

Second Phase of the Eighth Training Abroad for Senior Executive on New Energy

Since 19th, June 2009, the Eighth Training Abroad for Senior Executive on new energy began the second phase of training on offshore wind farm, which contented class room teaching and site visiting. In the afternoon, regardless of 400 km long journey, Trainees began their study immediately.

In the afternoon, first of all, the president of the Bremen Chamber of Commerce and Industry gave a welcome speech and a brief introduction on the wind power industry in Bremen. Mr. Laukamp from Germany Fraunhofer Institute for Solar Energy (ISE) introduced the photovoltaic industry development goals and the status quo in Germany, with emphasize on photovoltaic technology and network requirements. At last, Mr. Wagner from Offshore Wind Power Foundation introduced the offshore wind power development in the European Union, and the construction status of the first offshore wind power test field- Alpha Ventus.

On 21st, June 2009, (Sunday), first trainees visited the offshore wind power certification center in the German wind power institute(DEWI-OCC) and the offshore wind power test site in northern Germany's operated by Cuxhaven. This wind farm tests and issues certification for the offshore wind turbine and its components, meanwhile, provides services concerning offshore wind power project investment, government decision and certifications, etc. currently, there are 5 installed wind turbine units, with a total installed capacity of 22.5MW, among which, the largest wind turbine is the direct-drive unit of the 6MW from Enercon. The trainees climbed the 5MW doubly-fed wind turbine from Repower, got a detailed understanding of the wind turbine's internal structure and working principle; The height of the tower is 117 meters, with a turbine wheel diameter of 126 meters, represents the most advanced offshore wind turbine manufacturing technology. After, trainees visited the aero acoustics wind tunnel of WindGuard Co. The wind tunnel can simulate 0 - 80 m / s wind speed, mainly used for testing the aerodynamics performance of the blade. Finally, all the trainees visited a small offshore wind power exhibition held by German wind power Foundation in Bremen. The exhibition is free of charge to the public, mainly for propaganda and popularization of basic knowledge on offshore wind power.

This one-day tour introduced the world's newest wind power technology to the trainees. They got a better understanding on the wind power knowledge and principles, especially the key technologies and challenges facing the offshore wind power development.