

The China Market

CHINA



Key Data Region: Asia
Population: 1,261,832,482
(July 2000 est.)
Area Total: 9,596,960 km²
Area Land: 9,326,410 km²
Coast Line: 14,500 km
Capital: Beijing (Peking)
Climate: Extremely diverse;
tropical in south to subarctic
in north.
GDP \$1.08 trillion (2000)
Un electrified population: 60-
70M
Un electrified villages: 124,572

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Happenings....

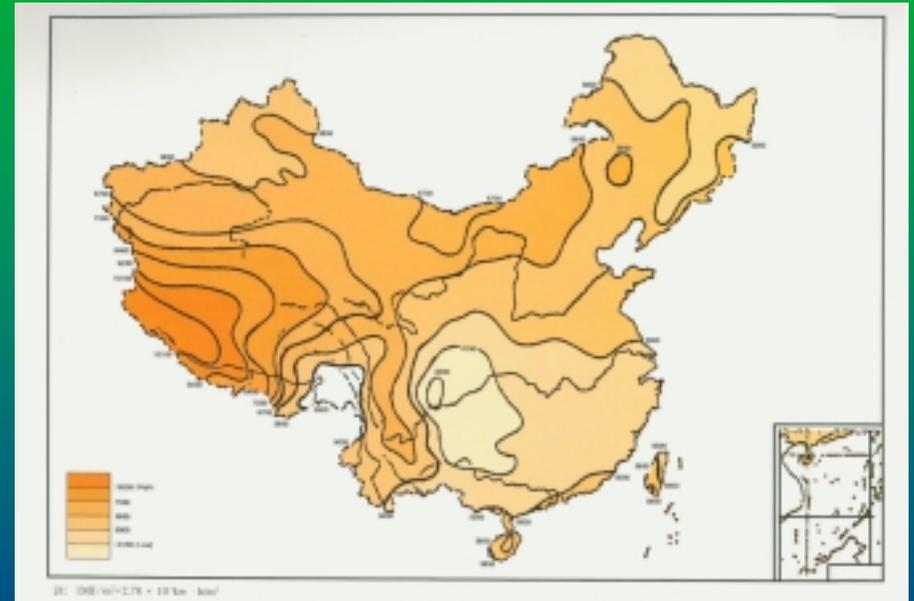
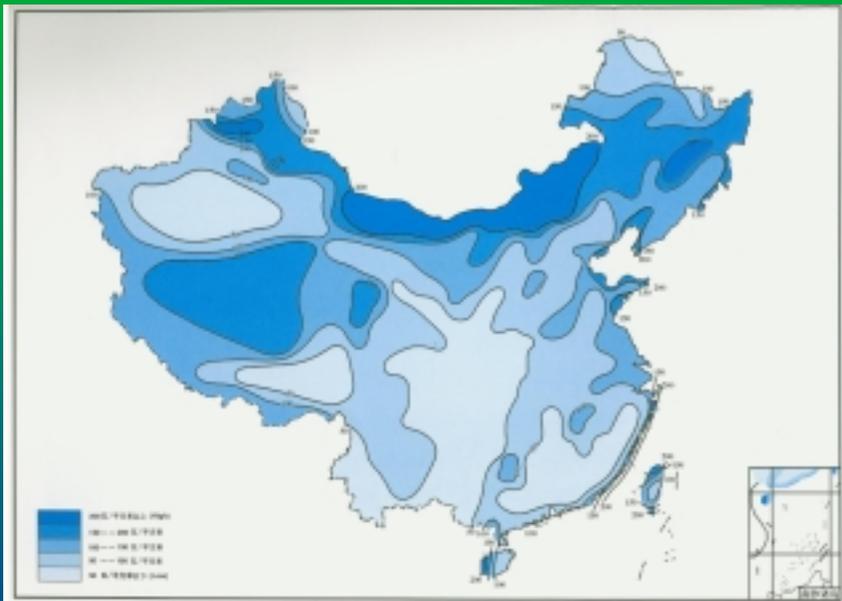
CHINA AT NIGHT



Courtesy: Bill Wallace, UNDP PMO

- Many rural populations and a strong use of diesel generation to provide power to remote communities.
- \$250 Million SPDC “Township electrification project”
 - UNDP rural with renewable electrification project
 - Other NGO organizations
 - Re-powering Projects

Resource....



Township Electrification Program

- SPDC has electrified all communities that can be electrified through grid extension
- Current program designed to electrify all of the unelectrified townships in China using off grid technology (with a focus on using renewables)
- Phase one of the project is currently underway with the second phase under internal proposal review.



UNDP/GEF Pilot Projects

- Many smaller projects
- Bei Long Dao Island in the Zhengjiang Province, China
 - 322 families in fishing and agriculture
 - 7.4 m/s 10 year average wind speed
 - Expected load (2005) 84.51kW
 - Currently provided part time power for 4 hours a



Bei Long Dao proposed Power System

- Lead by Zhejiang Institute of Mechanical and Electrical Engineering
 - 2 AOC 15/50 wind turbines
 - Two diesel generators
 - 100 kVA SS power converter and battery bank
 - 60 kW dump load
 - Independent capacitor bank
 - System controller
- Will incorporate training in productive use, operation etc.



Governmental Aid Funded Projects

- Everybody works in China with major programs from the Germany, Denmark and the Netherlands
- Minor programs from Canada and the World Bank
- Most focused on smaller DC bus implementation projects
- Several island systems from the 80's with poor long term operational results



Re-powering Projects

- Community Diesel Retrofit Projects
- Remote Applications
- Remote uses, primarily in the oil and mining industry
- Island community power



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