

# Press release

Munich, March 29, 2022

## Siemens Energy to power China's Greater Bay Area with low-emission power generation technologies

- 100th H-class gas turbine sold worldwide
- Four advanced combined cycle power units support a sustainable energy supply in a major economic area

Siemens Energy has recently entered into agreements separately with Guangdong Energy Group Co., Ltd. and Shenzhen Energy Group Co., Ltd. to deliver a total of four H-class combined cycle power units to their power plants located in the Guangdong-Hong Kong-Macao Greater Bay Area (GBA) in southern China. Upon completion, the new and updated power plants will help meet the growing power demand in the region with efficient and future-proof power generation technologies. In addition, with the one-hundredth unit sold, the projects also mark a milestone in the success story of the SGT-8000H gas turbine.

Under the agreement with Guangdong Energy, Siemens Energy will deliver a 675-MW combined cycle power generation unit, including a SGT5-8000H gas turbine, a steam turbine, two generators and related auxiliary equipment, and long-term maintenance service for the plant in Guangzhou owned by Guangdong Yuehua Power Co., Ltd. The existing coal-fired power plant will be transformed into a modern, higher-efficiency gas-fired plant, and this will reduce carbon dioxide emission by more than 60 percent. The plant will generate 2.3 billion kilowatt-hours of power annually and is expected to go into commercial operation in mid-2023.

The agreement with Shenzhen Energy includes supplying three H-class combined cycle power units for the Phase II project at Dongbu power plant and the upgrade project at Mawan power plant. The scope includes three SGT5-8000H gas turbines, three SST-5000 steam turbines, three SGen5-3000W generators, and auxiliary systems. The two projects, both located in Shenzhen, are scheduled to go into operation by the end of 2023 and in mid-2024 respectively. The annual total power generation of the two plants is expected to exceed six billion kilowatt-hours.

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“We’re achieving a significant milestone with the one-hundredth H-class gas turbine sold,” said Karim Amin, Member of the Executive Board of Siemens Energy AG. “We’re proud to see that our strategic partnerships with Guangdong Energy and Shenzhen Energy are now bearing fruit: We’ll be working together to make tangible contributions to the Greater Bay Area and the low-carbon development of China.”

With a population of over 70 million, the Guangdong-Hong Kong-Macao Greater Bay Area (GBA) is among the most dynamic regions in China. GBA aims to grow into a global sci-tech innovation center and a role model of sustainable development for the country. In December 2019, Siemens Energy and Shenzhen Energy forged a strategic partnership in the areas of R&D and smart and green energy.

With 88 turbines in operation on four continents and over 2.5 million operating hours, the SGT-8000H is the market leader in its class. Since its launch, the output rating of the gas turbine has grown from 375 megawatts (MW) to 450 MW, with efficiency of over 62 percent in combined cycle operation. The turbine’s high combined cycle efficiency, low NOx emissions, and industry-leading operational flexibility – which includes load-following capability of up to 80 MW/minute – make the turbine ideal for a wide range of applications, from simple cycle peaking and combined heat and power (CHP) to baseload power plants. The SGT-8000H is also capable of Hydrogen co-firing, which reduces its CO2 emissions even more.

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This press release and a press picture is available at [www.siemens-energy.com/press](http://www.siemens-energy.com/press)

For further information on Siemens Energy’s SGT-8000 gas turbine, please see <https://www.siemens-energy.com/global/en/offerings/power-generation/gas-turbines/sgt5-8000h.html>

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**Siemens Energy** is one of the world's leading energy technology companies. The company works with its customers and partners on energy systems for the future, thus supporting the transition to a more sustainable world. With its portfolio of products, solutions and services, Siemens Energy covers almost the entire energy value chain – from power generation and transmission to storage. The portfolio includes conventional and renewable energy technology, such as gas and steam turbines, hybrid power plants operated with hydrogen, and power generators and transformers. More than 50 percent of the portfolio has already been decarbonized. A majority stake in the listed company Siemens Gamesa Renewable Energy (SGRE) makes Siemens Energy a global market leader for renewable energies. An estimated one-sixth of the electricity generated worldwide is based on technologies from Siemens Energy. Siemens Energy employs around 91,000 people worldwide in more than 90 countries and generated revenue of €28.5 billion in fiscal year 2021. [www.siemens-energy.com](http://www.siemens-energy.com).