

Siemens provides 150 wind turbines for largest Dutch offshore project

May 29 2014, by Ms. Cordula Ressing



Siemens will deliver 150 wind turbines with a capacity of 4 megawatts each for the Dutch offshore wind power plant Gemini in the North Sea.

The Gemini consortium has signed all construction, operations and financing contracts yesterday with a total construction budget of nearly EUR 3 billion. With more than 20 parties involved 70 percent of this budget will be provided on the basis of project financing – making Gemini the largest-ever project financed offshore wind farm. For the

Gemini project Siemens will deliver 150 wind turbines with a capacity of 4 megawatts (MW) and a rotor diameter of 130 meters each.

The wind power plant is to be located in the North Sea, 85 km above the coast of Groningen. With an installed capacity of 600 MW in total Gemini will yield 2.6 terawatt hours (TWh) of electricity per year. The wind power plant will supply clean [energy](#) for one and a half million people after being fully commissioned. The amount of energy is equivalent to a reduction in the emission of CO₂ by 1,25 million tons per year.

For Siemens this is the first order for an offshore [wind power plant](#) in Dutch waters. The innovative service concept banks on the ongoing presence of a service vessel and the steady ground readiness of a helicopter.

Siemens' 15-year service and maintenance agreement for the Gemini project is the largest service order ever for Siemens Energy Service. It will introduce a highly advanced logistics concept for offshore sites. For the first time, a helicopter will be available for a project at all times and a specially designed, purpose-built service operation vessel (SOV) will be based at the wind farm. To ensure increased turbine availability, maintenance work can be carried out at almost all times irrespective of the weather conditions or wave height.

"With the project we are entering one of the most important emerging offshore wind markets in Europe," said Markus Tacke, CEO of the Wind Power Division of Siemens Energy.

Randy Zwirn, CEO of Energy Service for Siemens Energy adds, "Wind energy is becoming increasingly important to the world's energy mix. Therefore [wind turbines](#) need to operate at optimum levels over their entire service life." He underlines, "This record achievement for our

offshore wind service business underscores confidence in the highly advanced and innovative service logistics concept we created for Gemini, which is a direct result of the significant investments we make in R&D and the years of experience we have as the world's leading offshore service provider."

Financial Services contributed to securing the Siemens bid by participating in the Gemini consortium via an equity investment. The multi-source financing model used in the project can help meet the increased capital investment required to finance the next stage in the offshore wind market's development. It sends a signal how the appetite for offshore wind assets can be aligned across a wide range of investor groups.

Northland Power Inc., a Canadian independent power producer is the main shareholder, owning sixty percent of the shares in Gemini. 20 percent are owned by Siemens Financial Services, while smaller stakes belong to Van Oord (10%) and HVC (10%), a joint venture of 48 Dutch municipalities and six water regulatory authorities.

"We are very pleased to be working with Siemens on project Gemini. As the global leader in offshore wind turbine supply with more than 20 years of experience, the involvement of Siemens contributes to the solid structure of the project and will help us to deliver a high quality facility that will help to fulfill the Netherlands' renewable energy targets", notes John Brace, CEO of Northland.

As Matthias Haag, CEO of Gemini, points out: "With project financing and all building and supply contracts now in place, our focus has already shifted to the construction phase. We have assembled a team of experts in the offshore wind industry, and will be working closely with Northland Power, Siemens and Van Oord to make [offshore wind power](#) a vital and significant part of the Netherlands' electricity supply."

By supplying one and a half million of Dutch citizens with clean energy, Gemini will play an important role in helping the Government of the Netherlands achieve the targets mandated by the European Union's Renewable Energy Directive. It implies for the Netherlands to reach a 14 percent share of energy from renewable sources by 2020. Today the Dutch market has an installed [wind power](#) capacity of 2.7 gigawatts (GW), thereof 2.45 GW onshore. The offshore target is 4.45 GW to be operational in 2023.

Wind power and energy service are part of Siemens' Environmental Portfolio. Around 43 percent of its total revenue stems from green products and solutions. That makes Siemens one of the world's leading providers of eco-friendly technology.

For further information on the Gemini wind farm, please see www.geminiwindfarm.com

Provided by Siemens

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