

Erlangen, December 19, 2018

First Siemens H-class turbine in GCC to boost efficiency of UAE's aluminum industry

- **Combined cycle power plant will be most efficient in the United Arab Emirates**
- **H-class technology expected to reduce greenhouse gas emissions per tonne of aluminum produced by seven percent at Emirates Global Aluminium's Jebel Ali smelter**

Siemens has signed a contract to build the most efficient power plant in the United Arab Emirates (UAE), bringing the company's H-class turbine to the Gulf Cooperation Council (GCC) for the first time. Signed between Siemens, Dubal Holding and Mubadala Investment Company, the agreement will see the development of a highly-efficient, combined cycle power plant at Emirates Global Aluminium's smelter in Jebel Ali, Dubai. A signing ceremony for the project was witnessed by His Excellency Eng. Suhail Mohamed Faraj Al Mazrouei, UAE Minister of Energy and Industry, His Excellency Saeed Mohammed Al Tayer, Vice-Chairman of Dubal Holding and Vice Chairman of EGA, Khaldoon Khalifa Al Mubarak, Group Chief Executive Officer and Managing Director of Mubadala Investment Company, and Joe Kaeser, President and CEO of Siemens AG.

His Excellency Saeed Mohammed Al Tayer, Vice Chairman of Dubal Holding and Vice Chairman of EGA, said: "This project is in line with the directives of the wise leadership of His Highness Sheikh Khalifa bin Zayed Al Nahyan, President of the UAE; His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, and His Highness Sheikh Mohamed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces to enhance sustainable development in the UAE. This is done through ambitious initiatives and sustainable development projects that are highly efficient according to the IPP model. Our project includes a combined cycle power facility and a reverse osmosis water desalination plant that support the objectives of

the UAE Vision 2021 and the UAE Centennial 2071, which outlines the path for a brighter future for generations to come by making the UAE the best country in the world. We look forward to further achievements with this project.”

The over 600 megawatt (MW) plant will boost the efficiency of power production at the smelter, lowering emissions and reducing the consumption of natural gas.

“The choice of H-class technology for the EGA smelter reinforces our strategy that highly-efficient, gas-fired power generation is just as important for industry as it is for powering countries,” said Lisa Davis, Member of the Managing Board, Siemens AG.

“The GCC’s first Siemens H-class turbine will be a boost to the UAE’s industrial sector, and I’m pleased to see EGA joining a growing list of users around the world to embrace this Siemens technology.”

The H-class power plant is expected to lower greenhouse gas emissions from EGA’s power generation at Jebel Ali by some 10 percent. NOx emissions are expected to be reduced by 58 percent.

“This is a significant project for Dubal Holding as we continue to broaden our industrial footprint, working with Mubadala to further develop businesses in power generation,” said Abdunasser Bin Kalban, Chief Executive Officer of Dubal Holding. “We are pleased to be partnering with Siemens to bring this technology to the UAE for the first time, constructing a regional benchmark for energy efficiency in local manufacturing.”

Mubadala and Dubal Holding are to establish a joint venture to develop the new power plant at the smelter. EGA intends to buy the facility’s output for 25 years following commissioning. EGA is the largest industrial company in the UAE outside the oil and gas sector, and the third largest power producer in the country behind utilities DEWA and ADWEA.

The H-class gas turbine from Siemens can boast of benefits such as high efficiency, short start-up times and fast response to load changes. In combined cycle operation, the output of the 50-Hertz version is more than 665 MW under ISO condition and net generating efficiency 61 percent. One combined cycle unit can meet the electricity demands of a city with a population of 3 million. With over 99 percent reliability and 96

percent availability, Siemens' H-class gas turbines are widely used in combined heat and power (CHP) plants as one of the most efficient ways of converting fuels into usable energy. Siemens has sold 90 H-class gas turbines worldwide, 66 of which have already gone into operation with more than 900,000 fired hours globally, making them one of the highest net efficiency and powerful gas turbine products currently in commercial operation.



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During the signing ceremony for the project - the picture shows in the back from left to right: Joe Kaeser, CEO Siemens AG; HE Suhail Mohammed Faraj Al Mazroui, UAE Minister of Energy and Industry; Khaldoon Al Mubarak, CEO @Mubadala and HE Saeed Mohammed Al Tayer, Vice Chairman of EGA. In the front from left to right: Karim Amin, CEO Sales, Siemens Power Generation; Mohammed Al-Huraimel Al Shamsi, Director of Utilities Investments in Mubadala; Abdunasser Bin Kalban, CEO of Dubal Holding and Danny Dweik, Chief Financial Officer of EGA.

This press release and a press picture are available at

www.siemens.com/press/PR2018110084PGEN

More Information about the SGT5-8000H gas turbine is available at

www.siemens.com/energy/sgt5-8000h

For more information on the Siemens Power and Gas Division, please see

www.siemens.com/about/power-gas

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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. The company is active around the globe, focusing on the areas of electrification, automation and digitalization. One of the largest producers of energy-efficient, resource-saving technologies, Siemens is a leading supplier of efficient power generation and power transmission solutions and a pioneer in infrastructure solutions as well as automation, drive and software solutions for industry. With its publicly listed subsidiary Siemens Healthineers AG, the company is also a leading provider of medical imaging equipment – such as computed tomography and magnetic resonance imaging systems – and a leader in laboratory diagnostics as well as clinical IT. In fiscal 2018, which ended on September 30, 2018, Siemens generated revenue of €83.0 billion and net income of €6.1 billion. At the end of September 2018, the company had around 379,000 employees worldwide. Further information is available on the Internet at www.siemens.com.