

# ➤ Case study: Santa Vitoria do Palmar Complex



**Projekt** Santa Vitoria do Palmar Complex

**Owner** Atlantic Energy Renewables

**Installed capacity** 207 megawatts

**Wind turbines** 69 AW125/3000

**Tower height** TH 120 (concrete tower)

**Location** South Brazil, Santa Vitoria do Palmar

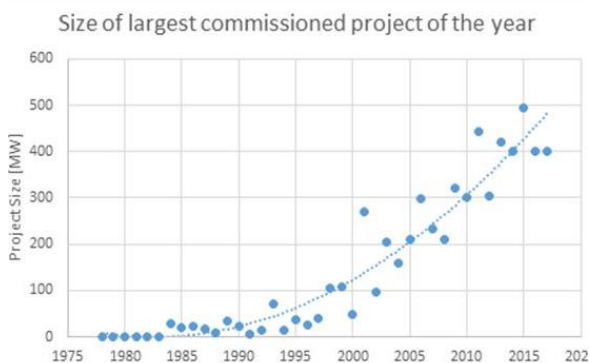
**Construction period** June 2016 until October 2017

**Online since** November 2017

**Scope of contract** Delivery and installation of the turbines.  
Compliance with local content requirements.  
Wind farm service for a period of at least 15 years



# Nordex Group has connected 207 MW wind farm successfully to the grid according to schedule



## Local tower production pays off

The global trend towards larger projects is clearly evident in the wind power industry. Since the mid-1980s the capacity of individual wind farms has risen from less than 50 megawatts to several hundred megawatts. The reasons for this are obvious: business in renewable energies has attracted financially potent investors, while governments all around the world are committed to clean energy and large projects are specifically less expensive.

This has also resulted in changes in the business of manufacturers such as the Nordex Group which has been active since 1985. Explains Patxi Landa, a member of Nordex SE's Management Board: "Part of the Company focused on large-scale projects right from the outset. In Europe, however, this frequently varied in regional terms. Here, too, the sale of individual turbines is no longer common today. This was generally not particularly efficient – either for our customers or for us." Since Nordex has been increasingly executing projects outside Europe, the size of the individual contracts has widened substantially. Thus, the Company connected one of its largest wind farms to the grid in Brazil at the end of 2017.

This was the "Santa Vitoria do Palmar Wind Farm Complex", which is composed of 69 AW125/3000 turbines with a combined capacity of 207 megawatts. The complexity of this task was not solely due to the sheer scale of the project. "In particular, local production of major components gives us a cost advantage to the



benefit of our customers. For instance, we established a new local tower manufacturing facility. Part of the team of 250 also took care of the production of the 69 concrete towers. Owing to their huge dimensions, we would not have been able to transport the total of over 1,500 concrete sections from our factory located 4,600 kilometres north. That would have been too expensive and ecologically unfeasible", explains Marcelo Menescal, Nordex Brazil Project Management Director.

The nacelles and rotor blades were transported to the building site by truck or ship from the central factories located in more northerly parts of Brazil. "In addition, we supported our customer in preparing the construction site; after all, we were tasked with installing the wind turbines, and everything needs to fit exactly on assembly," adds Marcelo.

After a construction period of around 17 months, the project manager is satisfied with the results as the wind farm was connected to the grid within the agreed period and is currently producing electricity for more than 400,000 households. The customer Atlantic Energy Renewables is also pleased, having confirmed the second contract for a wind farm of a comparable size last year. Santa Vitoria do Palmar is ready and operative and it is now up to Nordex's local service team to ensure good and clean yields over the next 15 years.

