
PRESS RELEASE

The power of a nuclear power plant: 1KOMMA5° hits gigawatt milestone with its Heartbeat AI virtual power plant

- **1KOMMA5° reaches one gigawatt of shiftable load with its virtual power plant – doubling within a single year – scaling to the capacity of a modern nuclear power plant. 1KOMMA5° plans to expand to 20 GW by 2030**
- **By intelligently integrating solar systems, heat pumps, and EVs, 1KOMMA5° creates an alternative to fossil-fuel backup power plants and specifically utilizes surplus electricity to lower system costs**
- **Software growth: Heartbeat AI subscriptions tripled after opening the platform to third-party providers and existing systems; in Germany alone, 1KOMMA5° is targeting over six million existing installations**
- **Heartbeat AI intelligently aligns generation and consumption phases, solving the greatest challenge of renewable energy: the gap between demand and volatile production**

Hamburg, Germany, May 20, 2026 – 1KOMMA5°, the energy pioneer and CleanTech unicorn from Hamburg, reaches one gigawatt of shiftable capacity within its virtual power plant. This is equivalent to the power of a modern nuclear power plant. Consequently, 1KOMMA5° has doubled its controllable capacity with Heartbeat AI within just one year.

The driving force behind this is the further scaling and opening of its energy intelligence to existing systems and third-party providers such as energy utilities, manufacturers, and installers. With this move, the company is addressing a market of millions of existing energy systems in Germany alone. In the first four months of the year, more solar systems, heat pumps, batteries, air conditioning units, and wallboxes were connected than ever before. By 2030, 1KOMMA5° aims to grow to a system-relevant controllable capacity of 20 GW.

"We have now reached the threshold of one gigawatt of time-shiftable capacity. This allows us to use electricity exactly when it is available in abundance or feed it back into the grid when prices are high and supply is scarce," **says Philipp Schröder, CEO and Co-Founder of 1KOMMA5°**. "While politics continue to debate the construction of new gas-fired power plants as a reserve

for times with little wind and sun, we at 1KOMMA5° see the enormous, existing potential in millions of private households."

Further opening of the platform for grid operators and utilities

The electricity system faces major challenges: volatile renewable energies meet increasing energy demand and an outdated grid infrastructure. The result is continued high electricity costs. Heartbeat AI is the solution to synchronize the divergence of renewable generation and consumption. The energy intelligence integrates and controls decentralized assets such as photovoltaics, batteries, heat pumps, air conditioning, and wallboxes, connecting them to the energy market. This allows capacities to be used flexibly instead of giving electricity away to foreign countries for free. The only requirement: a smart meter.

"Heartbeat AI is the operating system for the decentralized, new energy world. By opening our technology to existing energy systems, we have unlocked a potential of over six million systems in Germany alone. We want to further develop this potential together with energy utilities, grid operators, and other market participants and engage in a dialogue with them," **explains Barbara Wittenberg, CTO of 1KOMMA5° and Co-Managing Director of Heartbeat AI GmbH.** "Customers with existing systems are now our fastest-growing segment. Heartbeat AI subscriptions have tripled in a very short period of time."

Just recently, the company announced the opening of Heartbeat AI for KOSTAL inverters; this allows over 200,000 existing systems to be controlled intelligently and economically on a permanent basis, while aligning them with the new regulatory requirements of the energy market.

Decentralized flexibility instead of fossil-fuel backups

One gigawatt of controllable flexibility can significantly reduce the need for fossil-fuel reserve capacities. Instead of investing billions in new gas infrastructure, Heartbeat AI enables more efficient use of wind and solar energy through intelligent load shifting.

Against the backdrop of recurring energy crises and volatile electricity prices, many households' desire for greater independence from the energy market is growing. The electrification trend is intensifying this shift and increasing the need for intelligent control to efficiently steer decentralized energy systems and optimize electricity use.

Jannik Schall, Chief Product Officer of 1KOMMA5° and Co-Managing Director of Heartbeat AI GmbH, says: "Recently, one often hears that renewables are to blame for rising electricity

prices. In fact, negative wholesale electricity prices show how significantly renewable energies can lower the price of electricity. At the same time, high negative prices are a sign that the power system lacks flexibility and storage capacity. Our goal is to connect 20 GW of capacity as quickly as possible. This will create a flexibility lever that can balance power production and consumption on a large scale."

After 1KOMMA5° announced in May 2025 that it had connected 500 MW within three years, the jump to 1 GW marks a significant acceleration of the expansion. The company thus underscores its claim to market leadership for intelligent energy solutions.

To further expand the software business surrounding Heartbeat AI, 1KOMMA5° plans to invest over 100 million euros between 2025 and 2027. The first 30 million euros were already invested last year. The recent expansion into Australia now opens up the fifth market for Heartbeat AI.

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More information and press imagery: <https://1k5.link/press-kit>

About 1KOMMA5°

1KOMMA5° is a leading provider of carbon-neutral energy, heating and mobility. Founded in Hamburg, Germany, in 2021, the energy company operates around 80 locations in 7 markets worldwide, serving as the one-stop shop for intelligent, integrated energy solutions such as photovoltaics, batteries, heat pumps, air conditioning and EV chargers. Its core technology is Heartbeat AI: the energy intelligence already controls more than 1 GW of capacity today, creating one of Europe's largest virtual power plants, which connects customers to the energy market and controls electricity generation and sales in line with the wind and sun. 1KOMMA5° has already installed over 300,000 decentralized, controllable energy systems. By 2030, the company aims to convert more than 1.5 million buildings to a climate-friendly energy supply, thus contributing to achieving the Paris climate targets. 1KOMMA5° is one of the fastest and most profitable growing start-ups in Europe.

Media contact

Maxine von Grumbkow

Email maxine.vongrumbkow@1komma5grad.com

Mobile +49 171 2415562

Website 1komma5.com/de/presse