

Village Electrification with Solar Energies in the Chinese Brightness Programme – a Comprehensive Training measure for System Operators and Technical Administrators

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In view of the fact that 60 to 70 million people in China still live without the modern services of the electricity grid, China has decided on an ambitious electrification programme with renewable energies. "It is planned that 23 million people in remote areas shall be electrified by wind and (solar) PV-technologies till 2010; 100 W power capacity per capita shall be installed, which will be 1/3 of average power consumption of the people at that time." (Plan of the first Brightness Programme of China, JKD, July 1999.) It is the aim of the current phase of that programme to

- supply 1.78 Mio individual households, 2000 villages and 200 stationary systems
- install realistic financing mechanisms
- set up a system supply industry which can provide high quality products
- set up a distribution and service network
- install a technical training system for different levels of training

GTZ supports the Chinese efforts, among other measures, with contributions to a comprehensive training programme. On behalf of GTZ, ZSW and Fraunhofer-ISE carried out a training programme in Beijing in March/April 2003. The two weeks intensive course was for master trainers who, in their turn, will serve as trainers to more than 1000 technical staff and future system operators at the provincial level. Host organisation and organiser of the training course was JKD, a Chinese company belonging to the Chinese Academy of Science and the Chinese State Planning and Development Commission.

Our report will focus on the training course with its theoretical and practical aspects and we will present first examples of realised village electrification systems in Inner Mongolia / China.