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Press

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Siemens delivers AI-based white space cooling solution for Tier IV data center

- White Space Cooling Optimization for highly efficient greenfield data center in Paris region
- Intelligent, continuously learning solution to support data center's 24/7 availability and energy efficiency

Siemens Smart Infrastructure is supplying the first Tier IV-certified data center in the region of Paris, France. The "Thésée" data center will meet the highest industry standards for availability and energy efficiency. Siemens will install its White Space Cooling Optimization (WSCO) smart solution to optimize the building's energy efficiency as well as the thermal protection of the server rooms by automatically adjusting the operation of the cooling systems.

Located in Aubergenville in the Paris region, the Thésée data center will occupy a 1000 m² computer room building. The project is funded by French banking institute Caisse des Dépôts and real estate group Idec, with operations scheduled to start in the spring of 2021. In the long term, five more buildings will be added to the project. Siemens was chosen to install the cooling solution to increase the building's energy efficiency, primarily by automatically adjusting the computer rooms' cooling systems around the clock. The WSCO solution meets the particularly high cooling demands of the data center, leveraging artificial intelligence to optimize performance. When it comes to sustainability, Thésée aims to achieve a PUE (power usage effectiveness) coefficient of 1.2.

"We opted for the Siemens solution because it ensures a high level of security and reduces energy consumption and maintenance needs. In the long term, this will also

Werner-von-Siemens-Straße 1 80333 Munich Germany extend the life span of the equipment," said Eric Arbaretaz, CTO of the Thésée data center.

High-performance white space cooling

The Thésée campus will be the Paris region's first independent co-location data center and the first to adhere to the Tier IV certification by the Uptime Institute. Tier IV stands for the highest certification level, guaranteeing a "fault tolerant" site and an availability of 99.995%. Currently, there are less than thirty Tier IV data centers in Europe.

Operating the cooling equipment accounts for up to 30% of a data center's energy consumption. The Siemens solution leverages artificial intelligence to strictly limit energy demand to what is necessary, thus generating major financial, operational and energy savings. For data centers, the tolerance threshold for the temperature in computer rooms is a vital parameter to be adhered to. The WSCO solution from Siemens will respond automatically to any unexpected event, quickly solving temperature problems or failures and minimizing the risks of malfunctioning. In addition, artificial intelligence enables a rapid response to mitigate any overconsumption or issues linked to the infrastructure's operation, ensuring the equipment's availability without any interruption.

This press release and press pictures are available at <u>https://sie.ag/2KJSkD9</u> For further information on Siemens Smart Infrastructure, please see <u>www.siemens.com/smart-infrastructure</u> For further information on WSCO, please see <u>www.siemens.com/wsco</u>

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Siemens Smart Infrastructure (SI) is shaping the market for intelligent, adaptive infrastructure for today and the future. It addresses the pressing challenges of urbanization and climate change by connecting energy systems, buildings and industries. SI provides customers with a comprehensive end-to-end portfolio from a single source – with products, systems, solutions and services from the point of power generation all the way to consumption. With an increasingly digitalized ecosystem, it helps customers thrive and communities progress while contributing toward protecting the planet. SI creates environments that care. Siemens Smart Infrastructure has its global headquarters in Zug, Switzerland, and has around 72,000 employees worldwide.

Siemens AG (Berlin and Munich) is a global technology powerhouse that has stood for engineering excellence, innovation, quality, reliability and internationality for more than 170 years. Active around the world, the company focuses on intelligent infrastructure for buildings and distributed energy systems and on automation and digitalization in the process and manufacturing industries. Siemens brings together the digital and physical worlds to benefit customers and society. Through Mobility, a leading supplier of intelligent mobility solutions for rail and road transport, Siemens is helping to shape the world market for passenger and freight services. Via its majority stake in the publicly listed company Siemens Healthineers, Siemens is also a world-leading supplier of medical technology and digital health services. In addition, Siemens holds a minority stake in Siemens Energy, a global leader in the transmission and generation of electrical power that has been listed on the stock exchange since September 28, 2020.

In fiscal 2020, which ended on September 30, 2020, the Siemens Group generated revenue of \in 57.1 billion and net income of \in 4.2 billion. As of September 30, 2020, the company had around 293,000 employees worldwide. Further information is available on the Internet at www.siemens.com.