

Aurubis and enercity start up largest industrial heat supply in Germany

- » CO₂-free heat supply for Hamburg's HafenCity district
- » 20,000 tons of CO₂ emissions to be prevented annually
- » Technical potential to extract three times the current heat volume

Hamburg, October 29, 2018 – With the words "Wärme frei!" ("Release the heat!"), heat began to flow to the Hamburg district HafenCity East today. On the Aurubis plant premises, First Mayor of Hamburg Peter Tschentscher, Environmental Senator Jens Kerstan, Aurubis AG CEO Jürgen Schachler, enercity AG CEO Susanna Zapreva, and Aurubis' Head of Energy Affairs Ulf Gehrckens turned a large dial, starting up the new heat pipeline.

From now on, multi-metal company Aurubis will deliver CO₂-free heat from its plant on the island of Peute to the energy service provider enercity through a newly constructed pipeline more than 3.7 km long. The heat will be supplied to HafenCity East. This heat is formed in a sub-process of copper production: The sulfur in the copper concentrates is processed as sulfur dioxide and then converted into sulfuric acid.

Industry provides solutions for the energy transition

Using this heat prevents more than 20,000 tons of carbon dioxide (CO₂) emissions per year. For comparison: This is equivalent to the emissions of about 10,000 midrange cars driving an average of 12,000 kilometers per year. About half of the CO₂ reduction results from the replacement of natural gas used to produce steam on the Aurubis plant premises, while the other half is saved by delivering the waste heat to enercity. In HafenCity East alone, about 4,500 t of CO₂ will be saved each year by the final expansion (target date: 2029).

"When it comes to copper production, Aurubis is already a global forerunner in environmental protection," explained Jürgen Schachler. "With this project, however, we're going one step further: We are actively improving the CO₂ balance beyond our plant boundaries. This shows that we, as an energy-intensive industry, are a significant part of the solution in the energy transition."

"The project makes a substantial contribution to the heat transition – a sector that currently accounts for 50 percent of primary energy," Susanna Zapreva said. "Industrial heat is forward-looking because urban heat sources enable a CO_2 -neutral energy supply – and the fruitful cooperation of all of the actors shows that there is strength in proximity! The key to the heat transition is in decentralized, tailored projects."

Significant potential for further CO₂ reduction

According to Jürgen Schachler, today's commissioning of the project is only the beginning: "We are in a position to extract three times the current heat volume. In fact, we could prevent a total of about 140,000 tons of CO₂ annually in this way." This would be nearly equivalent to the level that the entire Hamburg industry established as a reduction target in a voluntary agreement starting in 2018. "There

Aurubis AG

Malte Blombach Senior Communications Manager Phone +49 40 7883-3037 m.blombach@aurubis.com

Hovestrasse 50 20539 Hamburg, Germany

www.aurubis.com

enercity AG

Carlo Kallen
Corporate Communications
Phone +49 511 430-2161
carlo.kallen@enercity.de

Ihmeplatz 2 30449 Hannover, Germany

www.enercity.de



have to be further political measures to leverage this potential, for example by distributing free EU emissions trading certificates for CO₂ emissions that are prevented beyond the plant premises," Schachler continued.

"Shaping the urban energy transition is one of the central objectives of the enercity group. We have the ambition of increasing the share of renewable, CO₂-free heat to 50 percent together with our customers," Zapreva emphasized. "Our experience with a number of decentralized heating grids, neighborhood concepts, and heating solutions for buildings in Germany and in the Baltic region makes us a reliable partner that places its customers' success at the forefront. With innovative solutions like this project, we make heat in big cities green. Hamburg is a forerunner in this area."

Recognition across Germany

The two participating companies invested over € 20 million each, 30 to 40 percent of which was publicly funded. Aurubis received funding from the German Reconstruction Loan Corporation (KfW), while enercity received support from the European Regional Development Fund (ERDF) and the KfW. The funding was initiated by the German Federal Ministry for Economic Affairs and Energy (BMWi) and the Hamburg Authority for Environment and Energy (BUE).

In its size and complexity, the industrial heat project implemented by Aurubis and enercity is unique in Germany. It has therefore resonated strongly among experts. For instance, it is one of ten case examples for the project "Flagships of Energy-Efficient Waste Heat Use" started by the German Energy Agency (dena). In late September 2018, the Hamburg Renewable Energies Cluster honored the project with the German Renewables Award. It has also been nominated by dena for the Energy Efficiency Award. The winner will be announced in November.



Aurubis - Metals for Progress

Aurubis AG is a leading global provider of non-ferrous metals and the largest copper recycler worldwide. The company processes complex metal concentrates, scrap metals, and metal-bearing recycling materials into metals of the highest quality.

Its main area of expertise is the processing and optimal recovery of concentrates and recycling raw materials with complex qualities. With its range of services, Aurubis is a forerunner in the industry. The group of companies is oriented towards growth, efficiency, and sustainability: The main components of the strategy are the expansion of the leading market position as an integrated copper producer; entering new markets in industries of the future; the highly efficient and optimal recovery of additional metals and by-products from complex raw materials; and practicing a responsible attitude when dealing with people, resources, and the environment.

Aurubis produces more than 1 million t of copper cathodes annually, and from them a variety of copper products such as wire rod, continuous cast shapes, rolled products, and strip, as well as specialty wire and profiles made of copper and copper alloys. Precious metals, selenium, lead, nickel, and a number of other products such as sulfuric acid and iron silicate also belong to the product portfolio.

Aurubis has about 6,500 employees; production sites in Europe and the US; and an extensive service and distribution system in Europe, Asia, and North America.

Aurubis' customers include companies in the semis industry; the electrical, electronics, and chemical industries; and suppliers of the renewable energies, construction, and automotive sectors.

Aurubis shares are part of the Prime Standard Segment of the German Stock Exchange and are listed in the MDAX, the Global Challenges Index (GCX), and the STOXX Europe 600.

Further information: www.aurubis.com

enercity - Driving the digital energy world of tomorrow

enercity AG is one of the largest municipal energy service providers in Germany, with annual revenues of about € 2.5 billion. enercity provides electricity, heat and natural gas, water, and energy-related services – increasingly in new business areas such as electric vehicles, energy efficiency, and smart infrastructure.

enercity supplies about 1,000,000 people with electricity, natural gas, heat, and drinking water, as well as services including contracting, telecommunications, and e-mobility in Germany and the Baltic region.

With about 3,000 employees in the group enercity AG, the company views itself as a driving force of the energy world of tomorrow. enercity's key objectives include economic success; the best energy solutions for our customers; the sustainable expansion of renewable energies in the electricity, heat, and mobility sectors; and higher energy efficiency. The plan is to expand regenerative electricity and heat production significantly, increasing it to 50 percent by the year 2035. Forward-looking solutions are aimed at exciting energy experiences for customers – sustainable, interconnected, intelligent, and reliable.

Further information: www.enercity.de www.enercity.de www.enercity.de