

MVV commissions its first innovative river heat pump in Mannheim

The new river heat pump from MVV supplies climate-friendly heat from Rhine water to around 3,500 households - One of the largest heat pumps of its kind in Europe.



Mannheim-based energy company MVV is consistently driving forward the energy transition of heat supply: With the official commissioning of its first river heat pump on the grounds of Grosskraftwerk Mannheim AG (GKM), MVV today reached another important milestone on the road to greener district heating in Mannheim and the region.

With its “Mannheim Model”, the company has committed itself to the strategic path of becoming climate-neutral by 2040 at the latest and climate positive thereafter, which means removing greenhouse gases from the atmosphere with its operations.

To achieve this, MVV is relying on a triad of a heating transition, an electricity transition, and green customer solutions. The heating transition is an important lever for MVV's climate positive goal. As Germany's second-largest district heating supplier - including industrial steam - MVV has already been working at full speed on the heating turnaround for years.

MVV is making district heating green step by step

"By 2030, we will generate our district heating in Mannheim and the region entirely from climate-friendly energy sources. At the same time, we are continually expanding our district heating grid and increasing the density of existing district heating areas, i.e. connecting additional households to the existing grid. With the commissioning of our first river heat pump, we are once again demonstrating that the energy turnaround is already a reality at MVV," stressed Dr. Georg Müller, CEO of MVV Energie AG.

One of the largest heat pumps in Europe

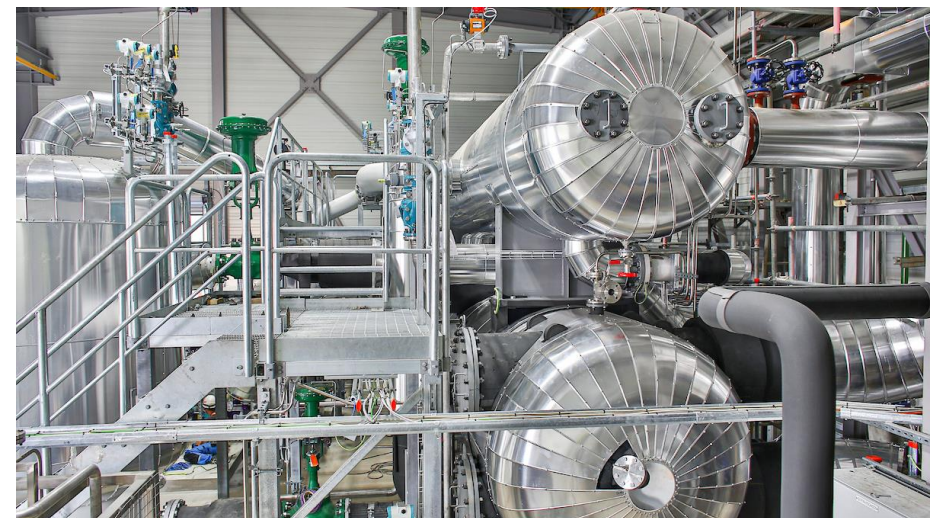
The large-scale heat pump supplied by Siemens Energy, which GKM integrated into the infrastructure of the large-scale power plant for MVV, and operates, will now supply 3,500 households with climate-friendly heat from Rhine water. The new plant saves around 10,000 tons of CO2 annually. With a thermal output of 20 megawatts, the innovative MVV river heat pump is currently the largest heat pump integrated into a district heating network in Germany and one of the largest plants of its kind in Europe.

The MVV flow heat pump utilizes the existing infrastructure of the GKM, specifically the high-performance water intake, the water outlet and the connection to the district heating network.

Large heat pumps an important lever for the heating transition

The MVV river heat pump was built by Siemens Energy in Sweden and delivered to Mannheim by truck. "Large heat pumps like the one in Mannheim make heat from water or industrial waste heat usable for district heating networks as well. Powered by electricity from renewable sources, this technology can be an important lever for the heating transition, especially in urban areas," says Vanessa Bauch, Head of Decentralized Power Generation at Siemens Energy.

To drive the heating transition, MVV is investing in a broad portfolio of renewable generation options: In Mannheim, the connection of MVV's waste-to-energy plant in 2020 and MVV's flow heat pump this year will be followed as the next step by the commissioning of a sewage sludge treatment plant. In 2024, MVV will also connect its biomass power plant to the district heating network. In addition, there are further green options such as deep geothermal energy, additional river heat pumps, biomethane plants, electrode boilers or the use of further industrial waste heat.



Mannheim 2023 | MVV Energie AG. Großkraftwerk GKM mit einer Flusswärmepumpe zur Energieerzeugung.

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