markets are open to these uses, but new markets can also be explored.

BÜFA Composite Systems aims to establish new composite product groups that have antimicrobial properties.

# SUNNY OUTLOOK – PHOTOVOLTAIC SYSTEM AT OHMSTEDE

At Ohmstede, we are planning to install a photovoltaic system to generate climate-neutral energy in the near future.





Photo: Solar Roof Potential Map – City of Oldenburg

A feasibility study is currently being carried out for the entire site. The factors taken into account include solar radiation, roof load reserve, energy load profile of the site, fire protection, licensing issues, efficiency of the PV system, storage options for the generated energy and the possible impact of CO<sub>2</sub> savings. An area of approximately 1,000 to 5,000 square metres is being examined for this project. This resulted in a potential CO<sub>2</sub> saving of around 190 tonnes of CO<sub>2</sub> in the first year.

As part of the cooperation with the Department of Innovation Management and Sustainability at the Carl von Ossietzky Universität Oldenburg, students have also analysed the extent to which energy from the PV system that is not used can be stored so that it can be accessed at a later date.

# "GREEN SOLUTIONS" IN PERSONAL CARE - BÜFA LAUNCHES NEW B2C BRAND SOLVERDE®

The SOLVERDE® story goes back to one of BÜFA's core areas. Sustainability and therefore environmental products have been part of the corporate group's DNA for years. In 2018, "green" raw materials were introduced at BÜFA Chemicals and ViVoChem under the name SOLVERDE®.

Since then however, SOLVERDE® has been further developed and detached from the original idea to become a brand for the end consumer business. Since 2019, the "SOLVERDE®" team led by Chief Business Development Officer Dr Stephan Göttke has been working on establishing an environmental product line for personal hygiene and care. SOLVERDE® is located under: grüner shoppen GmbH.

Working together with new partners, the SOLVERDE® team has developed the first products that will be actively launched on the market. The SOLVERDE® range so far includes soap, hand sanitiser and hand cream. All products are certified according to NCP/NCS or Cosmos – renowned environmental standards.



It was initially a new brand for the business customer sector. The portfolio of environmental, innovative and certified raw materials was also expanded and sales significantly increased. In addition to plant-based surfactants, the range includes biodegradable complexing agents, plant-based ethanol, propanediol and acetic acid.

At the beginning of the year, the portfolio for washing raw materials was reviewed and some products were renamed. The group of surfactants, for example, has been combined under the new brand name Tensidol®, and other groups will follow.





# BÜFA BRAND WORLD ADVERTISING MATERIAL SHOP

Since 2015, BÜFA has operated an internal advertising materials shop where employees can find promotional items related to the BÜFA brand as well as small gifts for customers. Alongside small gift items such as pens and lighters, the shop also sells seasonal gifts and branded textiles.

In future, BÜFA will adopt an even more sustainable approach to give-aways, both in terms of the items as well as the full-service partner. The BÜFA shop range will be smaller but of high quality. Promotional items made of environmentally friendly

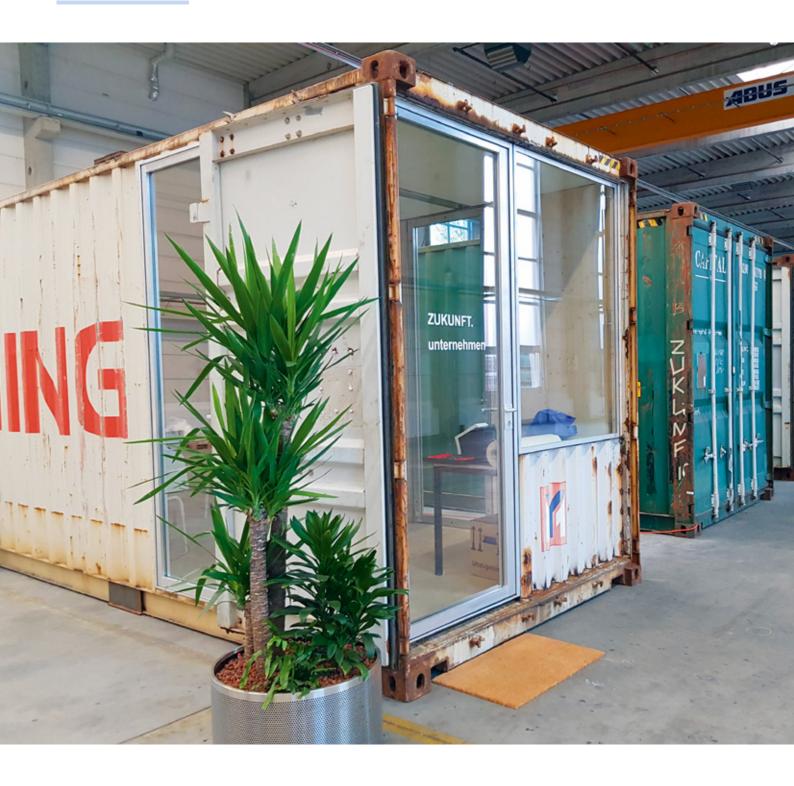
materials as well as more products from the BÜFA corporate world, including eco-friendly detergents and cleaning agents from sodasan, are designed to address the issue of sustainability in advertising messages. Furthermore, BÜFA will expand its cooperation with partners who act sustainably in all areas of its operations from this year onwards.

BÜFA continues to rely on promotional products to raise brand awareness, but we want to convey to our customers that sustainability is something the company lives by in this area as well.









## A VILLAGE IS GROWING

In 2019, BÜFA launched an innovation centre in the old BÜFA Glass Hall at the Ohmstede site. The project partners are GIZ gGmbH and the Barthel Stiftung. The first offices were built and start-ups moved in here in 2020. The start-up and innovation

incubator "ZUKUNFT.unternehmen" aims to bring together regional businesses, people interested in founding companies and startups with digital, innovative and sustainable ideas.



Start-ups have the opportunity to rent inexpensive and flexible premises here. GIZ gGmbH, an affiliated institute of the Carl von Ossietzky University Oldenburg, organises, manages and operates the incubator.

Shipping containers converted into offices lie at the centre of the expansion and design of the incubator. This is creating a special atmosphere in the old industrial hall with a continuously growing container village. In autumn last year, the first shipping containers were installed. Work is continuing at full speed so there will soon be more space for creative ideas from young start-ups. The first start-ups have already moved into the containers and the neighbourhood is steadily growing.



Area	Project description	Status
BÜFA Holding	Use FSC paper (Blue Angel/ Ecolabel)	Completed
BÜFA Holding	Introduce climate-friendly mobility management	Currently being implemented
BÜFA Holding	Fast charging stations for electric cars (two charging stations)	Completed
BÜFA Holding	Determine our CO <sub>2</sub> footprint	Completed
BÜFA Holding	Draw up a catalogue of compensation measures	Currently being reviewed
BÜFA Holding	All sustainability proposals centrally on the BÜFA Wiki	Completed
BÜFA Holding	Establish sustainability reporting (quarterly) ("BÜFA Green Reporting")	Completed
BÜFA Holding	Introduce document management system to build a more paperless workflow (electronic invoice receipt processing)	Currently being reviewed
BÜFA Holding	Solar energy for old BÜFA glass hall	Currently being reviewed
BÜFA Holding	Heating system for old BÜFA glass hall	Currently being reviewed
BÜFA Holding	Advertising material shop – sustainable advertising material	Currently being implemented
BÜFA Holding	Increase number of video conferences	Completed
BÜFA Holding	Increase remote working (instead of commuting)	Completed
BÜFA Holding	Group-wide energy audit / for every location	Completed
Apprentices	Gradual conversion of car fleets to electric (electric and plug-in hybrid)	Currently being implemented
Apprentices	Gradual conversion of lights to LEDs (bulbs)	Completed
BÜFA Chemicals	By the end of 2020, increase the combination of drop shipments with the warehouse by 10% (scheduling)	completed (not feasible)
BÜFA Chemicals	By the end of 2020, reduce water consumption by 10% compared to previous year (operations)	completed (not feasible)
BÜFA Chemicals	By the end of 2023, convert truck fleet to gas (vehicle fleet)	completed (not feasible)
BÜFA Chemicals	Use biodegradable wrapping foil and reduce plastic stanchions (warehouse)	Currently being implemented
BÜFA Chemicals	By the end of 2020, reduce invoice dispatch by mail by 20% (sales)	Currently being implemented
BÜFA Chemicals	By the end of 2020, reduce the number of certificates of analysis in paper form by 10% (QA)	Completed
BÜFA Chemicals	Survey of the number of suppliers who have supplied us to date and are certified according to ISO 50001. Increase the number of these suppliers 10% by the end of 2020 (purchasing)	Completed
BÜFA Chemicals	By the end of 2020, delivery with digital delivery note (shipping)	Currently being reviewed
BÜFA Chemicals	By the end of 2020, no longer print production orders, only document them digitally (filling)	Currently being implemented
BÜFA Chemicals	By the middle of 2020, exchange envelopes for ecological alternatives (shipping)	Completed
BÜFA Chemicals	Sustainable giveaways	Completed
BÜFA Cleaning	Use only ecological products from our range for site cleaning	Completed
BÜFA Cleaning	Use more environmentally friendly wrapping foil	Completed
BÜFA Cleaning	Save on wrapping foil (e.g. do not wrap goods which are only one level high or which hold only a few canisters (<10)	Completed
BÜFA Cleaning	Avoid unnecessary packaging (including sugar sachets, milk, etc.)	Completed
BÜFA Cleaning	Turn off appliances (e.g. coffee machine) after the working day and over the weekend	Completed
BÜFA Cleaning	Completely shut down the computer at the end of the working day and not just turn off the screen	Completed
BÜFA Cleaning	Save travel by increasing the use of communication media (telephone, remote maintenance, email)	Completed
BÜFA Cleaning	Turn on artificial light only when necessary	Completed
BÜFA Cleaning	Plant trees in the meadow by the car park	Completed

Area	Project description	Status
BÜFA Cleaning	Switch lighting in Warehouse 7 and production to LEDs	Completed
BÜFA Cleaning	Procure E-bike pool RS – Holding	Completed
BÜFA Cleaning	Shred cardboard that accumulates as waste and then use it as filling material.  Procure shredder	Completed
BÜFA Cleaning	Use solar energy / photovoltaics at BÜFA sites. Is planned for the old BÜFA Glass Hall.	Currently being implemented
BÜFA Cleaning	Prioritise regional products and suppliers in the canteen.	Currently being reviewed
BÜFA Cleaning	Convert all forklifts to electric	Currently being implemented
BÜFA Cleaning	Roof renovation of old building	Currently being implemented
BÜFA Composite Systems	Use of 100% recycled paper	Completed
BÜFA Composite Systems	Reduction of unsuitable goods	Currently being implemented
BÜFA Composite Systems	Highlighting and advertising of "Greener products"	Currently being implemented
BÜFA Composite Systems	Use of renewable raw materials; appropriate consideration during formula development and raw material registration	Completed
BÜFA Composite Systems	Streamline portfolio	Currently being implemented / Bonding pastes have been implemented
BÜFA Composite Systems	Reduction of the raw materials used with very high hazardous potential as per GHS to $<$ 15	Currently being implemented
BÜFA Composite Systems	Reduction in diversity of containers	Currently being implemented
BÜFA Composite Systems	Concept development for waste separation / waste avoidance	Currently being implemented
BÜFA Composite Systems	Employee communication: workshop results	Completed
BÜFA Composite Systems	Creation of action list: Location: Rastede	Completed
BÜFA Composite Systems	Creation of action list: Points for Holding	Currently being implemented
BÜFA Composite Systems	Rastede location energy concept	Currently being implemented
BÜFA Composite Systems	Raise greener awareness among all employees	Completed
BÜFA Composite Systems	Conduct a review of the suitability of a possible use of sustainable cleaning agents	Currently being implemented
BÜFA Composite Systems	Canteen service: Cuisine seasonal, regional, healthy	Currently being implemented
BÜFA Composite Systems	Insect-friendly planting for the outdoor area	Currently being implemented
BÜFA Composite Systems	Introduction of the working group "Ecological sustainability"	Currently being reviewed
BÜFA Thermoplastic Composites	Set up Ecosia as the standard search engine on all PCs	Completed
ViVoChem	Sensitisation for liquids and waste water	Currently being implemented
ViVoChem	Continuous improvement of the rinsing water – every little bit helps.	Currently being implemented
ViVoChem	Proactively replace certain products	Currently being implemented
ViVoChem	Promotion of a sustainable lifestyle (at home) e.g. reduction of plastic consumption.	Completed
ViVoChem	Review of LED lighting	Completed
ViVoChem	Green retirement planning: pensions to be invested in sustainable funds.	completed (not feasible)
ViVoChem	Replace all leased vehicles (trucks) with electric vehicles	Currently being implemented
Tricura	Replace filling material with ecological alternatives by the end of 2020 (Tricura)	Currently being implemented
Tricura	By the end of 2020, reduce consumption of adhesive tape and seek ecological alternatives (Tricura)	Currently being reviewed

# Numbers, Figures + Facts

BÜFA Group		2020	2019	2018
Group sales	EUR million	244	224	219
Equity ratio	%	> 40	> 40	> 40
Research and development expenses	EUR million	2.2	2.4	2.1
Investments in property, plant and equipment	EUR million	6.4	12.9	12.4
Personnel expenses	EUR million	39.9	35.8	33.5
Locations Germany (D)		5	5	5
Location abroad		7	5	4
Employees		624	556	548
Employees <sup>1</sup>	FTE	557	489	484
Qualification costs per employee <sup>2</sup>	EUR	565	495	726

Locations in Germany				
Sickness rate <sup>3</sup>	%	4.57	4.56	3.96
Staff turnover	%	9.07	7.98	7.1
Qualification days	±	957,1	918	883
Qualification days per employee	±	2,0	2.1	2.0
average age, female employees	Years	41.25	43.29	41.1
average age, male employees	Years	44.56	44.02	43.5
average company tenure, female employees	Years	12.32	12.19	12.2
average company tenure, male employees	Years	12.79	12.05	12.1
Share of female employees	%	30.8	30.5	29.7
Apprentices		42	31	28
Apprenticeship rate	%	7.54	6.34	5.79

Locations in Germany and the Netherlands				
Accident frequency rate <sup>4</sup>	11.3	23.5	19	
1000-persons quota <sup>5</sup>	10	32.1	24.9	
Accidents <sup>6</sup>	9	19	18	
Days lost	99	153	187	

<sup>&</sup>lt;sup>1</sup> FTE = Full-Time Equivalent

<sup>&</sup>lt;sup>2</sup> Calculation based on costs for external courses

<sup>&</sup>lt;sup>3</sup> Calculation based on 255 working days; sick days with continued pay

<sup>&</sup>lt;sup>4</sup> Calculation: Accidents with lost time per 1 million working hours

<sup>&</sup>lt;sup>5</sup> Calculation: reportable occupational accidents per 1000 employees

<sup>&</sup>lt;sup>6</sup> Calculation: Number of occupational accidents from one day of absence

Relative consumption/tonnage produced or sold respectively					
Locations in Germany 2020 2019 2018					
BÜFA Chemikalien, Hude-Altmoorhausen (/tonnes	sold)				
Waste	kg	2.810	2.620	2.009	
Gas consumption	kWh	11.228	10.178	15.328	
Gas consumption in CO <sub>2</sub>	kg	2.247	2.045	3.078	
Electricity consumption	kWh	9.226	6.936	7.059	
Electricity consumption in CO <sub>2</sub> **	kg	0.000	0.000	0.000	
Water consumption	m³	0.115	0.104	0.108	

BÜFA Reinigungssysteme, Oldenburg (/tonnes produced)				
Waste	kg	33.175	25.495	27.371
Gas consumption	kWh	100.452	87.100	88.745
Gas consumption in CO <sub>2</sub>	kg	20.191	17.507	19.524
Electricity consumption	kWh	24.535	25.649	30.426
Electricity consumption in CO <sub>2</sub> **	kg	0.000	0.000	0.000
Water consumption	m³	0.733	0.761	0.790

BÜFA Composite Systems, Rastede-Liethe (/tonnes produced)				
Waste	kg	36.219	43.966	47.588
Gas consumption	kWh	227.764	213.757	253.248
Gas consumption in CO <sub>2</sub>	kg	45.781	42.965	55.714
Electricity consumption	kWh	167.137	152.245	180.412
Electricity consumption in CO <sub>2</sub> **	kg	0.000	0.000	0.000
Water consumption	m³	0.164	0.193	0.205

Locations abroad				
ViVoChem, Almelo (NL) (/tonnes sold)				
Waste	kg	±	5.689	2.960
Gas consumption	kWh	5.661	7.445	5.40
Gas consumption in CO <sub>2</sub>	kg	1.087	1.435	1.037
Electricity consumption	kWh	8.921	9.471	9.74
Electricity consumption in CO <sub>2</sub>	kg	4.059	4.305	4.432
Water consumption	m³	0.022	0.020	0.023

Reporting framework
This is the fifth sustainability brochure produced by the BÜFA Group. The financial year runs from 1 January to 31 December 2020.
The information on this page relates exclusively to the German and Dutch locations of the BÜFA Group.
The cut-off date for the key figures was 31 December 2020 and the editorial deadline was 18 March 2021.
\* Data was not yet available on the key date.
\*\* Purchase of green electricity.

# **Our Locations**

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