

MUNICIPAL UTILITIES  
MUNICIPAL COMPANIES  
MUNICIPAL SERVICE PROVIDERS

HIGH-QUALITY ACTIVATED CARBON  
SERVING THE COMMUNITY.



**CarboTech**  
The activated carbon people

## AT A GLANCE

**Our proposition to municipal works companies, municipal businesses and municipal service providers:**

- High quality activated carbon cleaning solutions.
- Solutions for minimising pollutants and safeguarding water quality.
- Comprehensive, competent, professionally sound advice with our own in-house research lab.
- Homegrown solutions rooted in the community.
- Sustainability and economy through responsible recycling, for example by reactivating the carbon.

## WE'RE AT YOUR SERVICE

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## ONE OF THE WORLD'S LEADING SUPPLIERS OF **ACTIVE CARBONS**

CarboTech is one of the world's leading suppliers of high-quality powdered, granulated and extruded activated carbons for every municipal application. As a market leader in recycling saturated activated carbon by means of thermal reactivation or energy recovery, we attach great importance to sustainability in what we do.

Located in the Ruhr conurbation at the heart of Europe, our integrated production plants manufacture, refine and package as well as reactivate tailor-made activated carbons and carbon molecular sieves. All common source materials are used in this process. Our fluidised bed process – the only one of its kind in the world – ensures our customers are supplied with highly efficient activated carbon of consistent quality for demanding cleaning processes.

Thanks to our decades of experience and the expertise we've built up in the field of activated carbon, we are now a **full-service provider to municipal utilities municipal companies and municipal service providers.**

We are your capable point of contact: From advice on product selection and production to logistical handling of activated carbon – in sacks, bulk bags (FIBCs) or in the form of MAMS mobile adsorber rental systems – right through to eco-friendly reactivation of used activated carbon and, ultimately, disposal. We also develop made-to-measure solutions and custom-fit products to your wishes and requirements.

This versatility is all down to our highly proficient application technology and our in-house lab facilities. If you are already using activated carbon solutions, we'll be happy to offer you more powerful alternatives from our product range. Our definition of "full service" is always based firmly around your needs and requirements. Whatever the challenge, consider us at your service, ever ready to magic up the optimal solution for you.

Our activated carbons are especially suitable for **high-performance cleaning of contaminated water and gases**. This makes them ideal for use by municipal utilities, municipal companies and municipal service providers.

**A summary of the advantages and applications of our products can be found on the following pages.**





## SOLUTIONS FOR LANDFILLS AND LANDFILL LEACHATE

**THE CHALLENGE:** When waste is stored in landfills, toxic leachate is produced, which can have a strong impact on the environment.

**THE SOLUTION:** Purify the waste water to reduce toxic leachate. Our adsorbents effortlessly remove nearly all organic components, such as CSB and AOX as well as some trace substances, thus recycling the leachate in a reliable manner.

**WE OFFER YOU A FULL PACKAGE:** Particularly reliable, durable, high-performance activated carbon at a fair price together with comprehensive, competent, expert advice founded on our **many years of innovation activity**. This is because our fluidised bed process, which is the only one of its kind in the world, makes our activated carbon especially durable – while maintaining a stable level of quality. Also, our **efficient production makes for attractive prices**. And last but not least, the expertise of our customer experts will pinpoint the perfect solution for your real-life requirements. **See for yourself!**

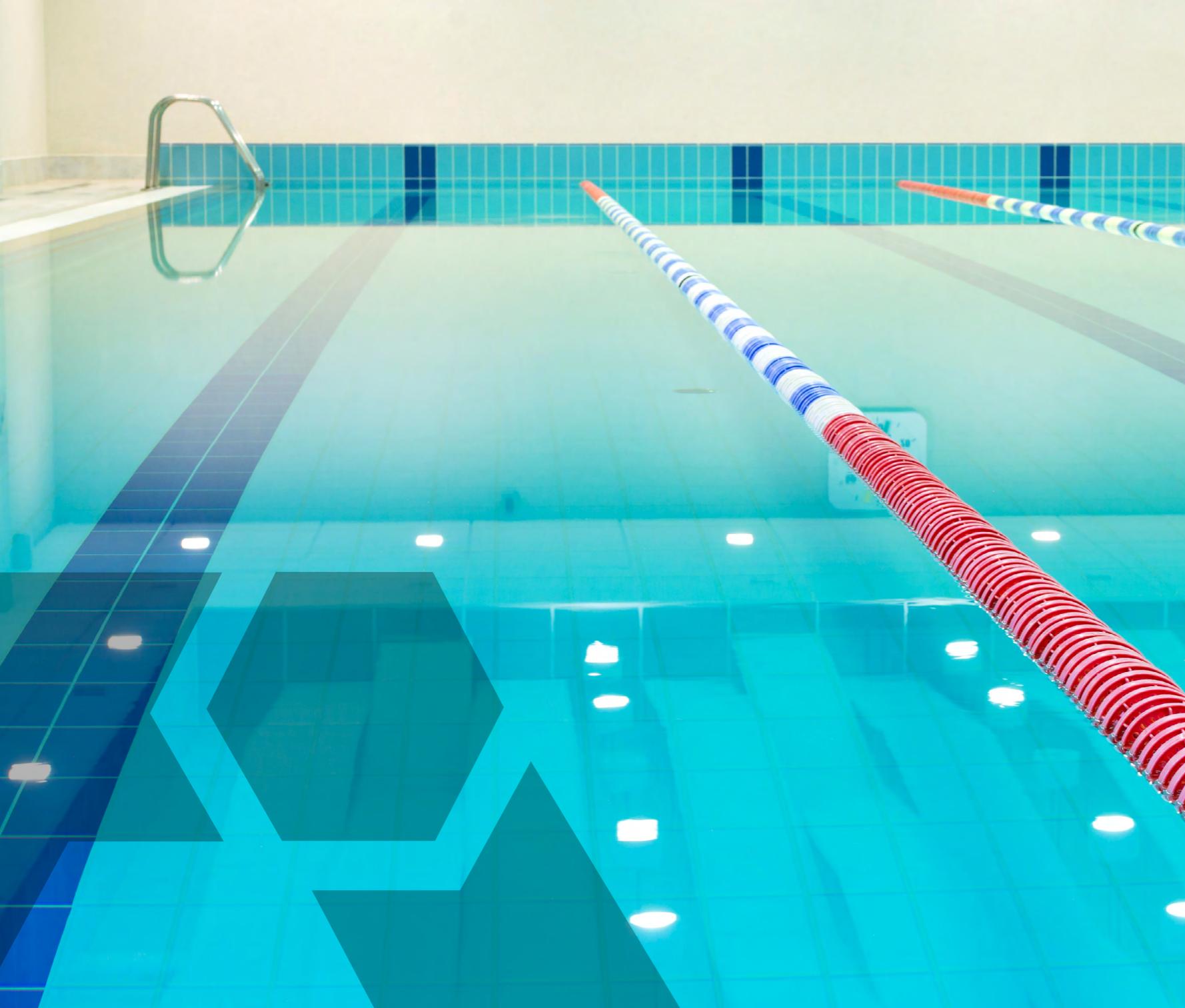
# SOLUTIONS FOR OPERATORS OF **BIOGAS PLANTS**

**THE CHALLENGE:** Digester gases contain undesirable components such as hydrogen sulphide and siloxanes. These pollutants are real poison for biogas engines and catalytic converters, because they result in increased wear and **costly damage** and tear to your biogas plant.

**THE SOLUTION:** Combined with our basic activated carbons, various impregnations – depending on your needs and application – remove hydrogen sulphide from biogas reliably and effectively. Our high-quality activated carbon mouldings are particularly effective in combating siloxanes.

Complementing our high-quality **homegrown activated carbon solutions**, we also offer short delivery lead-times and customer-focused order processing. **These are benefits only we can offer!**





## SOLUTIONS FOR SWIMMING POOLS

**THE CHALLENGE:** Giving visitors a carefree, healthy bathing experience in germ-free surroundings while complying with a raft of statutory requirements calls for a variety of processes and approaches.

**THE SOLUTION:** When it comes to reducing or avoiding chlorine-nitrogen and other organic compounds, our proven coconut shell activated carbons – available in various grain sizes – and our stir-in powdered activated carbons are the products of choice.

For more than 50 years we have been producing high quality activated carbon in the heart of the Ruhr area. This experience ensures you **the utmost quality**.

We offer the complete package **from initial activation (production) to reactivation (renewal)** of the activated carbon. We're always happy to advise!

## SOLUTIONS FOR WASTE INCINERATOR PLANTS

**THE CHALLENGE:** Incineration of waste produces a variety of substances that are hazardous and harmful to health – from hydrogen chloride, sulphur dioxide and released heavy metals such as mercury to dioxins and furans.

**THE SOLUTION:** Cleaning flue gas calls for the right dosage of powdered activated carbon. We can supply you with an activated carbon product adapted to your needs and at economic prices.

Our experience born of over 50 years of production and development in the German industrial heartland of the Ruhr enables us to activate our carbon with pinpoint accuracy. With our unique fluidised bed process, we achieve a special pore distribution offering both **optimum cleaning performance and economy. See for yourself!**





## SOLUTIONS FOR POWER PLANTS

**THE CHALLENGE:** In power generation plants, one of the by-products of creating electricity from fossil fuels is flue gas containing substances that are harmful to the environment and hazardous to human health.

**THE SOLUTION:** Our high-efficiency powdered activated carbon adsorbs components such as mercury directly in the flue gas stream, thereby **reducing pollutant content efficiently**. Filters ensure the activated carbon is reliably separated from the flue gas.

Especially when it comes to removing mercury, our powder activated carbon is a superb economic proposition thanks to its advantageous price and outstanding performance.

**We'll be happy to make you an offer!**

## SOLUTIONS FOR SEWAGE TREATMENT PLANTS (PURIFICATION STAGE 4)

**THE CHALLENGE:** The increase in micro-pollutants from medicines and pesticides in waste water has been a concern for operators of waste water treatment plants for years, especially since conventional plants can only remove around 70% of these trace substances.

**THE SOLUTION:** The fourth purification stage offers a remedy. Downstream of the regular treatment stages, even the most stubborn micro-pollutants can be removed with the aid of activated carbon. Therefore a **lasting high quality of water** can be ensured.

Depending on your waste water treatment requirements and the equipment involved, we can offer two solutions: either our granulated activated carbon, which can be reactivated after use and thus represents a sustainable solution, or our highly efficient and easily separable powdered activated carbon.

Either way: we will supply our activated carbon quickly, reliably and tailored precisely to your needs. **Let our experts advise you!**





## CONTACT

Interested in discovering more? But that's not all: Our products and solutions can be used to great effect in lots of other areas as well, and if you wish we'll be very happy to discuss and explain more.

We can also show you what our **activated carbon can do for your municipal utility, municipal business or municipal service provider** – we're always happy to advise!

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