



**CASE  
STUDY**

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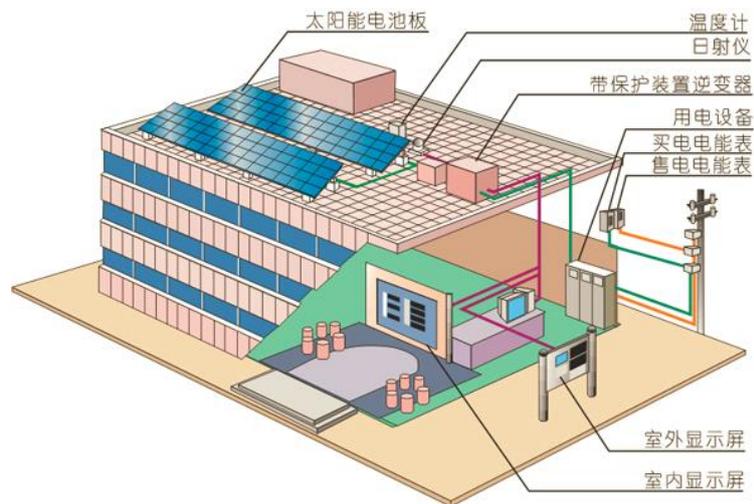
Clean Energy

## **Hohhot, Inner Mongolia, China - Building PV Power System**

Hohhot, the capital city of Inner Mongolia, is situated in the semiarid, severe cold zone of China. The south and south western region around Hohhot has rich and exploited coal and natural gas reserves. North of Hohhot, wind parks have multiplied. Already around 2000 numerous heat only boilers were replaced by a district heating line from the coal power station, although still coal fired. A heating energy concept was developed for the city. In view of the high wind energy production and the need to balance temporary surplus, a 'power to heat' concept was developed and concretized. The ADB-financed project intended to demonstrate the efficiency and viability of large-scale natural gas and wind-based district heating. Combining these two energy sources improve the poor air quality in urban areas of the Inner Mongolia Autonomous Region during the winter and help reduce carbon dioxide emissions.

Hohhot has won State-level demonstration projects involving the application of renewable energy in buildings, including the integration of solar thermal technology with buildings, solar heating technology, and the integration of rooftop solar photovoltaic. Hohhot will be a pilot city for the introduction of the distributed solar photovoltaic system in households and working places, in view of the situation of solar PV industry in the city.

### **Building PV Power System**



Source: <http://www.understandchinaenergy.org/wp-content/uploads/2013/10/PV-Scale-up-Use-in-Hohhot-City.pdf>

## References

Li Chang-Qing, Suding, P. et alii A study on integrated programming model of urban energy supply based on sustainable development, in: Volume 22, No, 2/3/4 2004, International Journal of Global Energy Issues, China's Energy Economics and the Sustainable Development in the 21st Century, edited by Wei Yi-Ming et al. Interscience Press.

Institute of Electrical Engineering, CAS Hohhot Research Center for Economic & Social Development  
 Inner Mongolian Institute of Electric Power Sciences, Planning Report On the PV Scale-up Use in Hohhot City March 2010 <http://www.understandchinaenergy.org/wp-content/uploads/2013/10/PV-Scale-up-Use-in-Hohhot-City.pdf>

## Credentials

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