Donor country			
Germany			
Project/programme title			
Wind energy in China / Xinxiang, Dabanchang			
Purpose			
Promotion of wind energy, a climate-neutral energy source, in China			
Recipient country	Sector	Total funding	Years in operation
China	Energy	EUR 26 million	Since 1999

## **Description**

In 1991, the Federal Ministry of Education and Research (BMBF) established the ELDORADO programme, aimed at promoting wind energy in developing and threshold countries. One of the support projects within ELDORADO led to the first wind energy facility in China. Subsequently, in 1995, KfW Entwicklungsbank, working under commission to the BMZ, financed the construction of five additional wind energy facilities. The first of those facilities was commissioned in 1999. The last of the facilities, a 49.25 megawatt (MW) wind farm in Dabanchang, in the autonomous region Xinxiang, is to be completed by the end of 2010.

At the beginning of the project series, wind energy played no role whatsoever in China's energy mix. The first wind turbines had to be imported from abroad. In 2003, Chinese companies began establishing their own capacities for production of wind turbines. The first systems produced were produced under license to German and Danish companies. For about two years now, the number of wind turbines developed by Chinese firms has been growing continually, however. Nonetheless, German companies, such as Aerodyn Energiesysteme GmbH, are continuing to play an important role in the further development of Chinese wind energy technology.

As of the end of 2008, a total of 12.2 gigawatts (GW) of wind energy generating capacity were in place in China – a result that corresponds to an annual doubling of wind energy capacity for the past three years. Already, China's own capacities for producing wind turbines are hardly able to keep up with the strongly growing demand, and the total potential demand for wind energy in China is estimated to be over 300 GW.

## Indicate factors that led to project's success

The project's major success is primarily a result of the time at which the project began. At that time, China formulated ambitious goals for installation of wind energy capacities even though wind energy was still – de facto – playing no significant role whatsoever in the country's energy mix. And the financing provided via German development co-operation, covering five wind energy facilities, played an important role in enabling China to achieve its ambitious goals for introduction of wind energy systems.

## **Technology transferred**

Wind-turbine technology, technical and operational know-how

## Impact on greenhouse gas emissions/sinks

Wind energy produces no greenhouse gases in electricity generation. On the average, the energy-amortisation period for a wind turbine is less than three months

Consequently, the project is making a significant contribution to climate protection.