ZURICH, SWITZERLAND, DECEMBER 4, 2025

ABB invests in OctaiPipe to partner in AI-optimized energy efficiency for data center cooling

- Strategic partnership set to expand adoption of AI-driven cooling control software by data centers, enabling up to 30 percent energy savings and rapid return on investment (ROI)
- By optimizing cooling infrastructure, ABB and OctaiPipe empower data centers to lower energy demand, strengthen energy security, and boost competitiveness
- Partnership combines ABB's global reach and expertise with OctaiPipe's privacy-first, on-premise AI platform for cooling optimization – helping operators meet regulatory, security, and operational challenges

ABB today announced a strategic investment through ABB Motion Ventures in OctaiPipe, a UK-based innovator in AI-driven software for optimizing data center cooling systems. The partnership is set to equip data center operators with intelligent tools to achieve substantial energy savings, strengthen operational resilience, and meet the growing demands for sustainability and transparency. The transaction consists of ABB taking a minority stake in OctaiPipe, with closing subject to its customary conditions. Financial details of the investment were not disclosed.

With global demand for data center capacity expected to rise at an annual rate of between 19 and 22 percent from 2023 to 2030,[1] energy use is surging - cooling alone accounts for up to 40 percent of a typical facility's electricity consumption.[2] ABB's investment in OctaiPipe brings a major advancement: an on-premise AI solution that enables up to 30 percent energy savings in cooling, with very short payback periods and rapid deployment - without the need for new hardware.

Data centers represented approximately 1.5 percent of the world's electricity consumption in 2024, with the US accounting for the largest share of this at 45 percent.[3] US data center power consumption is projected to drive nearly half of the growth in electricity demand through 2030.

"Data centers are the engines of the digital economy, but their energy footprint is unsustainable without radical innovation," said Eric Topham, CEO and co-founder of OctaiPipe. "Think of our federated learning[4] platform as an orchestra conductor, smartly adjusting the performance of the cooling system based on what's actually needed. In this way, our AI-driven software solution delivers secure, compliant, and actionable optimization. By joining forces with ABB, we're not just scaling technology. We're enabling data center operators to future-proof their infrastructure and thrive in a rapidly evolving market."

“Energy efficiency is key to ensuring industries can outrun, leaner and cleaner. It’s a must, not a plus,” concluded Ankush Gulati, Energy Efficiency Program Lead, ABB Motion Services. “By integrating OctaiPipe’s cutting-edge AI we are broadening our proven offering with advanced software capabilities, enabling data centers to optimize energy use in their cooling infrastructure. With the US economy predicted to consume more electricity in 2030 for processing data than for manufacturing all energy-intensive goods combined, the opportunity for impact is significant.”

The OctaiPipe solution leverages advanced proprietary AI, including federated AI, multi-agent reinforcement learning,[5] and digital twins to dynamically optimize cooling setpoints, while ensuring safety and regulatory compliance. Its privacy-first, on-premise architecture is designed for data center operators seeking seamless scalability while being wary of cloud-hosted solutions. The partnership is underpinned by a solid roadmap, offering data centers multiple ways to increase reliability and optimize performance.

ABB is a global technology leader in electrification and automation, enabling a more sustainable and resource-efficient future. By connecting its engineering and digitalization expertise, ABB helps industries run at high performance, while becoming more efficient, productive and sustainable so they outperform. At ABB, we call this ‘Engineered to Outrun’. The company has over 140 years of history and around 110,000 employees worldwide. ABB’s shares are listed on the SIX Swiss Exchange (ABBN) and Nasdaq Stockholm (ABB). www.abb.com

—

For more information please contact:

Media Relations
Phone: +41 43 317 71 11
Email: media.relations@ch.abb.com

Investor Relations
Phone: +41 43 317 71 11
Email: investor.relations@ch.abb.com

ABB Ltd
Affolternstrasse 44
8050 Zurich
Switzerland

—

[1] McKinsey

[2] Deloitte

[3] IEA

[4] Federated learning is a machine learning paradigm that facilitates the training of AI models across a network of decentralized devices (or servers). This approach allows each node to contribute to the model's learning process using its local data without the need to exchange or centralize these data samples.

[5] Reinforcement Learning is a powerful form of AI that learns through being given an objective with constraints. Reinforcement Learning dynamically learns by adjusting actions based on continuous feedback to maximize a reward, improving performance over time.