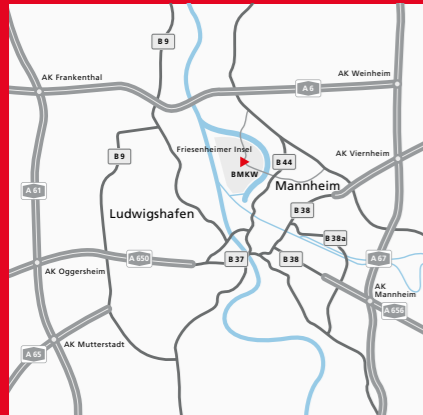


## How to find us

Turn off the A6 at the Mannheim-Sandhofen junction. Then drive along the B44 until you reach the Friesenheimer Insel exit. Turn into Bürstädter Strasse and then Diffenésstrasse to access Friesenheimer Insel.

Alternatively, take city railway lines 1 or 3 from Mannheim Central Station to Luzenberg. Change here to bus line 58 heading for "Heizkraftwerk". The Mannheim-Luzenberg station is also on the national railway network.



MVV Umwelt Asset GmbH  
Mannheim CHP Plant  
Otto-Hahn-Straße 1  
68169 Mannheim, Germany  
T +49 621 290 46 01  
F +49 621 290 46 06  
info-umwelt@mvv.de  
www.mvv-umwelt.de

**Delivery hours**  
Mon-Fri 6.30 a.m. - 6.30 p.m.

We inspire  
with energy.



# Energy from waste: sustainable and efficient

Our CHP plant in Mannheim





## Mannheim CHP Plant

# Environmentally-friendly energy from waste – for more than 50 years

## Protecting resources and the climate

Our future energy supply will be environmentally compatible and resource efficient. We are putting this principle into practice. With more than 50 years of experience in generating energy from waste timber, non-recyclable timber and from household and commercial waste, we are one of the technology leaders in these areas. Our plants in Germany and the UK incinerate more than 2 million tonnes of waste a year and turn this into valuable energy in the form of electricity and heating. In this, we consistently rely on combined heat and power generation to make the most efficient use of the energy contained in the fuel.

### End-to-end resource management

As well as planning, building and operating power plants, we also implement end-to-end resource ma-

agement for our customers. We develop individual strategies for public sector disposal companies and our industrial and commercial partners and take due account of the various kinds of waste and recycling options. We also plan and build waste treatment and power plant facilities using state-of-the-art technology.

### Crucial for a modern recycling-based economy

Generating energy from waste whose constituent materials cannot be reused is a crucial aspect of a modern recycling-based economy committed to protecting the climate and resources. We work with cutting-edge technology at our power plants and make a key contribution towards sustainably protecting the environment.

**Our waste-fired power plant began operating in 1965, has been repeatedly, and now incinerates waste for more than one million inhabitants of the Rhine-Neckar region and the city and district of Karlsruhe. The household waste and materials from commercial and industrial customers are incinerated and used to generate energy.**

### Safe incineration at up to 1,200 °C

Upon delivery, the waste is mixed in the waste bunker to make sure the calorific value is as uniform as possible. The fuel is then transported by crane to one of the three boilers at the power plants, all of which are built in line with the forward feed grate firing principle. Once on the grate, the waste is incinerated at up to 1,200 degrees Celsius. The furans, dioxins and chlorinated hydrocarbons thereby produced are safely destroyed. The flue gases radiate their heat to the water/steam circuit. Not only that, contaminants are removed in several stages in our cutting-edge flue gas cleaning process.

### Peak performance for electricity suppliers and industry

The steam produced in the boiler is used on the one hand to generate electricity. Working with highly efficient combined

heat and power generation, we simultaneously produce process steam and supply this to industrial customers in the north of Mannheim. In future, we will also feed environmentally-friendly district heating into Mannheim's grid. The residues remaining after incineration are recycled. Metals are returned to the materials cycle, while slag is used as a material in road construction and landscaping. The filter dusts resulting from flue gas cleaning are used as backfill in the mining industry.

## Facts and Figures

### Approval

17th BImSchV

### Launch of operations

1965/1997/2003/2009

### Waste types

Mixed municipal waste and industrial and commercial waste

### Number of boilers

3 waste-fired boilers and 2 gas-fired medium-pressure steam generators as a reserve

### Firing

Forward feed grate

### Waste bunkers

2 bunkers with 34,000 m<sup>3</sup> extra volume

### Annual throughput

700,000 Mg/a

### Design calorific value

Boilers 4 + 5 – 9,600 kJ/kg

Boiler 6 – 12,500 kJ/kg

### Live steam production

Up to 2.2 million Mg/a between 40 and 65 bar, 385–430 °C

### Electricity production

300,000 MWh/a

### Steam production

65 Mg/h steam production under normal loading

