## **SIEMENS**

## Press

Wunsiedel, July 9, 2021

Siemens to build one of Germany's largest carbon-free hydrogen generation plant in Wunsiedel Wunsiedel

- Bavarian Minister-President Dr. Markus Söder kicks off H<sub>2</sub> lighthouse project for energy transition in Germany
- With 8.75 megawatts of electrical power, it will be one of Germany's largest carbon-free hydrogen generation plants
- Siemens Financial Services, Rießner Gase GmbH and SWW Wunsiedel
  GmbH are investors in Wunsiedel's WUN H2 operating company
- Plant to go into operation in summer 2022 with an annual production of up to 1,350 tons of hydrogen and CO₂ savings of up to 13,500 tons
- WUN H2 to supply Northern Bavaria, Thuringia and neighboring part of Czech Republic with hydrogen

Kickoff for one of the largest green hydrogen projects in Germany: The official groundbreaking ceremony in Wunsiedel marked the start of construction of a hydrogen generation plant with a capacity of 8.75 megawatts. The facility will produce up to 1,350 tons of hydrogen per year using only renewable energy, for example from solar or wind power. Using the generated hydrogen in transportation and industry allows for CO<sub>2</sub> savings of up to 13,500 annually. Siemens Smart Infrastructure is the general contractor for the entire plant, with Siemens Financial Services (SFS) participating in the equity financing as well as holding a share of 45 percent in the operating company WUN H2 GmbH. The electrolyzer will be supplied by Siemens Energy. Attended by Dr. Markus Söder, Minister-President of Bavaria, Hubert Aiwanger, Bavarian State Minister of Economic Affairs, Regional Development and Energy, Thorsten Glauber, Bavarian State Minister of Environmental and Consumer Protection Affairs, Professor Dr. Ralf P. Thomas, Chief Financial Officer of Siemens, Dr. Philipp Matthes and Dr. Thilo Rießner, Managing Directors of WUN H2, Nicolas Lahovnik, Mayor of Wunsiedel, Marco

Siemens AG Communications Leitung: Judith Wiese Werner-von-Siemens-Straße 1 80333 München Deutschland

Krasser, Managing Director of SWW Wunsiedel, and Andreas Schmuderer, Siemens Project Manager, the groundbreaking ceremony marked the start of construction of this lighthouse project.

In his remarks, Minister of Economic Affairs Hubert Aiwanger said: "The WUN H2 project is an important contribution to implementing Bavaria's hydrogen strategy. Green hydrogen 'Made in Bavaria' demonstrates domestic technological expertise and increases acceptance through local value creation." Minister of Environmental Affairs Thorsten Glauber added: "Hydrogen is a key technology on the road to a climate-neutral future. The energy transition will only succeed if there are many innovative approaches like the one pursued in Wunsiedel."

According to a recent analysis by the OECD, global energy demand is estimated to increase by 80 percent by 2050. Meeting this demand while addressing the challenges of climate change will require massive investments in clean energy generation, power distribution, and digitalization. To this end, all energy-consuming sectors, including transportation and industry, must push ahead with their decarbonization efforts.

The plant will be constructed at Wunsiedel Energy Park and connected to the existing Siemens battery storage facility and adjacent industrial enterprises. These can use waste heat, or the oxygen split off during electrolysis. This connected infrastructure will serve as a model for the whole of Germany.

"Converting our energy supply to new, climate-neutral energy sources is one of the main objectives of the energy transition. Hydrogen plays a key role in this," said Siemens CFO Professor Dr. Ralf P. Thomas at the groundbreaking ceremony. "In this respect, Wunsiedel, with its existing distributed energy system and the use of digital technology, is a lighthouse project for a sustainable energy future." For Siemens, digitalization and sustainability are increasingly becoming the focus of business activities. At an event for investors, Siemens had presented its new "Degree" framework for sustainable commitment to environmental, social and governance issues.

For the project in Wunsiedel, SFS, the financing arm of Siemens, is in charge of commercial project development and structuring the financing. SFS holds a 45 percent share in the project's operating company WUN H2; Rießner Gase GmbH

also holds 45 percent and Stadtwerke Wunsiedel (SWW) the remaining 10 percent. At the same time, SFS was able to implement non-recourse project financing, i.e. without counter-liability to the shareholders, with UmweltBank as an external lender to secure financing for the project. "WUN H2 is a pilot project for Germany that will demonstrate innovative technology in practice and ultimately prove the feasibility of industrial production of green hydrogen. Our concept is scalable and can easily be transferred to other locations. If every city had its own H2 plant, the energy transition would already be much further along," said Dr. Philipp Matthes, Managing Director of WUN H2 GmbH.

If hydrogen is produced through the electrolysis of water by only using power from renewable energy sources for this process, it is referred to as "green", i.e. carbon-free hydrogen. The Wunsiedel plant uses Siemens Energy's most advanced electrolyzer. "Green hydrogen plays a crucial role, especially in the decarbonization of industries and the transportation sector," said Dr. Christian Bruch, CEO of Siemens Energy AG. "With our latest generation of electrolyzers, we are continuing to commercialize this technology. The plant not only supplies green hydrogen from renewable energy sources, it also makes full use of the resulting byproducts, oxygen and waste heat."

The hydrogen is delivered via truck trailers to local and regional end customers for local distribution, mainly in the regions of Upper Franconia, Upper Palatinate, Thuringia and Saxony as well as Western Bohemia (Czech Republic). The plant also helps alleviate grid bottlenecks and provides flexibility for the power grid. The option to build a public hydrogen filling station for trucks and buses at the same location will make it possible to create an offering for carbon-free heavy goods transportation as well as regional public transportation.

"Thanks to our 'Wunsiedler Weg' concept, we're ideally positioned to achieve climate neutrality. Hydrogen technology will position Wunsiedel as a model city for the energy future far beyond the region, and indeed beyond Bavaria," said Wunsiedel Mayor Nicolas Lahovnik. "This allows us to create new and sustainable forms of energy use for our residents."

The new hydrogen production plant is scheduled to go into operation in the summer of 2022.

This press release as well as press photos are available at https://sie.ag/3hP79RJ

For more information on Wunsiedel, see https://sie.ag/3hrCfzQ

## **Contact for journalists**

Christian Wilson (national daily and business press)

Phone: +49 172 2791027; email: <a href="mailto:christian\_stuart.wilson@siemens.com">christian\_stuart.wilson@siemens.com</a>

Bernhard Lott (regional daily press)

Phone: +49 174 156 06 93; email: bernhard.lott@siemens.com

Nicole Zeitz (trade press)

Phone: +41 79 594 76 15; email: nicole.zeitz@siemens.com

## Follow us on Twitter:

<u>twitter.com/Siemens\_press</u>, <u>twitter.com/SiemensDE</u>, <u>twitter.com/SiemensInfra</u> and <u>twitter.com/Siemens\_SFS</u>

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. As of September 30, 2020, the business had around 69,600 employees worldwide.

**Siemens Financial Services (SFS)** – the financing arm of Siemens – provides business-to-business financial solutions.

A unique combination of financial expertise, risk management and industry know-how enable SFS to create tailored innovative financial solutions. With these, SFS facilitates growth, creates value, enhances competitiveness and helps customers access new technologies. SFS supports investments with equipment and technology financing and leasing, corporate lending, equity investments and project and structured financing. Trade and receivable financing solutions complete the SFS portfolio. With an international network, SFS is well adapted to country-specific legal requirements and able to provide financial solutions globally. Within Siemens, SFS is an expert adviser for financial risks. Siemens Financial Services has its global headquarters in Munich, Germany, and has almost 2,800 employees worldwide. <a href="https://www.siemens.com/finance">www.siemens.com/finance</a>.

Siemens AG (Berlin and Munich) is a technology company focused on industry, infrastructure, transport, and healthcare. From more resource-efficient factories, resilient supply chains, and smarter buildings and grids, to cleaner and more comfortable transportation as well as advanced healthcare, the company creates technology with purpose adding real value for customers. By combining the real and the digital worlds, Siemens empowers its customers to transform their industries and markets, to transform the everyday for billions of people. Siemens also owns a majority stake in the publicly listed company Siemens Healthineers, a globally leading medical technology provider shaping the future of healthcare. In addition, Siemens holds a minority stake in Siemens Energy, a global leader in the transmission and generation of electrical power.

In fiscal 2020, which ended on September 30, 2020, the Siemens Group generated revenue of €55.3 billion and net income of €4.2 billion. As of September 30, 2020, the company had around 293,000 employees worldwide. Further information is available on the Internet at <a href="www.siemens.com">www.siemens.com</a>.